

## CONTENTS

## MY HOME – Technical sheets

Radio system . . . . .	627
Automation. . . . .	667
Burglar alarm. . . . .	861
Load control . . . . .	957
Temperature control . . . . .	971
Sound system . . . . .	1009
Video door entry system . . . . .	1027
Structured cabling system for the home sector. .	1095
Control and integration . . . . .	1108

# Technical sheets

The pages that follow provide all the technical information to assess, design, and install a MY HOME automation system.

For detailed information on individual devices refer to the corresponding

“Technical Sheets”. These can be selected by **Item code No.**

For each device, the corresponding technical sheet offers information on:

- Product description;
- Related items;

- Dimensional and technical data;
- Configuration;
- Wiring diagram, if required.

The technical sheets may also be viewed by accessing the “Professionals” section of the [www.bticino.com](http://www.bticino.com)





bticino

## Multimedia Touch Screen

HC/HS 4690

Description

### Description

Multimedia Touch Screen is a device that enables controlling all the functions of the MY HOME system by means of simple and intuitive icons displayed on the 10" 16:9 LCD Touch Screen.

In addition to the management of the automation functions, lights, temperature control, sound system, burglar alarm, and scenarios, by using the device it is also possible to answer to video door entry system calls, and display the images transmitted by the entrance panel, or the connected cameras. Thanks to the USB device and SD card inputs, Multimedia Touch Screen can manage multimedia files, allowing the users to listen to their favourite music or to view films and images.

When integrated with a domestic LAN network with internet connection, the device enables (following the activation of specific icons) receiving RSS services such as "news" and weather information, displaying images transmitted through webcams, and listening to internet radio channels.

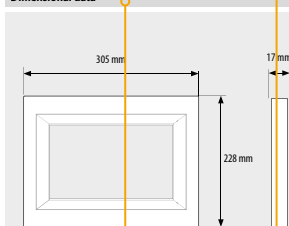
### Related items

Surround plate: HA4690XC, HA4690VBB, HA4690LTX, HA4690VNB, HA4690VSW  
Power supply: 346020

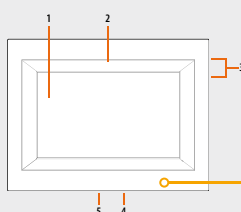
### Technical data

Power supply from SCS BUS: 18 – 27 Vdc  
Local power supply (1 – 2): 18 – 27 Vdc  
Maximum local absorption (1 – 2): 600 mA  
Absorption from SCS BUS: 50 mA  
Operating temperature: 5 – 45 °C

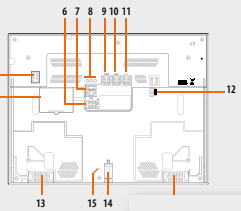
### Dimensional data



### Front view



### Rear view



### Legend

1. 10" Touch Screen colour LED display
2. Microphone
3. USB connection
4. Mini USB PC connection
5. SD card connector
6. Sound system source output connector
7. RJ45 connector for Ethernet connection
8. LAN connection signalling LED
9. PSTN telephone line connector (future applica...)
10. 2 wire video BUS-SCS connector
11. 1-2 power supply connector
12. End of line ON/OFF micro switch
13. Loudspeaker
14. Bracket fixing screw
15. Factory configuration reset pushbutton
16. NiMH 7.2 V battery compartment; 160 mAh
17. RS232 PC connector

TECHNICAL SHEETS

Device drawing

Configuration

Assembly, Installation

bticino

HC/HS 4690

TECHNICAL SHEETS

### Configuration

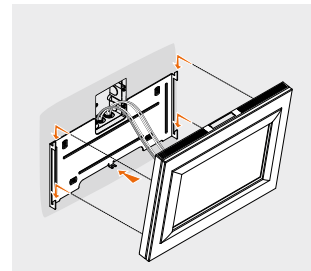
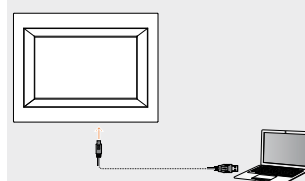
Multimedia Touch Screen must be configured using the TiMultimediaTouchScreen software supplied as standard. In order to receive/transfer the configuration performed, or to update the firmware, connect Multimedia Touch Screen to the PC using one of the three solutions:

- USB-miniUSB cable;
- serial connector (3559);
- Ethernet cable.

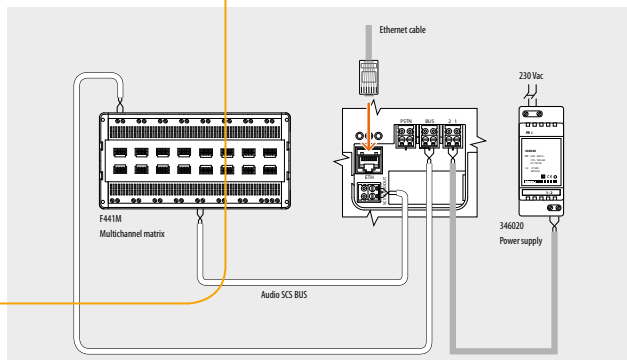
### Installation

Connect Multimedia Touch Screen to the system and fix it to the wall using the bracket supplied with the product.

### USB connection



### Wiring diagrams



Dimensional data

Technical data

Legend

Wiring diagrams



## CONTENTS

Technical sheets – Radio system



## Remote control 5 pushbuttons

3527N

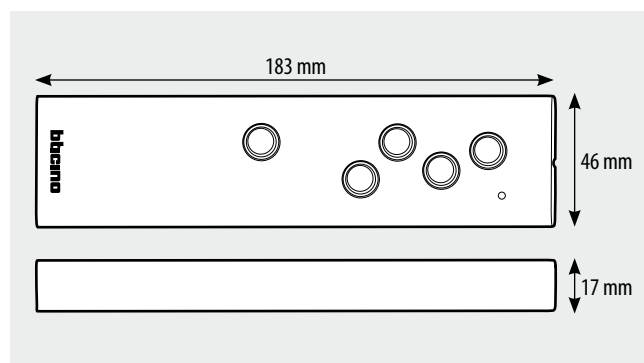
### Description

Remote control with 5 scenario control pushbuttons.  
The device can be set to operate as an IR remote control (mode not possible for ZigBee® Radio automation devices).

### Technical data

Power supply:	No. 2 batteries, 1.5 V LR03
Duration of the batteries:	2 years
Operating temperature:	5 – 45 °C
Technology:	2.4 GHz Radiofrequency ZigBee® standard
Radio frequency capacity:	100 m free field, 10 m in rooms with concrete walls
Infrared capacity:	10 m free field

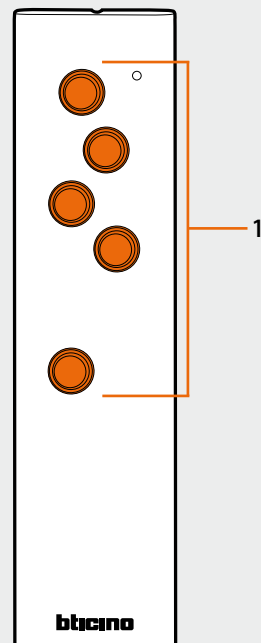
### Dimensional data



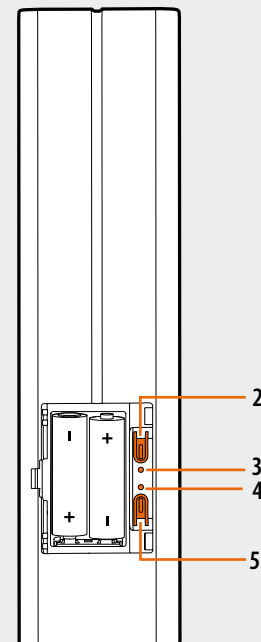
### Configuration

"Push and Learn" self-learning type.

Front view



Rear view



### Legend

1. Scenario activation pushbutton
2. NETWORK key
3. NETWORK LED
4. LEARNING LED
5. LEARNING key



# Remote control 4 pushbuttons

3528N

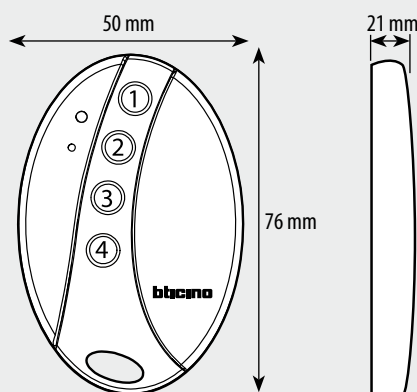
## Description

Remote control with 4 scenario control pushbuttons.

## Technical data

Power supply:	No. 1 lithium battery, 3V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	2.4 GHz Radiofrequency ZigBee® standard
Capacity:	80 m free field, 15 m in rooms with concrete walls

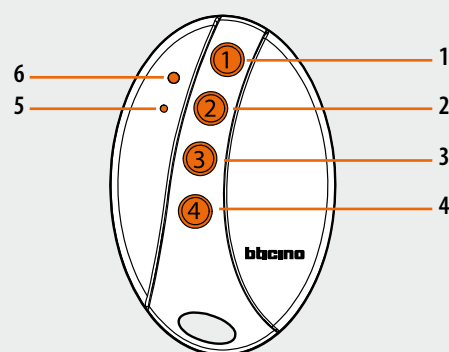
## Dimensional data



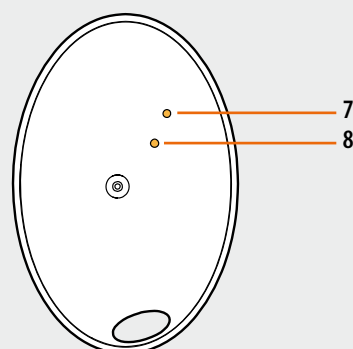
## Configuration

"Push and Learn" self-learning type.

Front view



Rear view



## Legend

1. Scenario no. 1 activation pushbutton
2. Scenario no. 2 activation pushbutton
3. Scenario no. 3 activation pushbutton
4. Scenario no. 4 activation pushbutton
5. LEARNING LED
6. LEARNING key
7. NETWORK LED
8. NETWORK key



# Integration module switch 1X2500W RF


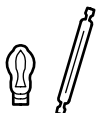


3571





## Description

Actuator for the control of a load with maximum power 2500 W, with ON/OFF control pushbutton for system testing.  
In enclosure suitable for installation inside false ceilings.

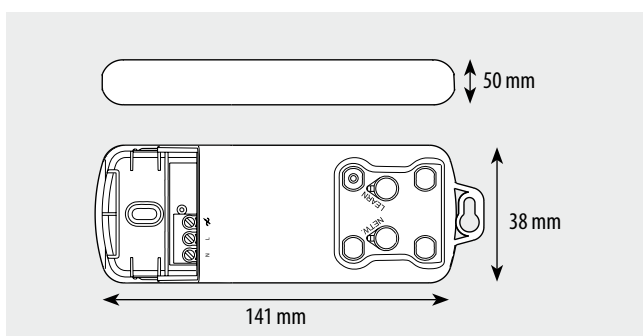
## Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	2.4 GHz Radiofrequency ZigBee® standard
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Incandescent lamp	Halogen lamp	Fluorescent tube lamp	Ferromagnetic transformer
				
230 Vac	2500 W	2500 W	1250 W	2500 VA
110 Vac	1250 W	1250 W	625 W	1250 VA

Voltage	Electronic transformer	Compact fluorescent tube lamp	LED lamps	Motors
				
230 Vac	2500 W	1250 W	1250 W	250 VA
110 Vac	1250 W	625 W	625 W	125 VA

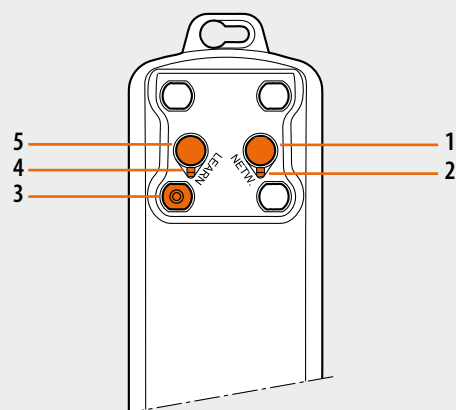
## Dimensional data



## Configuration

"Push and Learn" self-learning type.

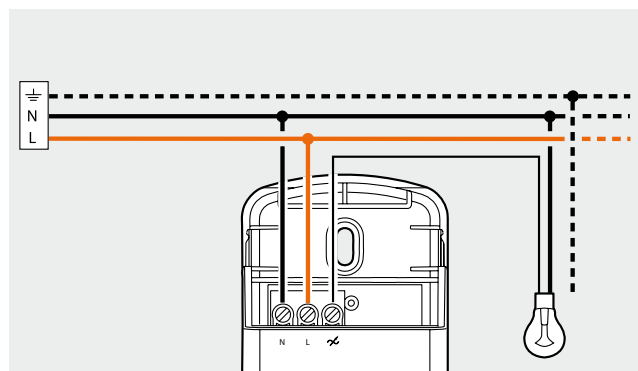
Front view



## Legend

1. NETWORK key
2. NETWORK LED
3. ON/OFF key
4. LEARNING LED
5. LEARNING key

## Wiring diagram



## Important:

- Protect the device with a 10 A fuse.
- Connect a load before performing any "scenario" learning procedure.
- For conventional type transformers, a load with power 60% higher than their rated power must be connected.
- For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)



# Integration module dimmer 1 X 600W all load RF





3572

## Description

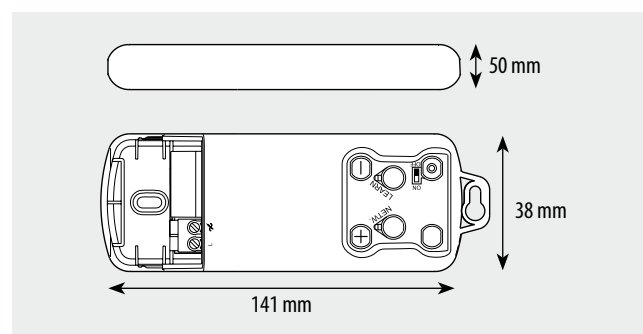
Dimmer actuator for the control of a load with maximum power 600 W, with ON/OFF control and adjustment pushbuttons for system testing.  
In enclosure suitable for installation inside false ceilings.

## Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	2.4 GHz Radiofrequency ZigBee® standard
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Incandescent lamp	Halogen lamp	Ferromagnetic transformer	Electronic transformer
				
230 Vac	Max. 600 W Min. 60 W	600 W 60 W	450 VA 60 VA	600 VA 60 VA
110 Vac	Max. 300 W Min. 60 W	300 W 60 W	225 VA 60 VA	300 VA 60 VA

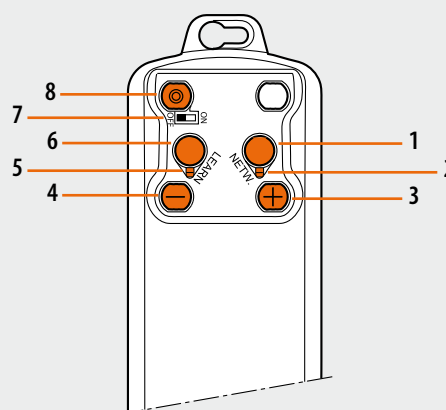
## Dimensional data





## Configuration

"Push and Learn" self-learning type.

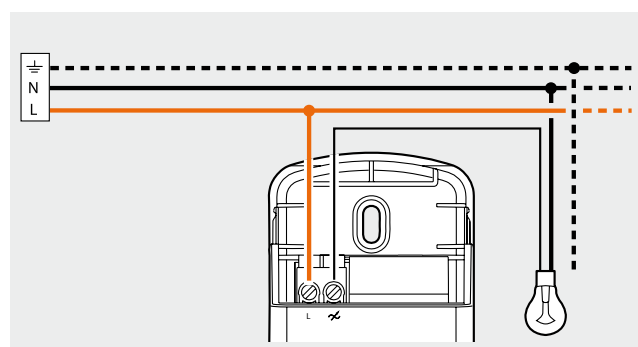
Front view



## Legend

1. NETWORK key
2. NETWORK LED
3. + key: press and release to switch the load ON at 66% of its power, press and hold down to increase the power to the maximum value
4. - key: press and release to switch the load ON at 33% of its power, press and hold down to decrease the power to the minimum value
5. LEARNING LED
6. LEARNING key
7. Load selection micro-switch: ON  / OFF 
8. ON/OFF key

## Wiring diagram



### Important:

- Connect a load before performing any "scenario" learning procedure.
- For conventional type transformers, a load with power 60% higher than their rated power must be connected.
- For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)

BT00395-a-UK



# Integration module dimmer 0-10V 1000W RF

3573

## Description

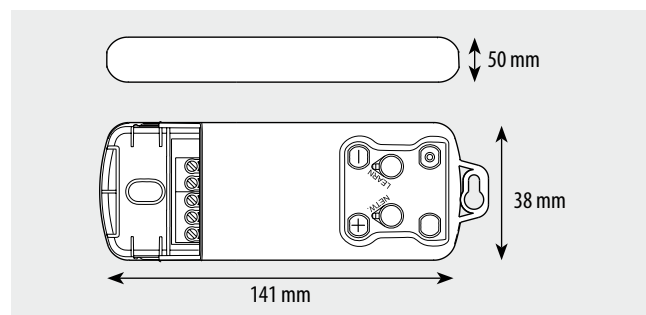
Actuator for the control of Ballasts for 0-10V type Fluorescent tube lamps with power up to 1000 W max. The device has pushbuttons for ON/OFF control and for the adjustment of the power to the load for system testing. In enclosure suitable for installation inside false ceilings.

## Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	2.4 GHz Radiofrequency ZigBee® standard
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Ballast 0 – 10 V
230 Vac	1000 VA
110 Vac	500 VA

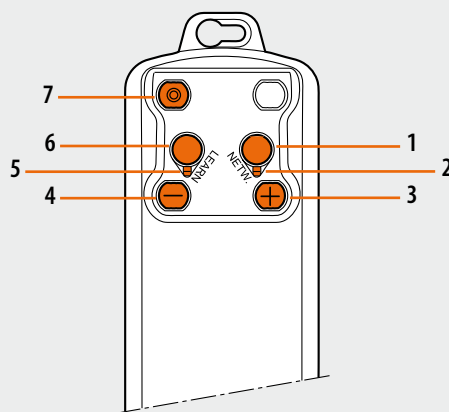
## Dimensional data



## Configuration

"Push and Learn" self-learning type.

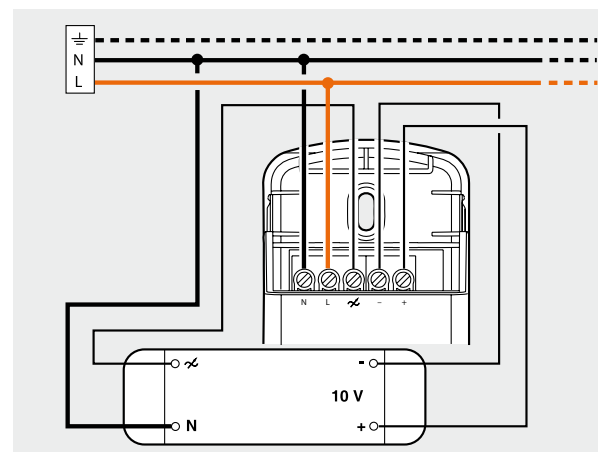
Front view



## Legend

1. NETWORK key
2. NETWORK LED
3. + key: press and release to switch the load ON at 66% of its power, press and hold down to increase the power to the maximum value
4. - key: press and release to switch the load ON at 33% of its power, press and hold down to decrease the power to the minimum value
5. LEARNING LED
6. LEARNING key
7. ON/OFF key

## Wiring diagram



### Important:

- Connect a load before performing any "scenario" learning procedure.
- For conventional type transformers, a load with power 60% higher than their rated power must be connected.
- For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)



# Mobile switched dimmer socket RF ZigBee for Schuko Standard

3574





## Description

Actuator device to be used with an electric socket, for dimmer control of a load with maximum power 500 W. The mobile socket can be managed with one or more radio controls or locally using an appropriate pushbutton that can be found on the top section of the device.

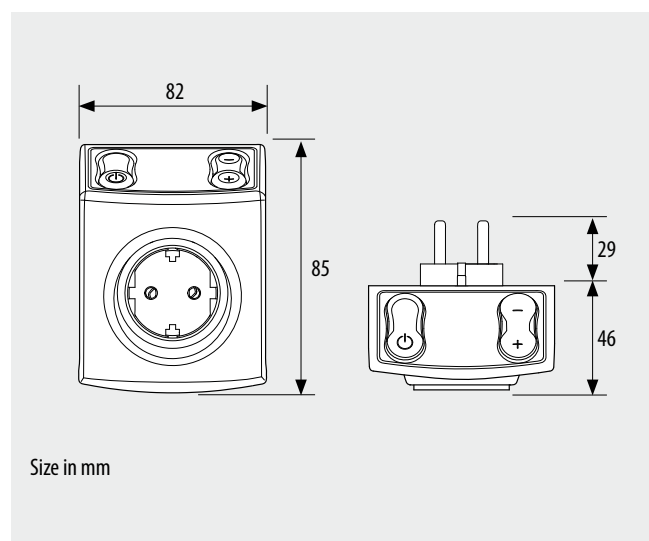
The device is protected from overheating caused by overload through an appropriate protection circuit that intervenes automatically by reducing the power to the load.

## Technical data

Power supply:	100 – 240 Vac; 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field; 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage		Incandescent lamp	Halogen lamp	Ferromagnetic transformer	Electronic transformer
					
230 Vac	max.	500 W	500 W	500 VA	500 VA
	min.	50 W	50 W	60 VA	60 VA
110 Vac	max.	250 W	250 W	250 VA	250 VA
	min.	50 W	50 W	60 VA	60 W

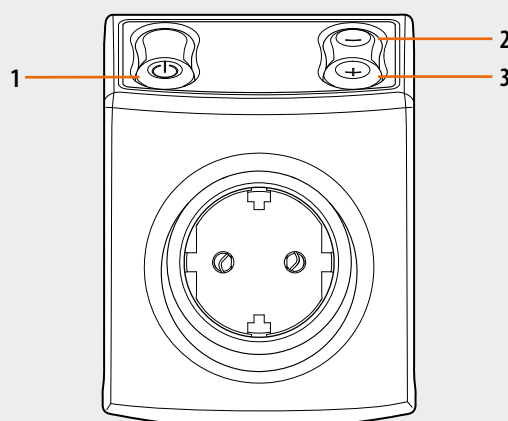
## Dimensional data



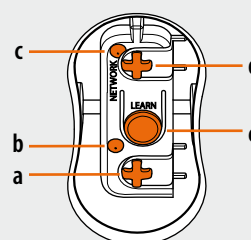
## Configuration

"Push and Learn" self-learning type.

Front view



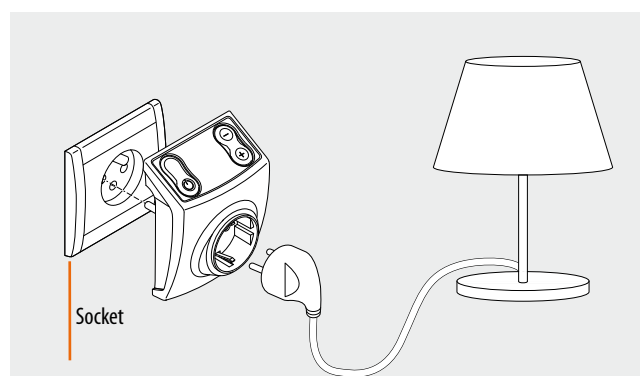
Detail point 1



## Legend

- ON/OFF key. The programming pushbuttons and LEDs can be found under the protection:
  - CONTROL key
  - LEARNING LED
  - NETWORK LED
  - NETWORK key
  - LEARNING key
- key: press and hold down to decrease the power to the minimum value.
- + key: press and hold down to increase the power to the maximum value

## Assembly, installation





# Mobile switch socket RF ZigBee for Schuko Standard

3575

## Description

Actuator device to be used with an electric socket, for ON/OFF control of a load with maximum power 2500 W. The mobile socket can be managed with one or more radio controls or locally using an appropriate pushbutton that can be found on the top section of the device.

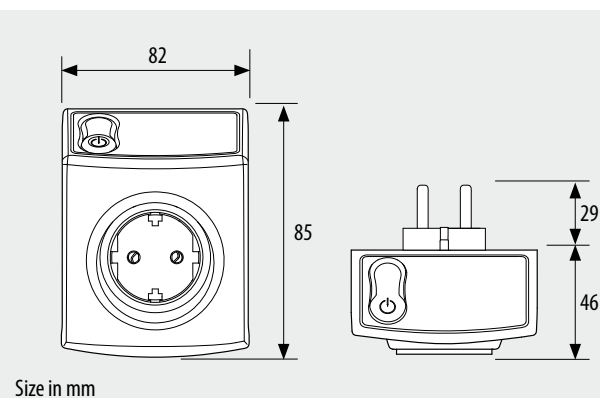
## Technical data

Power supply:	100 - 240 Vac; 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field; 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Incandescent lamp	Halogen lamp	Fluorescent tube lamp	Ferromagnetic transformer
230 Vac	2500 W	2500 W	1250 W	2500 VA
110 Vac	1250 W	1250 W	625 W	1250 VA

Voltage	Electronic transformer	Compact fluorescent tube lamp	LED lamps
230 Vac	2500 W	1250 W	1250 W
110 Vac	1250 W	625 W	625 W

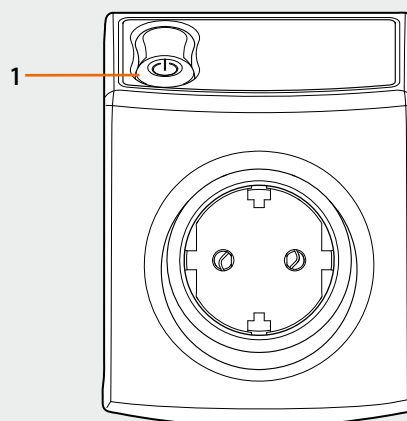
## Dimensional data



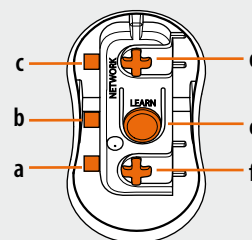
## Configuration

"Push and Learn" self-learning type.

Front view



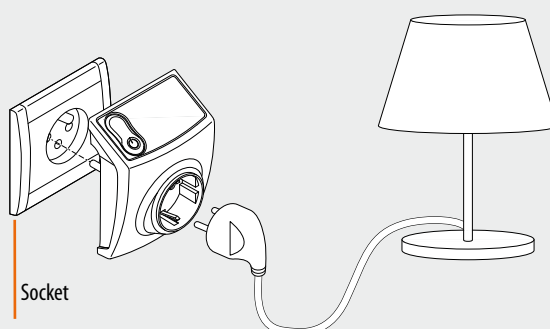
Detail point 1



## Legend

- ON/OFF key. The programming pushbuttons and LEDs can be found under the protection:
  - CONTROL key LED
  - LEARNING LED
  - NETWORK LED
  - NETWORK key
  - LEARNING key
  - CONTROL key

## Assembly, installation





# Individual roller blind controller RF ZigBee for mounting in technical compartment

3576

## Description

Actuator device for the control of rolling shutter and shutter motors with maximum power 500 VA.

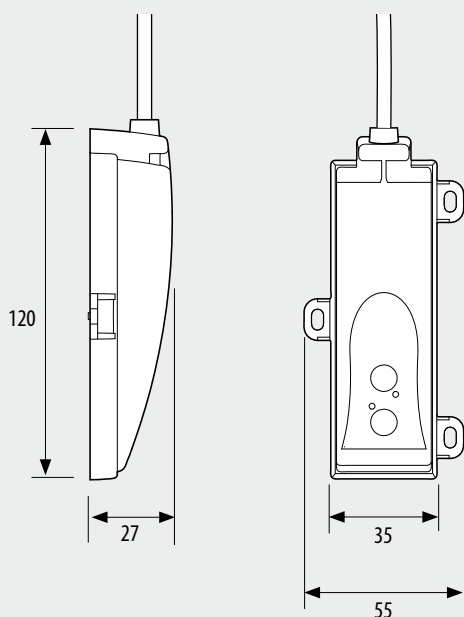
The actuator is inside an appropriate enclosure for installation in rolling shutter boxes or junction boxes.

## Technical data

Power supply:	100 - 240 Vac; 50/60 Hz
Operating temperature:	5 - 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field; 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Shutter motor
230 Vac	500 VA
100 Vac	270 VA

## Dimensional data

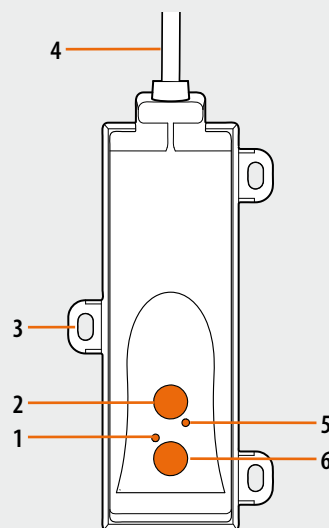


Size in mm

## Configuration

"Push and Learn" self-learning type.

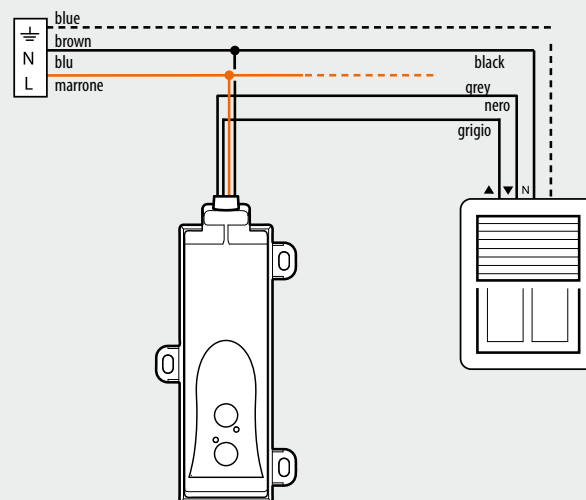
Front view



## Legend

1. LEARNING LED
2. NETWORK key
3. Fixing hook
4. Wiring for connection to the power line and to the load
5. NETWORK LED
6. LEARNING key

## Wiring diagram



**Important:** Connect a load before performing any "scenario" learning procedure.

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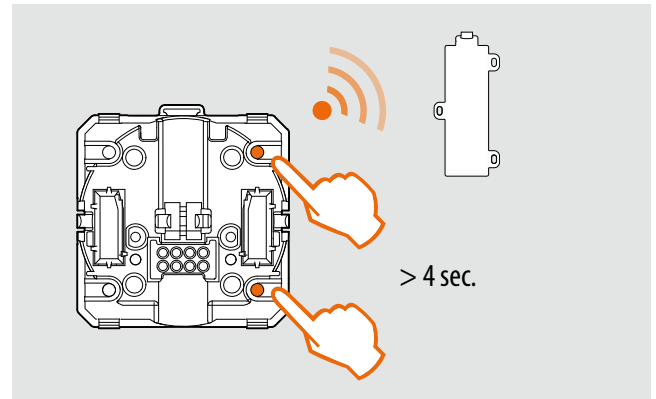
## Configuration

### Select the operating mode

The device may operate in two different modes:

- Bistable (to operate the rolling shutter press and immediately release the UP or DOWN keys).
- Monostable (to operate the rolling shutter press and hold down the UP or DOWN keys).

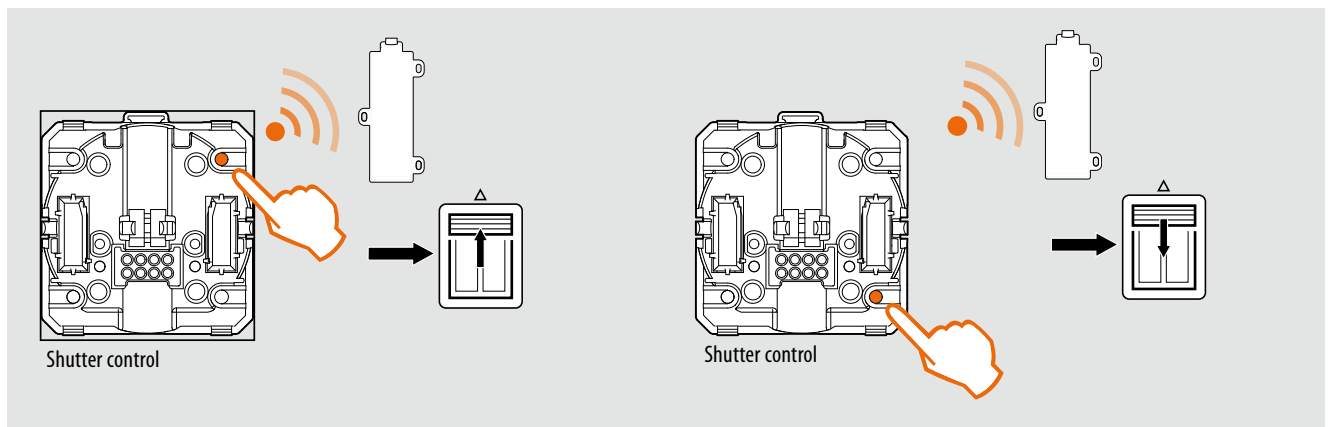
The device is supplied configured in bistable mode. It will be possible to change the operating mode at any time by pressing and holding down for more than 4 seconds both the UP and DOWN pushbuttons at the same time.



### Use of the device in bistable mode

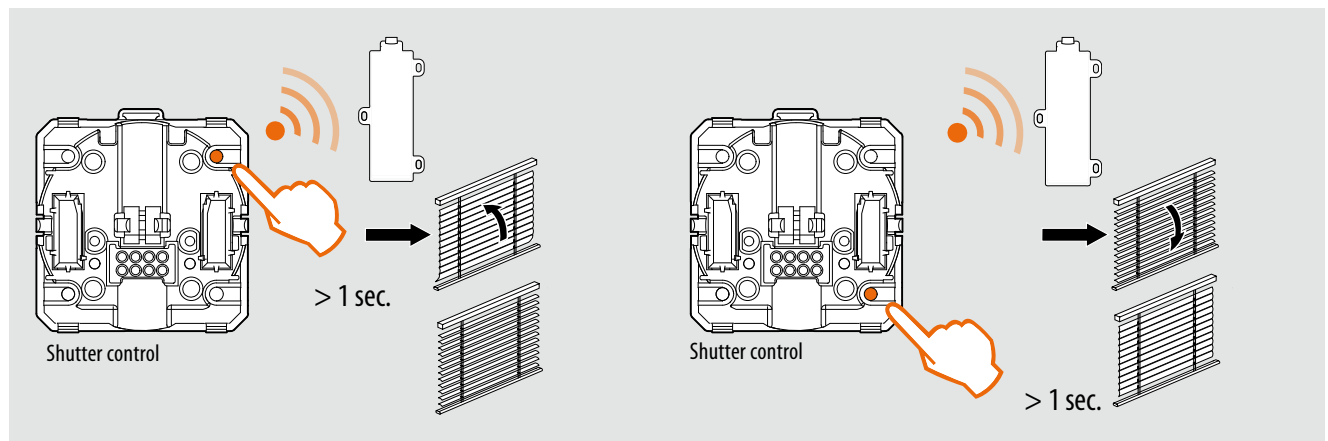
#### Opening and closing the rolling shutter:

Press and release the UP and DOWN pushbuttons.



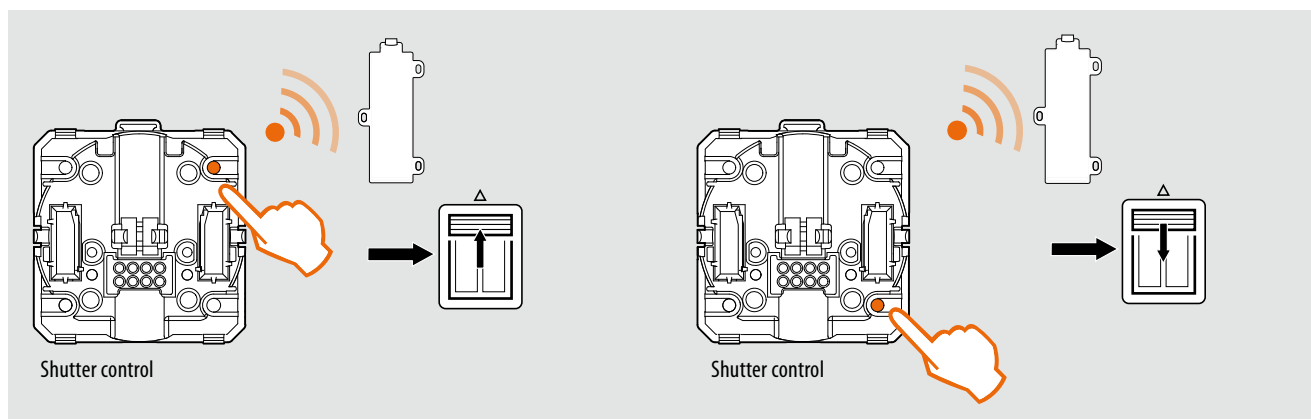
#### Adjustment of the blade position:

Press the UP and DOWN pushbuttons for more than 1 second.



**Use of the device in monostable mode****Opening and closing the rolling shutter:**

Press and hold down the UP and DOWN Pushbuttons until the desired rolling shutter position.



### Saving of the PRESET position (opening the rolling shutter to a preset position)

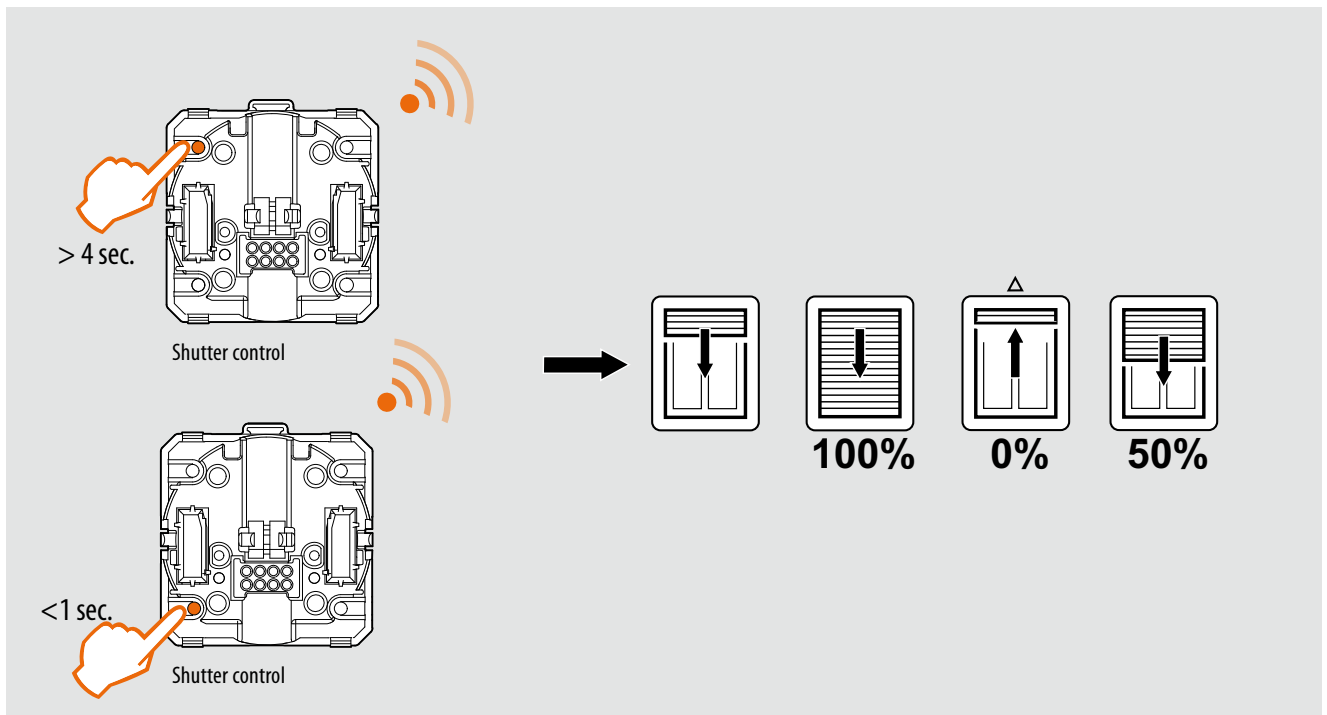
The rolling shutter control device for the management of the actuator can also be enabled to set the rolling shutters to a preset position, using the appropriate pushbutton (Preset).

The procedure for storing the position is performed in two different stages:

- calibration of the up and down movements times of the rolling shutter;
- saving of their positions. .

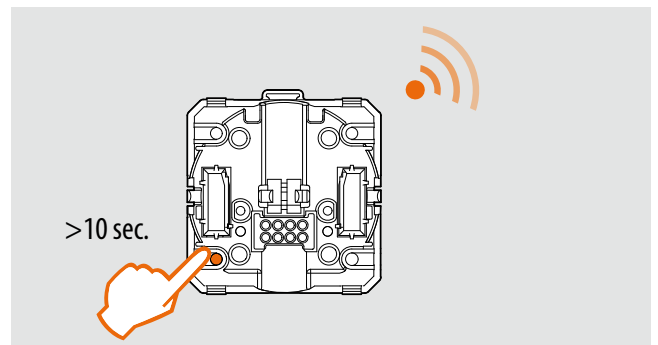
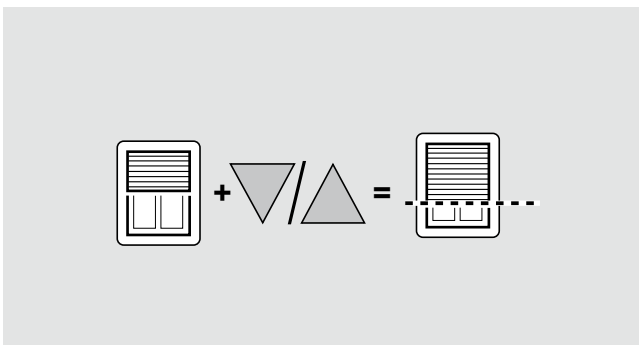
### Calibration of the up and down movements times of the rolling shutter;:

1. Check if the rolling shutter motor is equipped with a traditional, or with an electronic "limit switch".
2. Fully open the rolling shutter.
3. In case of traditional limit switch, press the pushbutton shown in the picture for more than 4 seconds. Press the pushbutton for less than 1 second in case of electronic limit switch.
4. The rolling shutter will close completely, will open completely, and then will move to the half open position. During this stage do not operate the device.
5. The device has saved the rolling shutter full opening and full closing time. Now proceed with saving the desired position (Preset).



### Saving the rolling shutter position:

1. Operate the UP and DOWN PUSHbuttons of the radio control to move the rolling shutter to the desired position.
2. To save the desired position press the Preset pushbutton of the rolling shutter radio control for more than 10 seconds.



3. From now on, irrespective of its position, when the Preset pushbutton of the control device is pressed the rolling shutter will move to the previously saved position.



## RF ZigBee transmitter with auxiliary inputs (2 inputs)

3577

### Description

This device gives the possibility of integrating traditional control devices (Two-way switch, switch, or pushbutton) in MY HOME radio systems.

The interface has 3 cables identified with C, 1, and 2 respectively, which connect to a two-way switch, or to a pushbutton.

The definition of the type of device connected (two-way switch, or pushbutton), and therefore of the interface operating mode, is done using appropriate pushbuttons found on the device itself; the preset mode (at the factory) requires connection to a two-way switch.

By configuring the A, PL, and MOD sockets, it will be possible to use this interface, together with the SCS/ZigBee gateway, for the radio extension of a MY HOME BUS system. The device is inside a Basic container with reduced sizes, for installation in flush mounted boxes, junction boxes, rolling shutter boxes, and trunking. Particularly advantageous is the installation inside junction boxes, positioning the item at the back of the flush mounted box, behind traditional devices.

### Related items

Gateway SCS/ZigBee: HC/HD/HS4578, L/N/NT4578N.

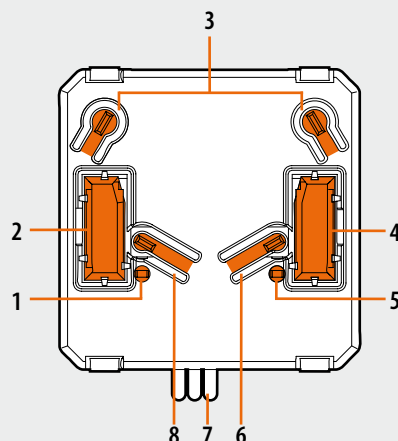
### Technical data

Power supply:	No. 1 lithium battery, 3V, CR2032 type
Duration of the battery:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150m free field; 15m in rooms with concrete walls

### Dimensional data

Size: basic module

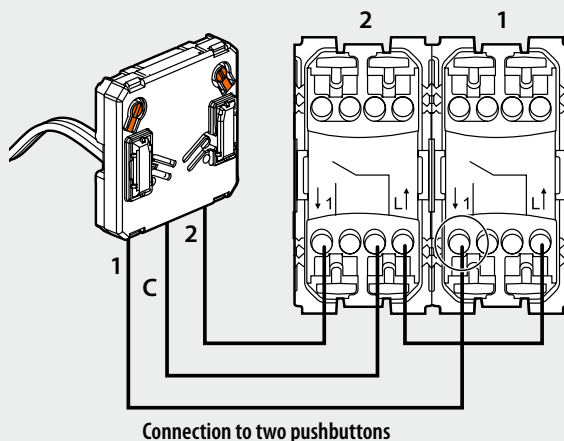
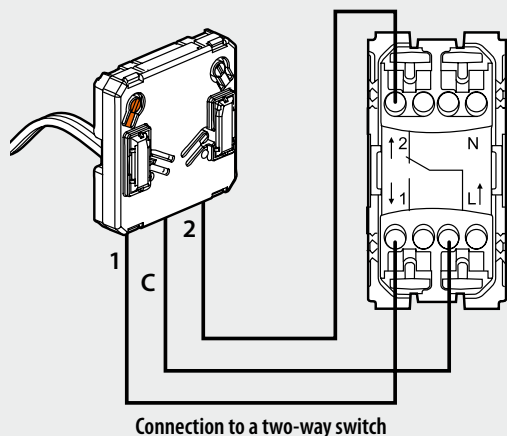
Front view



### Legend

1. LEARNING LED
2. SCS My Home Configurator socket
3. Local CONTROL key
4. SCS My Home Configurator socket
5. NETWORK LED
6. NETWORK key
7. Wiring for connection to traditional devices
8. LEARNING key

### Wiring diagram



## Configuration

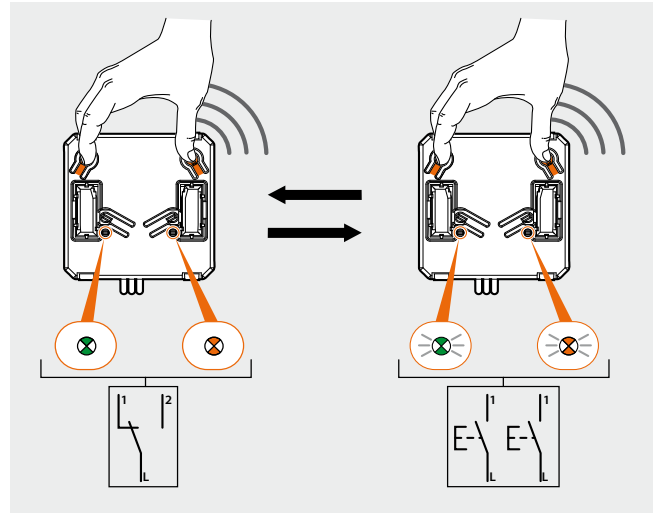
### Configuration of the ZigBee network "Push and Learn" self-learning type.

#### Definition of the interface operating mode

The interface is already configured during production for connection to a two-way switch or to a switch. If connecting one or more pushbuttons, change the operating mode as indicated below:

1. Press the two pushbuttons on the interface for at least 5 seconds.
2. When the two LEDs (green on the left and orange on the right) flash slowly, release the pushbuttons. The interface is now preset for connection to one or more pushbuttons.

To restore "switch/two-way switch" mode, press the two interface pushbuttons for at least 5 seconds, and release them when the two LEDs come on steady (not flashing).

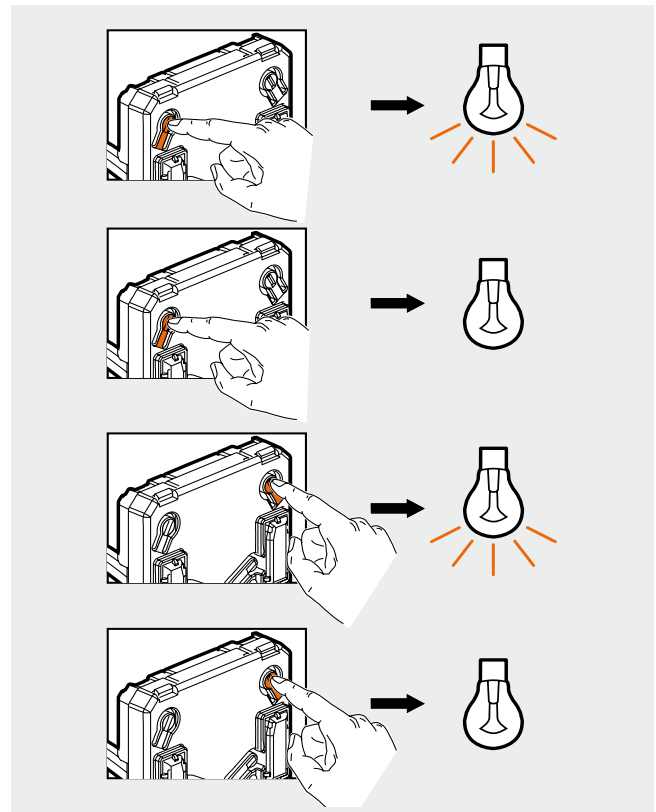
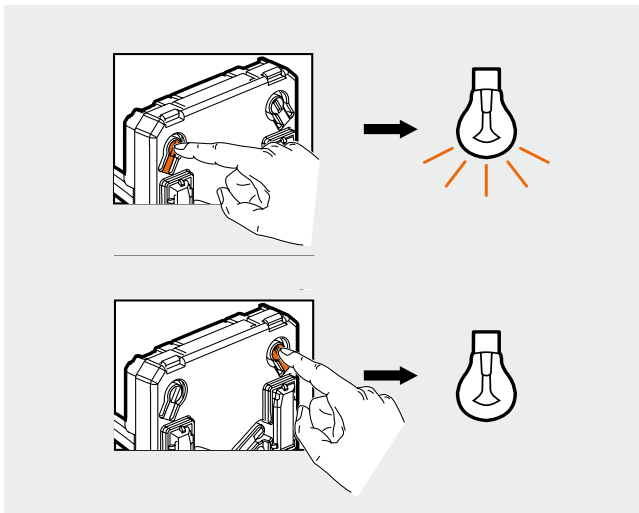


#### Operating test

After completing the wiring and defining the operating mode, the operation of the interface can be tested using the traditional devices connected, or the two pushbuttons:

- If the interface is in "two-way switch" mode, use the left pushbutton to send an ON command to the radio actuator associated to the two-way switch. Use the right pushbutton to send the OFF command.

- If the interface is in "pushbutton" mode, use the right pushbutton cyclically to send a cyclic ON and OFF command to the radio actuator associated with the P1 pushbutton. Use the left pushbutton to send a cyclic ON and OFF command to the radio actuator associated with the P2 pushbutton.



# Open Web Net/Zigbee Gateway

3578

## Description

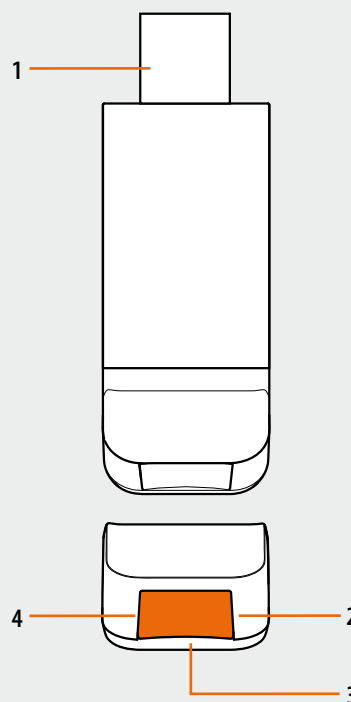
Interface for interaction with the functions of the ZigBee radio system using a Personal Computer and an Open Web Net communication protocol.

The device must be connected to a USB port of the computer and features a radio transmitter for sending/receiving data to and from ZigBee devices installed in the electric system.

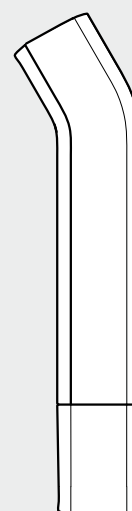
## Technical data

Power supply:	From USB 2.0 socket
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Front view



Side view



## Legend

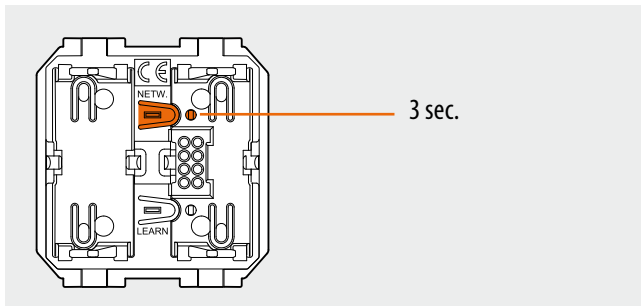
1. USB connector
2. Data traffic indicator LED
3. NETWORK key
4. NETWORK LED

BT00493-a-UK

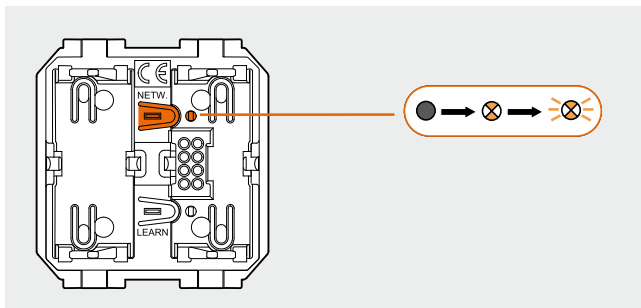
## Configuration

### Connecting the device to the network

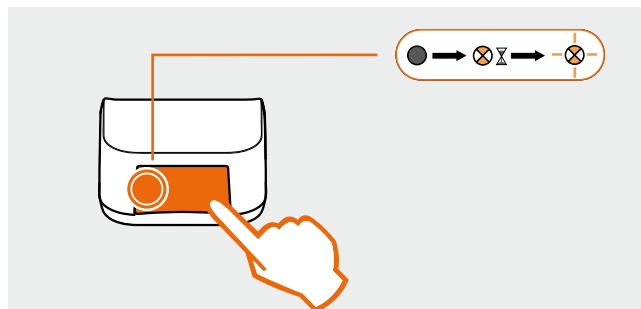
1. In the system identify the actuator device with "Zigbee network coordinator" function, and press the NETWORK key for 3 seconds.



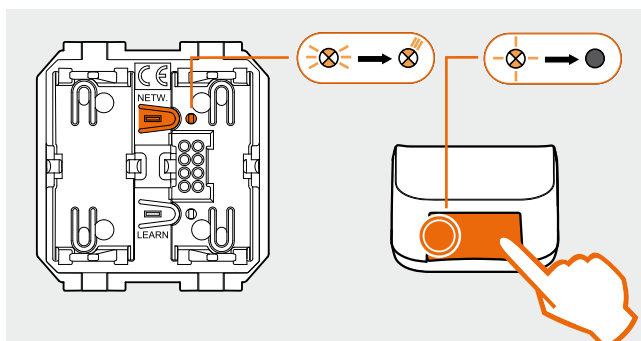
2. The NETWORK LED (yellow) will come on steady, and after a few instants will start flashing quickly.



3. Press the NETWORK key on the interface. The NETWORK LED will come on steady during the network search procedure and then will start flashing slowly.

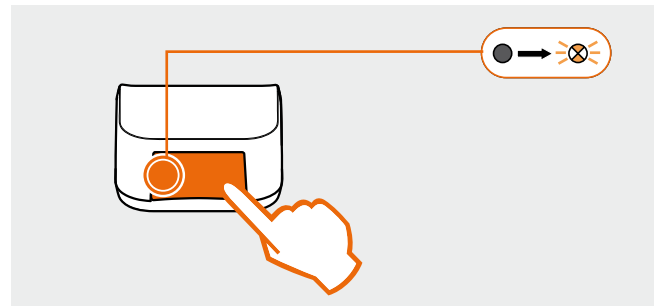


4. To complete the procedure press the NETWORK KEY of the Coordinator device; The corresponding NETWORK LED will flash three times while the interface NETWORK LED will turn off.

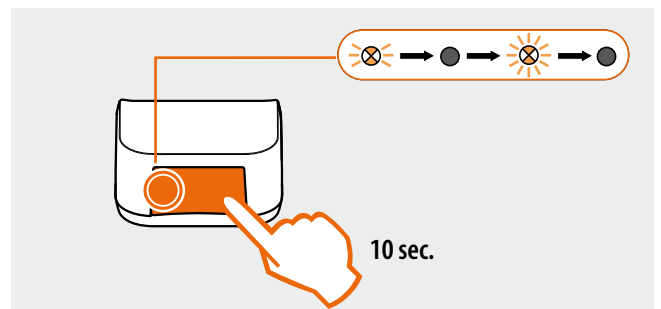


### Disconnecting the interface from the network

1. Press the NETWORK key on the interface. The NETWORK LED will flash quickly.



2. Press the NETWORK key again for at least 10 seconds. The NETWORK LED will flash quickly twice and then will turn off. The interface is no longer connected to the ZigBee network.





# Wireless movement detector RF ZigBee surface mounting

3579

## Description

Each scenario can consist of the timed activation of one or more ON/OFF and/or Dimmer actuators, depending on the brightness of the room and the presence (scenario 1), or absence (scenario 2) of people inside the area covered by the IR sensor.

## Related items

ON/OFF radio actuator: 3571, 3575, H4591, LN4591

Dimmer radio actuator: 3572, 3574, H4593, LN4593

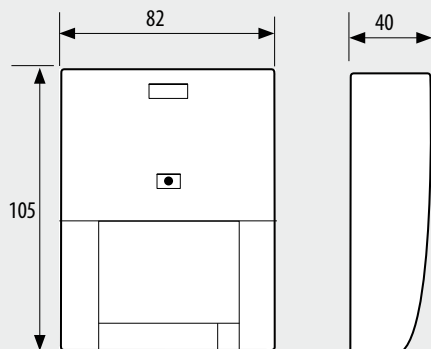
## Technical data

Power supply:	No. 2 batteries, AA 1.5V LR06
Duration of the batteries:	2 years
Timing ON:	15 minutes (1)
Minimum brightness threshold for scenario activation:	1000lux (1)
IR sensor sensitivity:	100% (1)
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Radio frequency capacity:	100 m free field, 10 m in rooms with concrete walls

Note (1): the values can be changed using the BMS04001 and BMS04003 remote controls

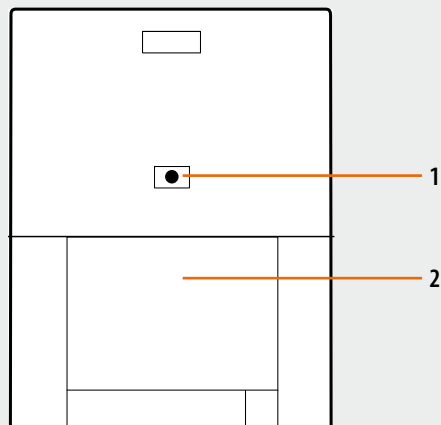
IR sensor covering area: see drawings on page 2

## Dimensional data

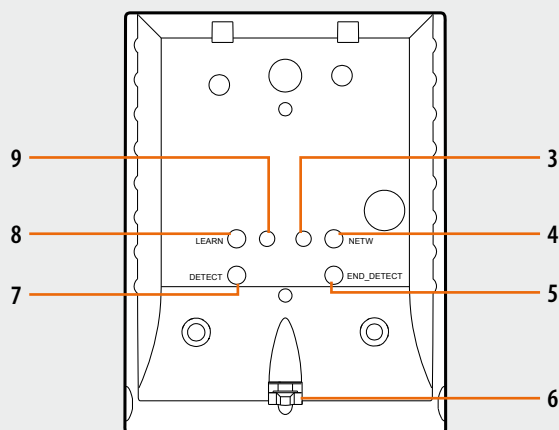


Size in mm

Front view



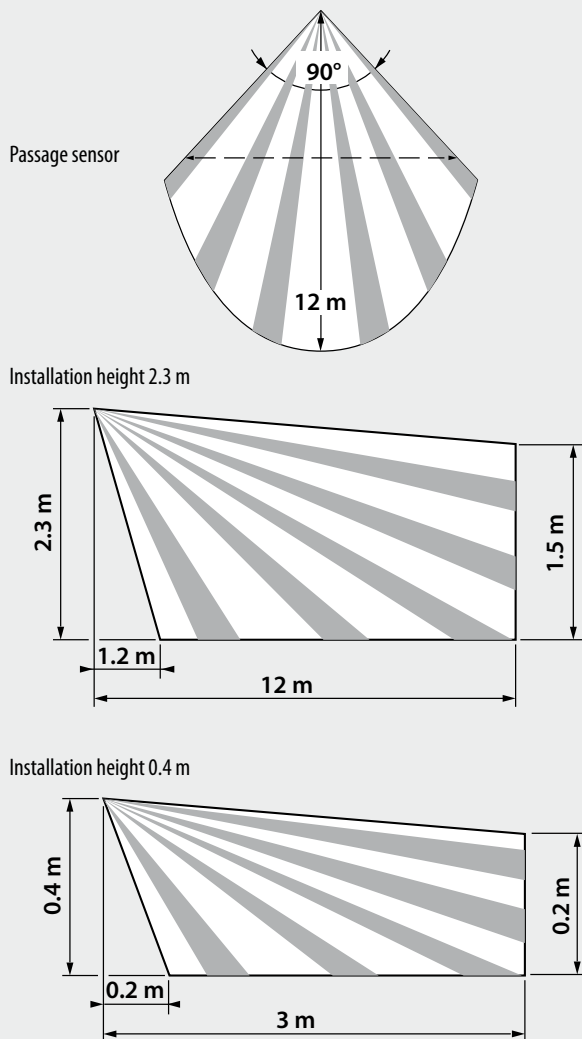
Rear view



## Legend

- LED:
  - Exhausted battery (flashing slowly)
  - presence of people detected inside the area (flashing)
- Fresnell lens (the IR sensor is underneath)
- NETWORK LED
- NETWORK key
- END DETECT key for the creation of scenario No. 2
- Closing screw. Remove to open the sensor and replace the batteries
- DETECT key for the creation of scenario no. 1
- LEARNING key
- LEARNING LED

### Dimensional data - IR sensor covering area



### Configuration

**Configuration of the device inside the network: "Push and Learn" self-learning type. Configuration of the time period, of the IR sensor sensitivity, and of the brightness threshold.**

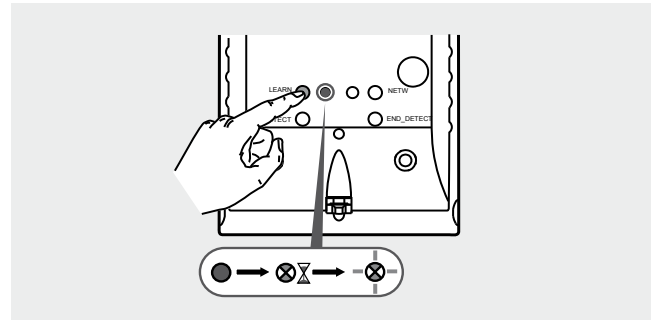
The device is supplied with the following factory set parameters:

- AUTO mode
- Timing ON: 15 minutes
- IR sensitivity: 100%
- Brightness threshold for activation: up to 1000 lux maximum

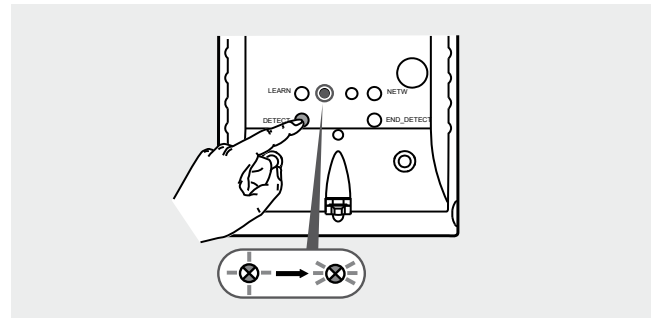
Other modes can be configured using remote controls BMS04001 and BMS04003 (see the instruction leaflet for the details).

**Creation of scenario 1 – active when people are present in the area controlled by the sensor.**

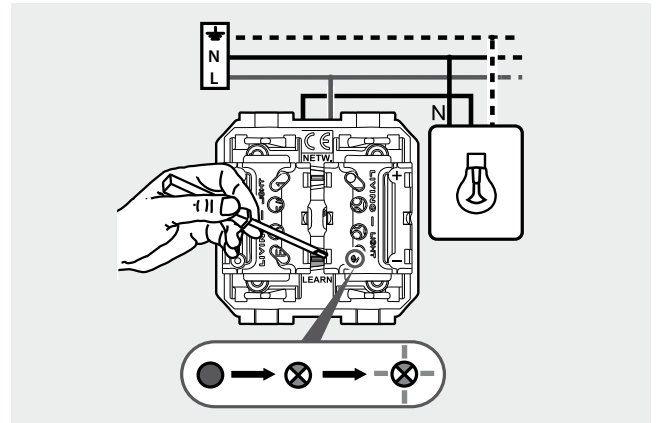
1. Press the sensor LEARNING key. The LEARNING LED will come on steady, and then will flash slowly.



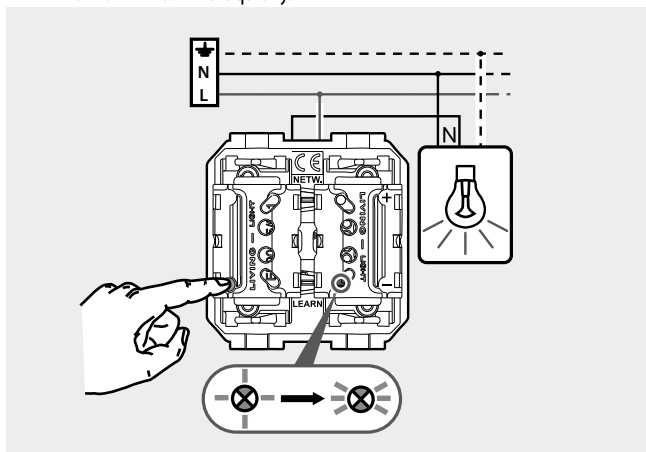
2. Then press the DETECT pushbutton. The LEARNING LED will flash quickly.



3. Press the LEARNING key of the actuator used for the scenario. The LEARNING LED will come on steady, and then will flash slowly.

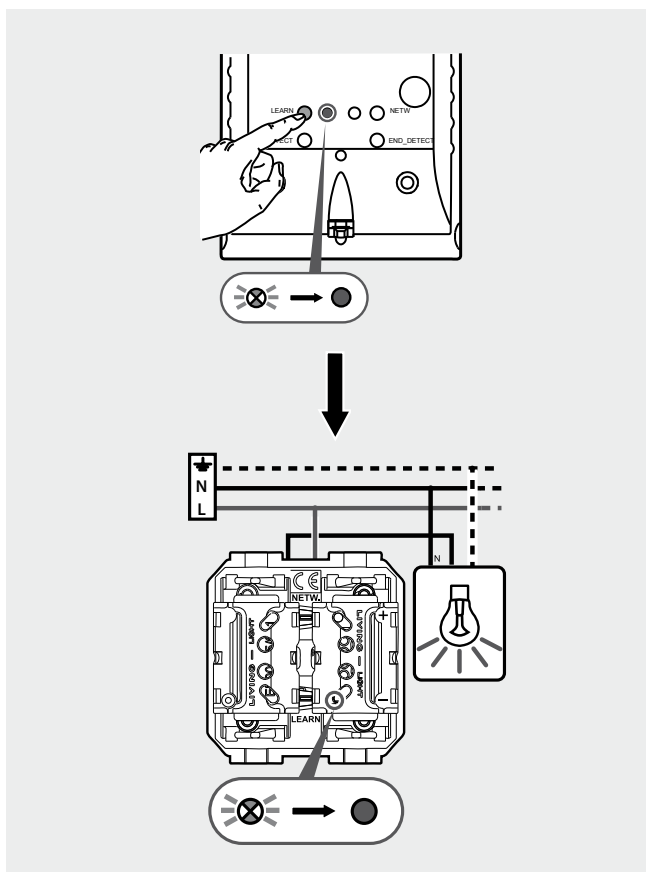


4. Press the ON pushbutton of the actuator. The connected load will come on and the LEARNING LED will flash more quickly.



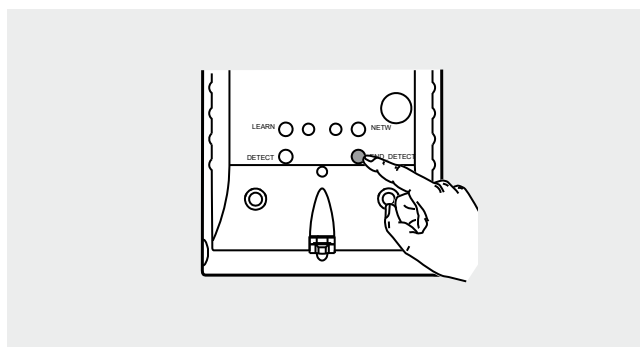
5. Repeat the procedures at points 3 and 4 for each actuator to associate to the scenario during its creation.

6. Press the sensor LEARNING key. The corresponding LEARNING LED and those of all the associated actuators will go off.



**Creation of scenario 2 – active when people leave the area controlled by the sensor.**

1. Repeat the operations described for the creation of scenario 1, using the END DETECT pushbutton to perform the operations described in point 2.



NOTE: For more information on the amendment of the set scenarios (addition and removal of actuators) refer to the instruction leaflet supplied with the sensor.



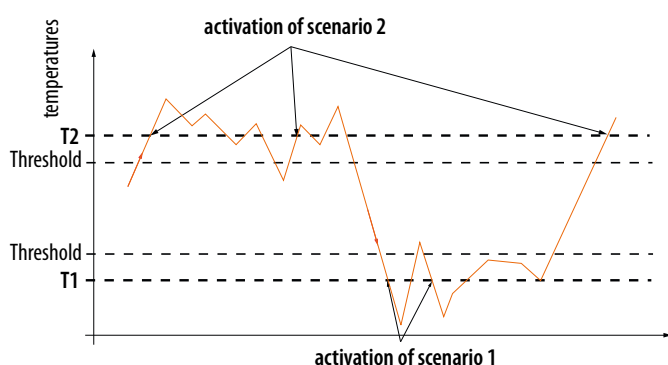
# Wireless temperature sensor RF ZigBee surface mounting

3581

## Description

Device capable of activating several actuators (scenarios) based on the measured temperature.

It is possible to manage up to 2 scenarios: the first activates when the temperature falls below a T1 level, the second when the temperature exceeds a T2 level.

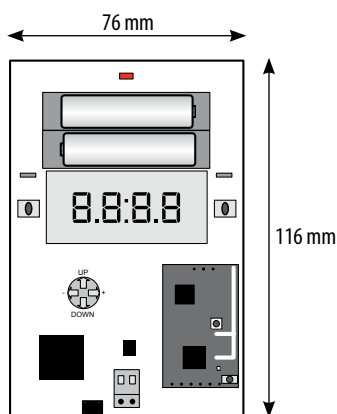


The sensor is battery powered, it features an LCD display for the display of the measured temperature, and a probe with  $\pm 0.5^{\circ}\text{C}$  precision tolerance. It can be easily wall mounted using screws.

## Technical data

Power supply:	No. 2 batteries, 1.5 V AAA type
Duration of the battery:	2 years
Measured temperature range:	$(-25) - (+40)^{\circ}\text{C}$
Tripping threshold:	$1^{\circ}\text{C}$
Precision:	$\pm 0.5^{\circ}\text{C}$
Operating temperature:	$0 - 40^{\circ}\text{C}$
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15m in rooms with concrete walls

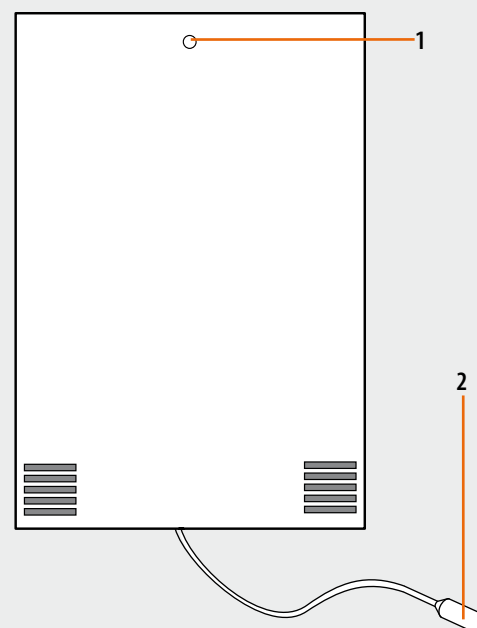
## Dimensional data



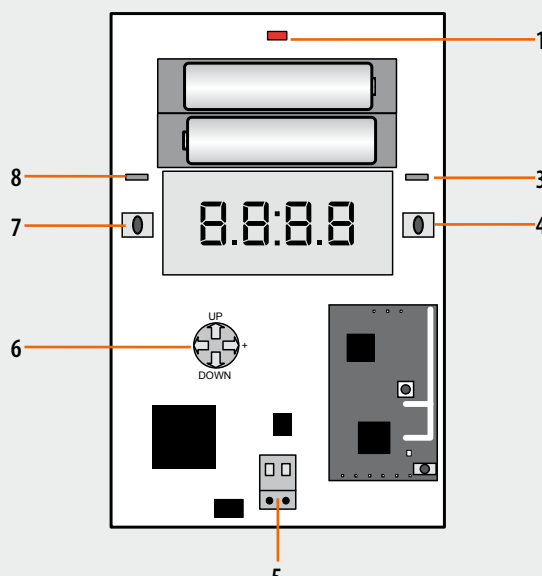
## Configuration

Configuration of the ZigBee network: "Push and Learn" self-learning type. For the association of the scenarios that can be enabled based on the temperature measured refer to the installation manual supplied with the sensor.

Front view



Internal view



## Legend

1. Battery exhausted LED
2. Measurement probe
3. LEARNING LED
4. LEARNING key
5. Probe connection clamp
6. Configuration menu navigation joystick
7. NETWORK key
8. NETWORK LED



# Transceiver for technical alarms

H4586  
LN4586

## Description

Device to be used together with a detector, for the protection of the home from water, gas, or smoke. In case of danger, the device will send a radio signal to the radio actuator for the activation of acoustic/luminous indicators, or for the control of a solenoid valve for the isolation of the water or gas pipes at the entrance of the house.

## Technical data

Power supply:	12 Vdc (also with 12 Vac L/N/NT4541 transformer)
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

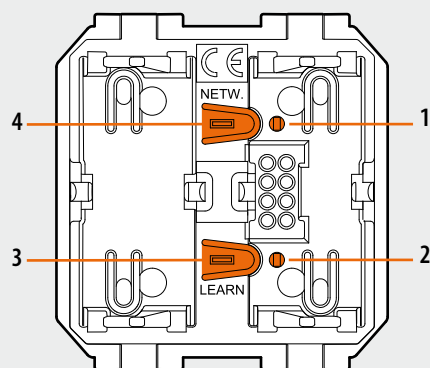
## Dimensional data

Size: 2 flush mounted modules

## Configuration

"Push and Learn" self-learning type.

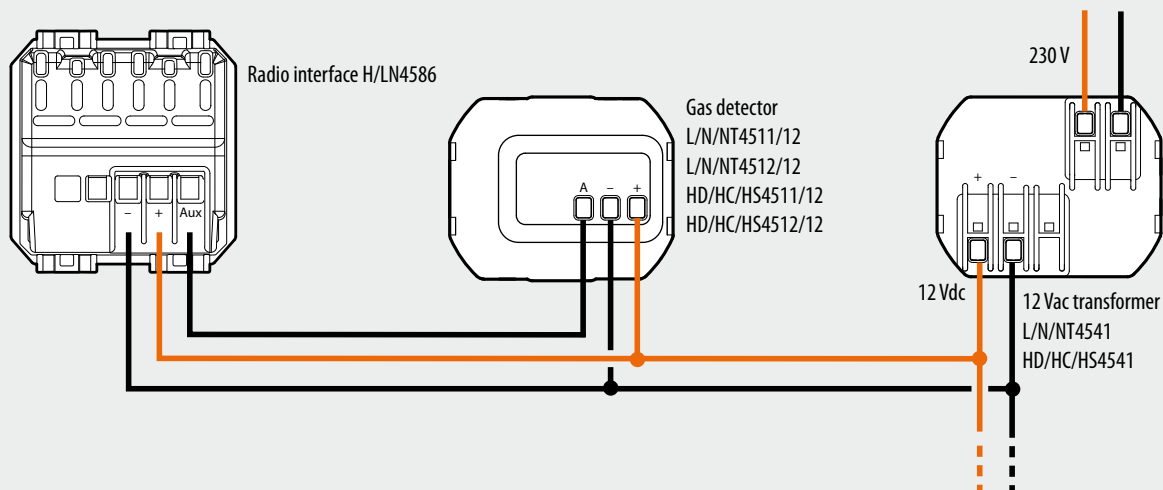
Front view



## Legend

1. ON/OFF key
2. NETWORK LED
3. LEARNING LED
4. LEARNING key
5. NETWORK key

## Wiring diagram





## Actuator RF for technical alarms

H4587  
LN4587

### Description

Radio actuator device with relay output to be used for the notification of an alarm through the activation of visual/acoustic indicators, or for the control of a solenoid valve for the isolation of the water or gas pipes at the entrance of the house.

The actuator is used together with the specific Radio interface for technical alarms, H/LN4586.

### Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	2500 W (240 Vac) 1250 W (100 Vac)

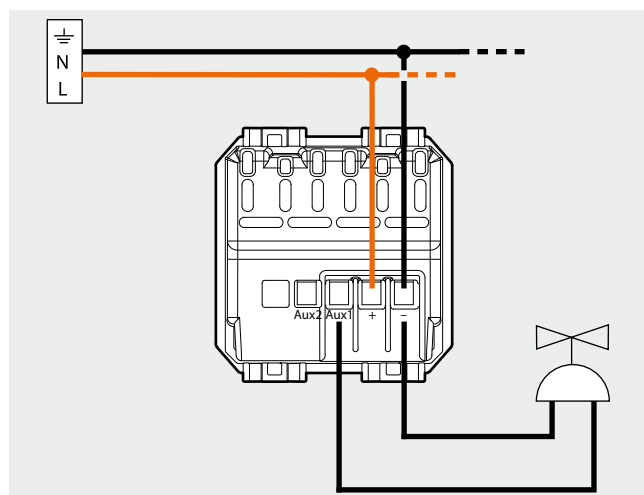
### Dimensional data

Size: 2 flush mounted modules-

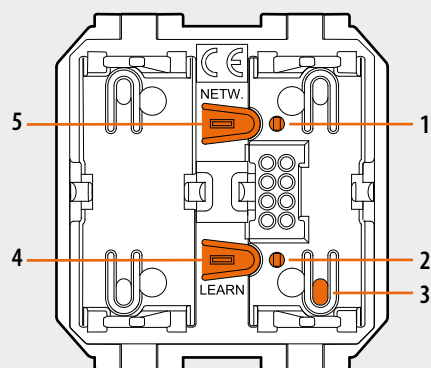
### Configuration

"Push and Learn" self-learning type.

### Wiring diagram



Front view



### Legend

1. NETWORK LED
2. LEARNING LED
3. Key
4. LEARNING key
5. NETWORK key



## 4 scenario control RF

HA4589 L4589N  
HB4589 N4589N

### Description

Radio control device used for saving and managing up to 4 scenarios max.

### Technical data

Power supply:	No. 1 lithium battery, 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

### Dimensional data

Size: 2 modules

### Configuration

**Radio system:** "Push and Learn" self-learning type.

**Wire system:** If the device is integrated with the BUS Automation system using the Gateway SCS/Zigbee interface, it will be possible to manage scenarios saved in the scenario module item F420, which address must be specified by connecting the configurators to the A, PL, and M housings as indicated:

#### Use with scenario module F420:

A = Room

PL = Light point

M = operating mode (1 – 4). It associates to the 4 pushbuttons the scenarios saved by the scenario module (max. 16). The correspondence between the 4 control keys and the scenario numbers saved in the module is as follows:

Configurator in M	Scenario saved
1	scenario 1 – 4
2	scenario 5 – 8
3	scenario 9 – 12
4	scenario 13 – 16

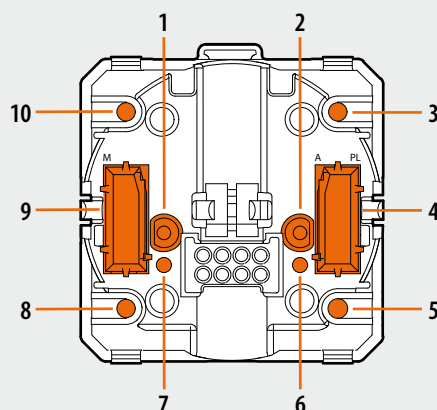
### Scenario programming

To program, change or delete a scenario, the programming of Module F420 must be enabled. This is confirmed by the status LED turning green (press the lock/unlock key of the scenario module for at least 0.5 seconds). After this has been done, proceed as follows:

1. press one of the four control keys to which the scenario should be associated for 4 seconds. The corresponding LED starts flashing;
2. Set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;
3. confirm the scenario by quickly pressing the corresponding key on the control to exit the programming mode;
4. to change a scenario, or to create new ones to use with the other keys, repeat the procedure starting from point 1;

To recall an already set scenario, a quick pressure of the corresponding key on the scenario control is enough.

Front view



### Legend

1. LEARNING key
2. NETWORK key
3. Scenario no. 2 key
4. Configurator socket (A, PL)
5. Scenario no. 4 key
6. NETWORK LED
7. LEARNING LED
8. Scenario no. 3 key
9. Configurator socket (M)
10. Scenario no. 1 key

### NOTES:

Once the necessary operations have been completed, lock the programming procedure, by pressing the lock/unlock key of the scenario module for at least 0.5 seconds, until the corresponding LED turns red.

To delete a scenario, proceed as follows:

1. The scenario module must be enabled for programming;
2. press the pushbutton of the scenario to delete for at least 10 seconds. The corresponding LED will flash quickly for approx. 2 seconds, confirming that the scenario has been deleted. If the LED does not flash, the procedure has been unsuccessful.

To reset the whole memory, press the DEL key of the scenario module for 10 seconds. The yellow LED, "reset scenarios", will flash quickly.



# Switch RF without neutral 400W with LEDS status





H4590  
LN4590

## Description

Actuator for the control of loads with maximum power 400 W, with ON/OFF LED.  
For the connection of the device to the load and to the electric system no neutral conductor is required.

## Technical data

Power supply: 100 – 240 Vac 50/60 Hz  
Operating temperature: 5 – 45 °C  
Technology: Radio 2.4 GHz standard ZigBee®  
Capacity: 150 m free field, 15 m in rooms with concrete walls  
Power/absorption of the loads driven: see following table

Voltage	Incandescent lamp	Halogen lamp	Ferromagnetic transformer	Electronic transformer
				
230 Vac	Max.	400 W	400 W	400 VA
	Min.	60 W	60 W	60 VA
110 Vac	Max.	200 W	200 W	200 VA
	Min.	60 W	60 W	60 VA

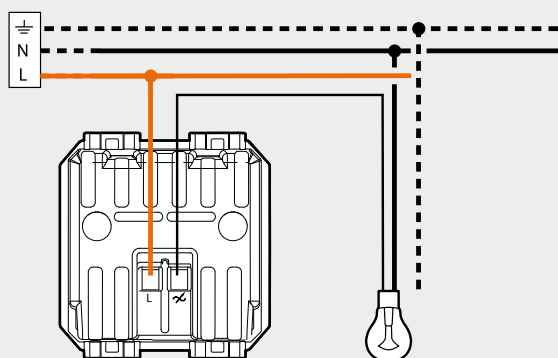
## Dimensional data

Size: 2 flush mounted modules

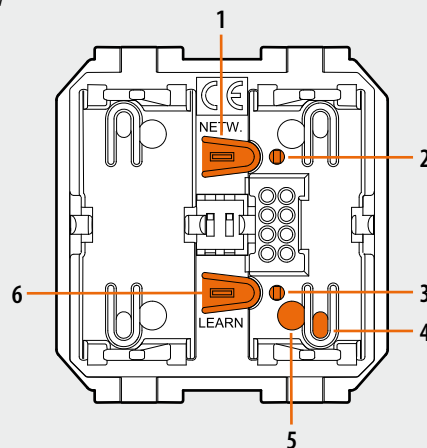
## Configuration

“Push and Learn” self-learning type.

## Wiring diagram



Front view



## Legend

1. NETWORK key
2. NETWORK LED
3. LEARNING LED
4. ON/OFF key
5. Load ON/OFF LED
6. LEARNING key

### Important:

- Connect a load before performing any “scenario” learning procedure.
- For conventional type transformers, a load with power 60% higher than their rated power must be connected.
- For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)



# Universal switch RF with neutral 2500W with LEDS status

H4591  
LN4591

## Description

Actuator for the control of different loads with maximum powers up to 2500 W, with ON/OFF LED.

## Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Incandescent lamp	Halogen lamp	Fluorescent tube lamp	Ferromagnetic transformer
230 Vac	2500 W	2500 W	1250 W	2500 VA
110 Vac	1250 W	1250 W	625 W	1250 VA

Voltage	Electronic transformer	Compact fluorescent tube lamp	LED lamps	Motors
230 Vac	2500 W	1250 W	1250 W	250 VA
110 Vac	1250 W	625 W	625 W	125 VA

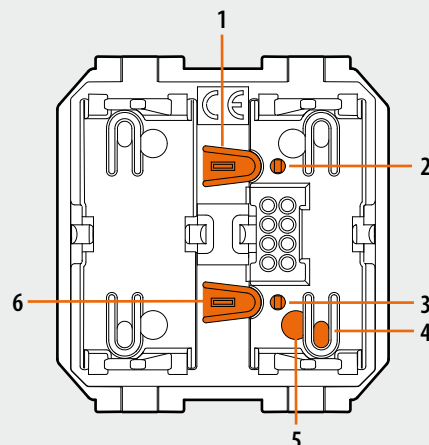
## Dimensional data

Size: 2 flush mounted modules

## Configuration

“Push and Learn” self-learning type.

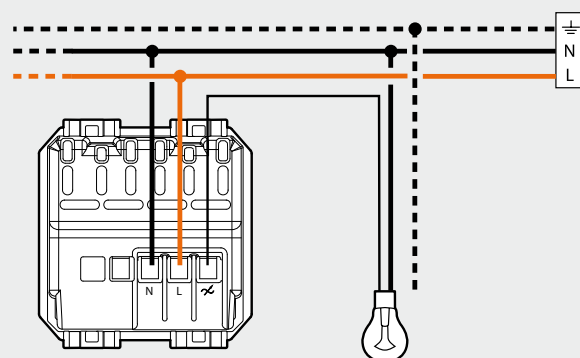
Front view



## Legend

1. NETWORK key
2. NETWORK LED
3. LEARNING LED
4. ON/OFF key
5. Load ON/OFF LED
6. LEARNING key

## Wiring diagram



## Important:

- Connect a load before performing any “scenario” learning procedure.
- For conventional type transformers, a load with power 60% higher than their rated power must be connected.
- For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)



# Universal switch RF with neutral 2 X 1000W with LEDS status





H4592  
LN4592

## Description





Actuator for the control of 2 different loads with maximum powers up to 1000 W, with ON/OFF LED.

## Technical data

Power supply: 100 – 240 Vac 50/60 Hz  
Operating temperature: 5 – 45 °C  
Technology: Radio 2.4 GHz standard ZigBee®  
Capacity: 150 m free field, 15 m in rooms with concrete walls  
Power/absorption of the loads driven: see following table

Voltage	Incandescent lamp	Halogen lamp	Fluorescent tube lamp	Ferromagnetic transformer
				
230 Vac	2 x 1000 W	2 x 1000 W	2 x 500 W	2 x 1000 VA
110 Vac	2 x 500 W	2 x 500 W	2 x 250 W	2 x 500 VA

Voltage	Electronic transformer	Compact fluorescent tube lamp	LED lamps	Motors
				
230 Vac	2 x 1000 W	2 x 500 W	2 x 500 W	2 x 100 VA
110 Vac	2 x 500 W	2 x 250 W	2 x 250 W	2 x 50 VA

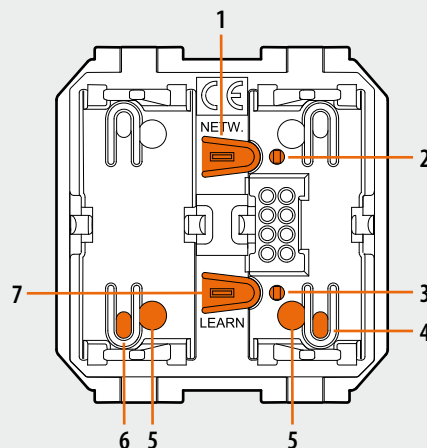
## Dimensional data

Size: 2 flush mounted modules

## Configuration

"Push and Learn" self-learning type.

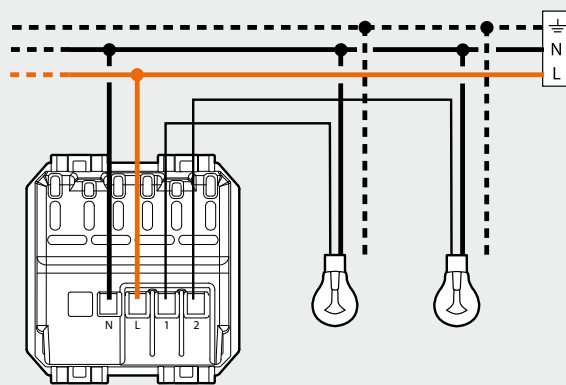
Front view



## Legend

1. NETWORK key
2. NETWORK LED
3. LEARNING LED
4. ON/OFF key
5. Load ON/OFF LED
6. ON/OFF key
7. LEARNING key

## Wiring diagram



## Important:

- Connect a load before performing any "scenario" learning procedure.
- For conventional type transformers, a load with power 60% higher than their rated power must be connected.
- For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)



# All load dimmer RF without neutral 300W with LEDS bargraphe





H4593  
LN4593

## Description

Actuator for the control of different loads with maximum powers 300 W, with ON/OFF LED. For the connection of the Dimmer to the load and to the electric system no neutral conductor is required. The selection of the ON/OFF mode based on the load to drive (resistive or inductive) is performed using a micro-switch.

## Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Incandescent lamp	Halogen lamp	Ferromagnetic transformer	Electronic transformer
				
230 Vac	Max.	300 W	300 W	300 VA
	Min.	60 W	60 W	60 VA
110 Vac	Max.	150 W	150 W	150 VA
	Min.	60 W	60 W	60 VA

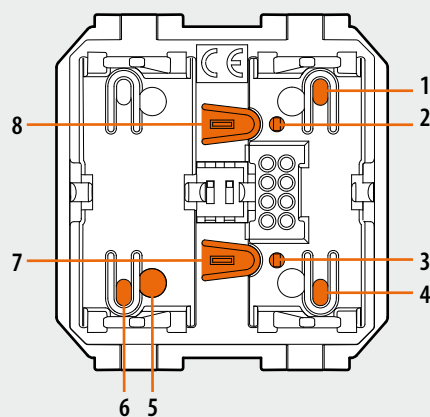
## Dimensional data

Size: 2 flush mounted modules

## Configuration

"Push and Learn" self-learning type.

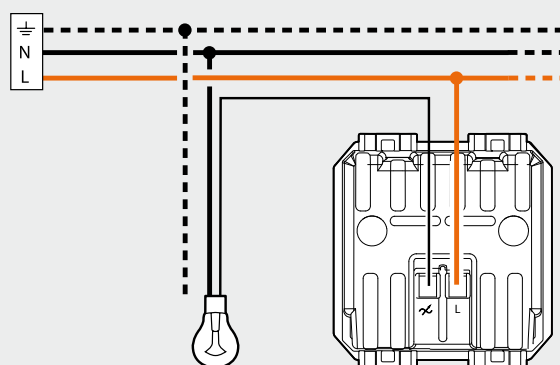
Front view



## Legend

1. + key: press and release immediately to activate the load at 66% of its power; press and hold down to increase the power to the maximum value.
2. NETWORK LED
3. LEARNING LED
4. - key: press and release immediately to activate the load at 33% of its power; press and hold down to decrease the power to the minimum value.
5. Load ON/OFF LED
6. ON/OFF key
7. LEARNING key
8. NETWORK key

## Wiring diagram



## Important:

- Connect a load before performing any "scenario" learning procedure.
- For conventional type transformers, a load with power 60% higher than their rated power must be connected.
- For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)



# Dimmer RF for ballasts 0-10V 1000W

H4594  
LN4594

## Description

Actuator for the control of Ballasts for 0-10 V type Fluorescent tube lamps with power up to 1000 W max , with ON/OFF LED.

## Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

	Ballast 0 – 10 V
Voltage	
230 Vac	1000 VA
110 Vac	500 VA

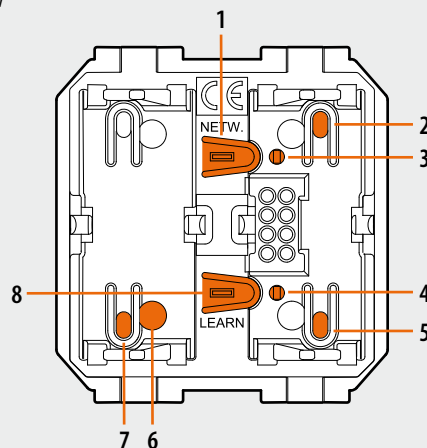
## Dimensional data

Size: 2 flush mounted modules

## Configuration

"Push and Learn" self-learning type.

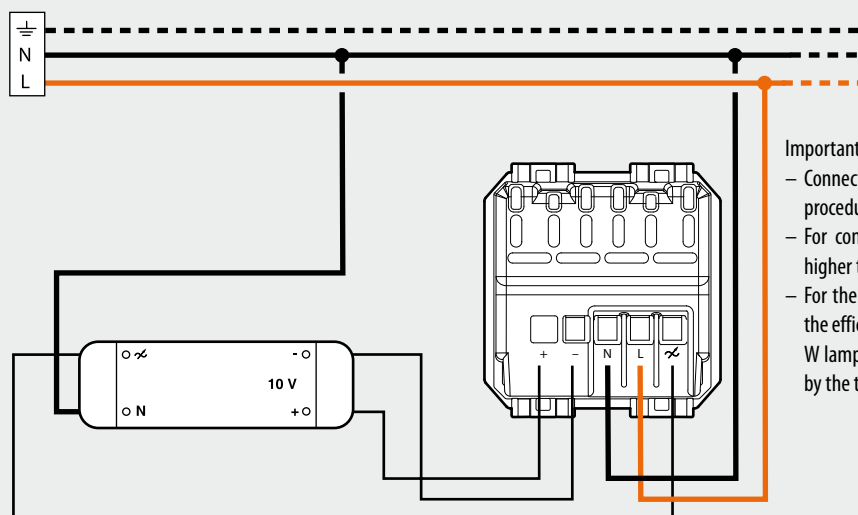
Front view



## Legend

1. NETWORK key
2. + key: press and release immediately to activate the load at 66% of its power; press and hold down to increase the power to the maximum value.
3. NETWORK LED
4. LEARNING LED
5. - key: press and release immediately to activate the load at 33% of its power; press and hold down to decrease the power to the minimum value.
6. Load ON/OFF LED
7. ON/OFF key
8. LEARNING key

## Wiring diagram



### Important:

- Connect a load before performing any "scenario" learning procedure.
- For conventional type transformers, a load with power 60% higher than their rated power must be connected.
- For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)



# Shutter switch RF with preset function

H4595  
LN4595

## Description

Actuator for the control of electric rolling shutter or shutter motors with maximum power 500 VA.

## Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage		Shutter motor
230 Vac	Max.	500 VA
	Min.	270 VA
110 Vac	Max.	250 VA
	Min.	135 VA

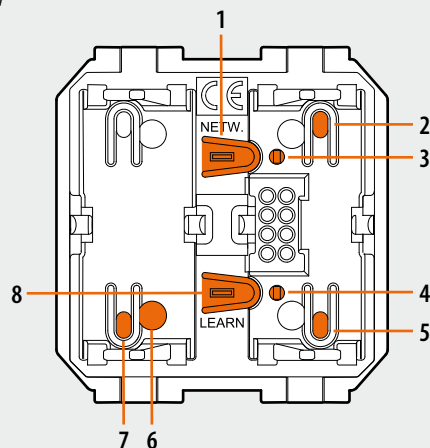
## Dimensional data

Size: 2 flush mounted modules

## Configurazione

"Push and Learn" self-learning type.

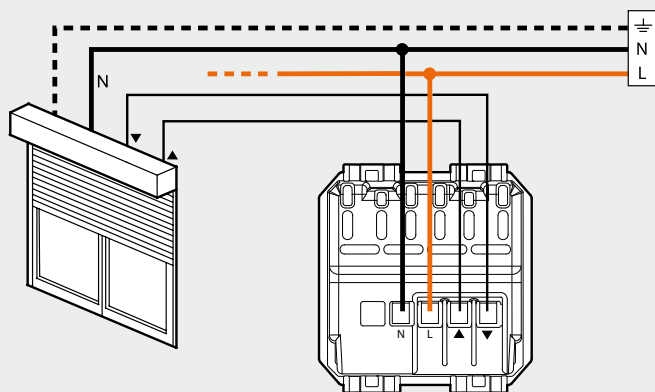
Front view



## Legend

1. NETWORK key
2. UP key
3. NETWORK LED
4. LEARNING LED
5. DOWN key
6. Load ON/OFF LED
7. STOP key
8. LEARNING key

## Wiring diagram



**Important:**  
– Connect a load before performing any "scenario" learning procedure.

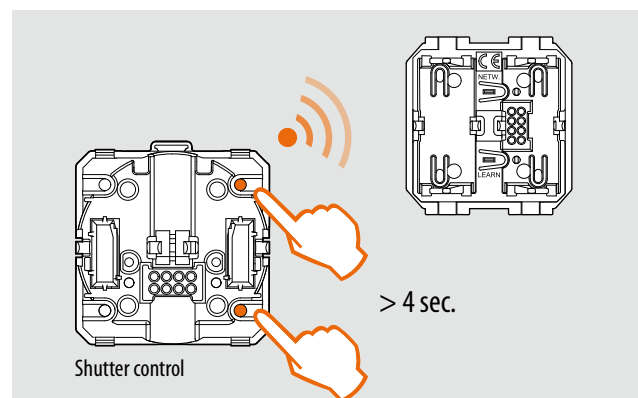
## Configuration

### Select the operating mode

The device may operate in two different modes:

- Bistable (to operate the rolling shutter press and immediately release the UP or DOWN keys).
- Monostable (to operate the rolling shutter press and hold down the UP or DOWN keys).

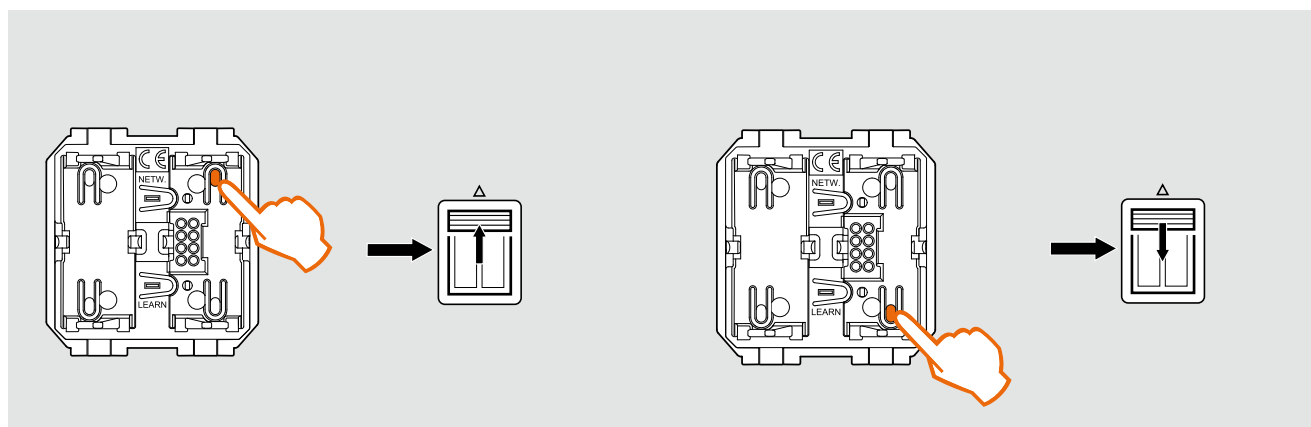
The device is supplied configured in bistable mode. It will be possible to change the operating mode at any time by pressing and holding down for more than 4 seconds both the UP and DOWN keys of the rolling shutter control at the same time.



### Use of the device in bistable mode

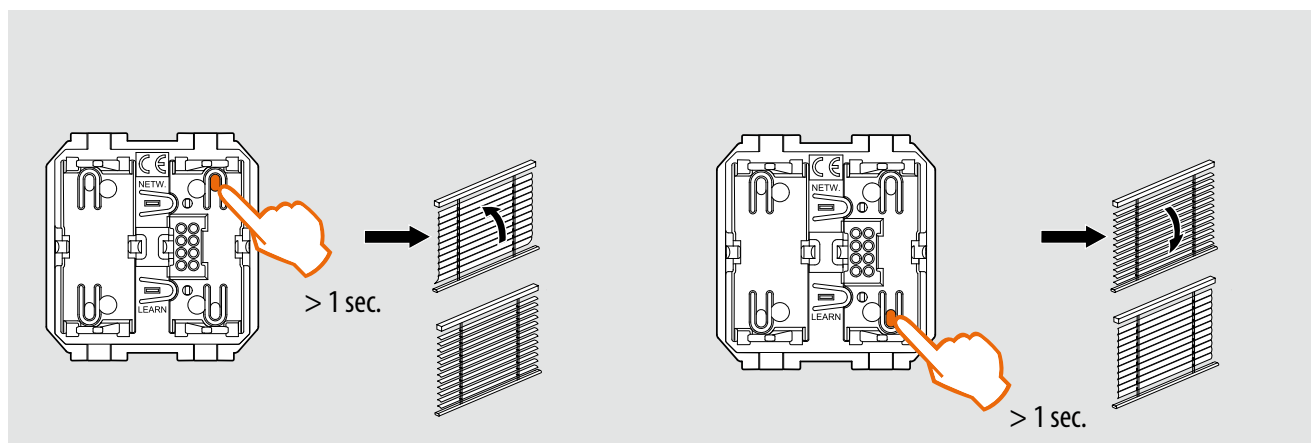
#### Opening and closing the rolling shutter:

Press and release the UP and DOWN keys.



#### Adjustment of the blade position:

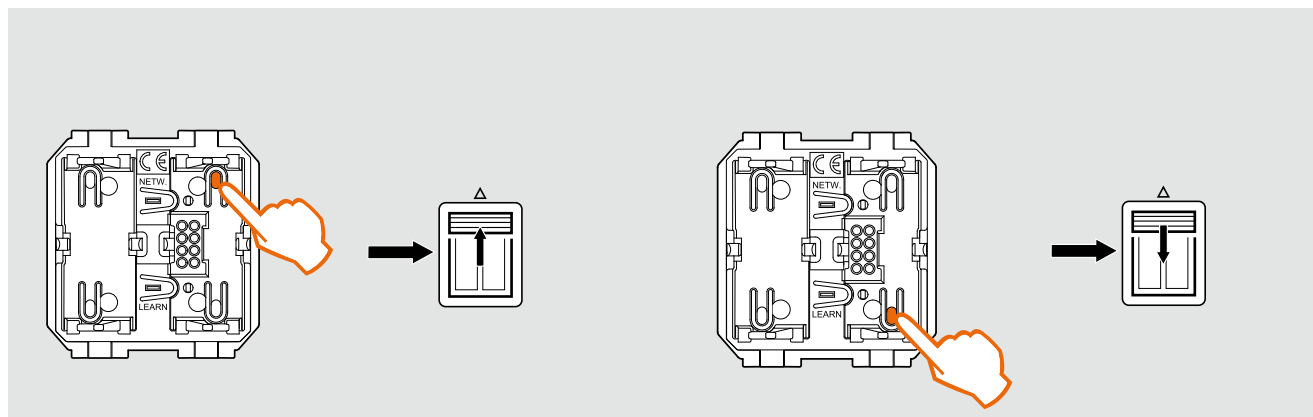
Press the UP and DOWN keys for more than 1 second.



## Use of the device in monostable mode

### Opening and closing the rolling shutter:

Press and hold down the UP and DOWN keys until the desired rolling shutter position.



### Saving of the PRESET position (opening the rolling shutter to a preset position)

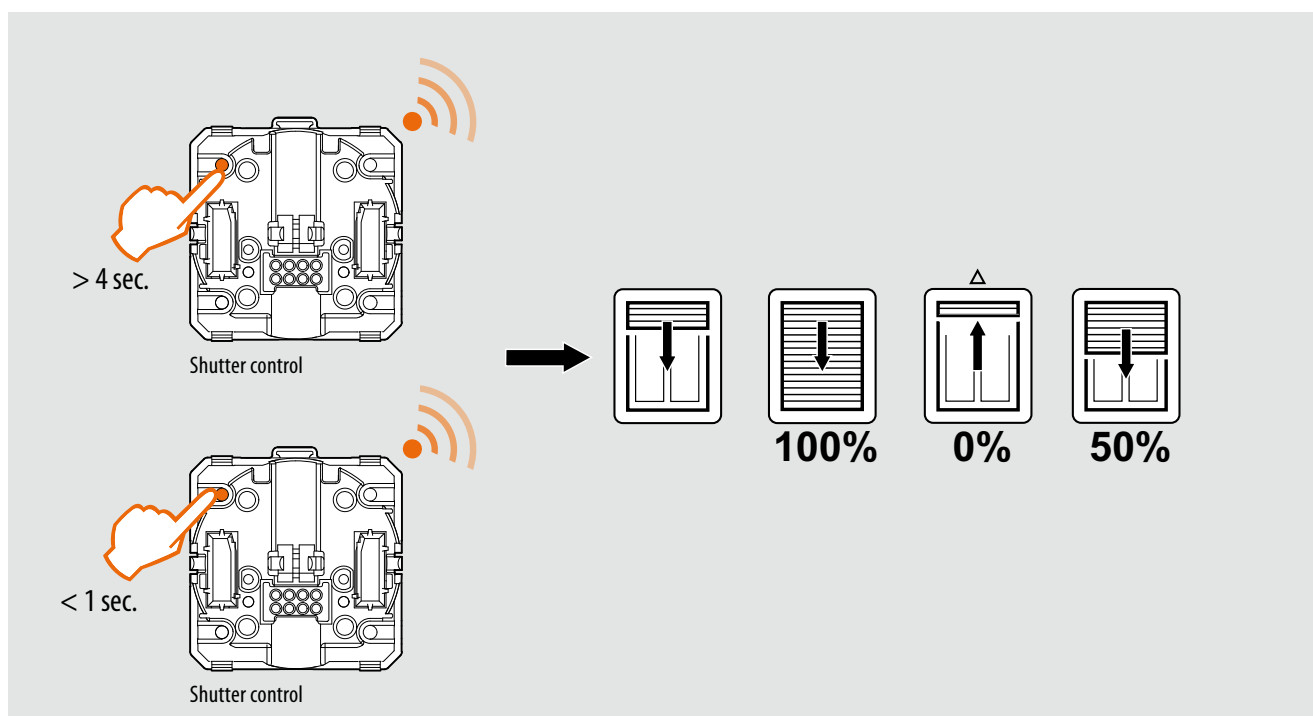
In addition to the operating modes specified, this device can be used to also set the rolling shutters to a preset position by only pressing one key.

The procedure is performed in two different stages:

- calibration of the up and down movements times of the rolling shutter;
- saving of their positions.

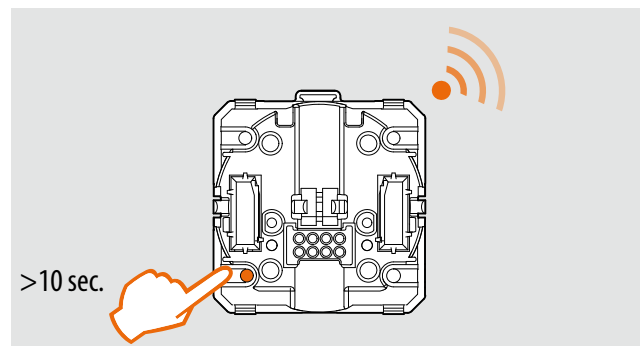
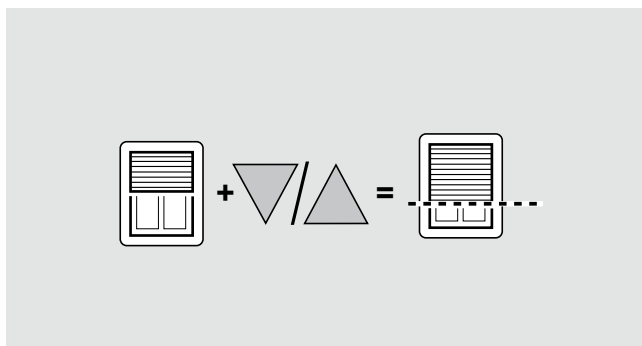
### Calibration of the up and down movements times of the rolling shutter;

1. Check if the rolling shutter motor is equipped with a traditional, or with an electronic "limit switch".
2. Fully open the rolling shutter.
3. In case of traditional limit switch, press the key shown in the picture for more than 4 seconds. Press the key for less than 1 second in case of electronic limit switch.
4. The rolling shutter will close completely, will open completely, and then will move to the half open position. During this stage do not operate the device.
5. The device has saved the rolling shutter full opening and full closing time. Now proceed with saving the desired position (Preset).



**Saving the rolling shutter position:**

1. Operate the UP and DOWN keys of the radio control to move the rolling shutter to the desired position.
2. To save the desired position press the Preset key of the rolling shutter radio control for more than 10 seconds.



3. From now on, irrespective of its position, when the Preset key of the control device is pressed the rolling shutter will move to the previously saved position.



# Switch control RF 1 gang

HA4596 L4596N  
HB4596 N4596N

## Description

Radio control device for the control of an ON/OFF or Dimmer actuator or group of actuators.

When controlling Dimmer actuators, it will only possible to switch the load on/off, but not to adjust the power level (dimmer function).

## Technical data

Power supply:	No. 1 lithium battery 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

## Dimensional data

Size: 2 modules

## Configuration

**Radio system:** "Push and Learn" self-learning type.

**Wire system:** if the device is integrated in the BUS Automation system using the Gateway SCS/Zigbee interface it will be possible to manage BUS actuators, which address must be configured by connecting the configurators to the A, PL, and M housings as indicated.

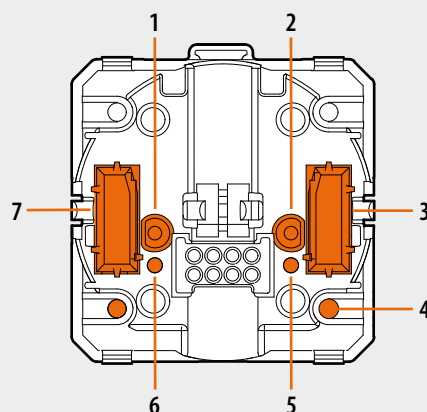
A = Room

PL = Light Point

M = Operating mode

Configurator in M	Function
0	Cyclical ON/OFF
1	ON timed - 1 minute
2	ON timed - 2 minutes
3	ON timed - 3 minutes
4	ON timed - 4 minutes
5	ON timed - 5 minutes
6	ON timed - 15 minutes
7	ON timed - 30 minutes
8	ON timed - 500 ms
O/I	Cyclical ON/OFF
OFF	OFF control
ON	ON control
PUL	monostable ON/OFF control (key)

Front view



## Legend

1. LEARNING key
2. NETWORK key
3. Configurator socket (A,PL)
4. ON/OFF key
5. NETWORK LED
6. LEARNING LED
7. Configurator socket (M)



# Switch control RF 2 gangs

HA4597 L4597N  
HB4597 N4597N

## Description

Radio control device for the control of two separate or two groups of ON/OFF or Dimmer type actuators.

When controlling Dimmer actuators, it will only possible to switch the load on/off, but not to adjust the power level (dimmer function).

## Technical data

Power supply:	No. 1 lithium battery 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

## Dimensional data

Size: 2 modules

## Configuration

**Radio system:** "Push and Learn" self-learning type.

**Wire system:** If the device is integrated in the BUS Automation system using the Gateway SCS/Zigbee interface it will be possible to manage BUS actuators, which address must be configured by connecting the configurators to the A, PL1, PL2, and M housings as indicated.

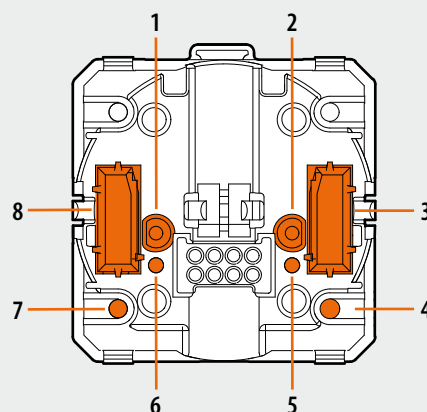
A = Room

PL1 = Light Point N°1

PL2 = Light Point N°2

M = Operating mode (see table)

Front view



## Legend

1. LEARNING key
2. NETWORK key
3. Configurator socket (A, PL1)
4. ON/OFF key No. 2
5. NETWORK LED
6. LEARNING LED
7. ON/OFF key No. 1
8. Configurator socket (PL2, M)

Configurator in M	Function
0	Cyclical ON/OFF
1	ON timed - 1 minute
2	ON timed - 2 minutes
3	ON timed - 3 minutes
4	ON timed - 4 minutes
5	ON timed - 5 minutes
6	ON timed - 15 minutes
7	ON timed - 30 minutes
8	ON timed - 500 ms
0/I	Cyclical ON/OFF
OFF	OFF control
ON	ON control
PUL	Monostable ON/OFF control (key)



## Dimming control 1 gang

HA4598 L4598N  
HB4598 N4598N

### Description

Radio control device for the control of an ON/OFF or Dimmer actuator, or a group of actuators.

When controlling ON/OFF actuators, it will only possible to switch the load on/off.

### Technical data

Power supply:	No. 1 lithium battery 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

### Dimensional data

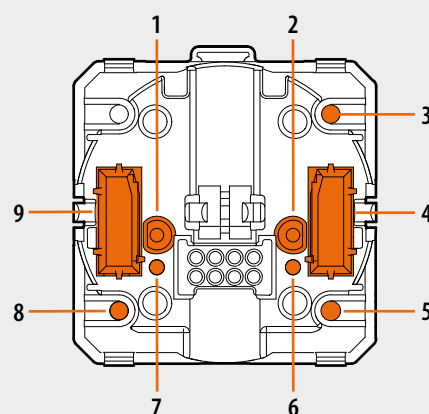
Size: 2 modules for surface mounted installation

### Configuration

"Push and Learn" self-learning type.

If the device is integrated in the BUS Automation system using the Gateway SCS/Zigbee interface it will be possible to manage BUS dimmer actuators, which address must be configured by connecting the configurators to the A and PL.

Front view



### Legend

1. LEARNING key
2. NETWORK key
3. + key: press and release to switch the load ON at 66% of its power, press and hold down to increase the power to the maximum value
4. Configurator socket (A,PL)
5. - key: press and release to switch the load ON at 33% of its power, press and hold down to decrease the power to the minimum value
6. NETWORK LED
7. LEARNING LED
8. ON/OFF key
9. Configurator socket (not used)



# Shutter control RF

HA4599 L4599N  
HB4599 N4599N

## Description

Radio control device for the control of one actuator or of one group of actuators for the control of motorized rolling shutters or shutters. It has a STOP/PRESET pushbutton to stop the movement of the rolling shutter/shutter, and to move it to a preset position.

## Technical data

Power supply:	No. 1 lithium battery 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

## Dimensional data

Size: 2 modules

## Configuration

“Push and Learn” self-learning type.

If the device is integrated in the BUS Automation system using the Gateway SCS/ Zigbee interface it will be possible to manage 2 relay actuator, which address must be configured by connecting the configurators to the A, PL, and M housings as indicated:

A = Room

PL = Light Point

M = operating mode (see below)

Configurator in M	Function
↑↓	Press and immediately release UP and DOWN keys to rise or lower the rolling shutter; to stop the movement press the STOP key.
↑↓ M	Press and hold down the UP or DOWN keys to send the command to rise or lower the rolling shutter; to stop the movement release the pushbutton.

## Configuration

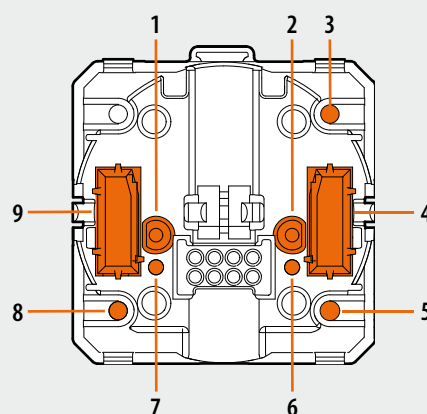
### Select the operating mode

The device may operate in two different modes:

- Bistable (to operate the rolling shutter press and immediately release the UP or DOWN keys).
- Monostable (to operate the rolling shutter press and hold down the UP or DOWN keys).

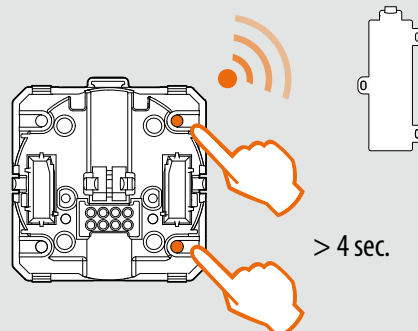
The device is supplied configured in bistable mode. It will be possible to change the operating mode at any time by pressing and holding down for more than 4 seconds both the UP and DOWN pushbuttons at the same time.

Front view



## Legend

1. LEARNING key
2. NETWORK key
3. UP key
4. Configurator socket (A,PL)
5. DOWN key
6. NETWORK LED
7. LEARNING LED
8. STOP/PRESET key. Stops the rolling shutter during its movement. If pressed when the rolling shutter is stopped, it activates its movement to a preset position, saved in the Shutter actuator H/LN4595.
9. Configurator socket (M)

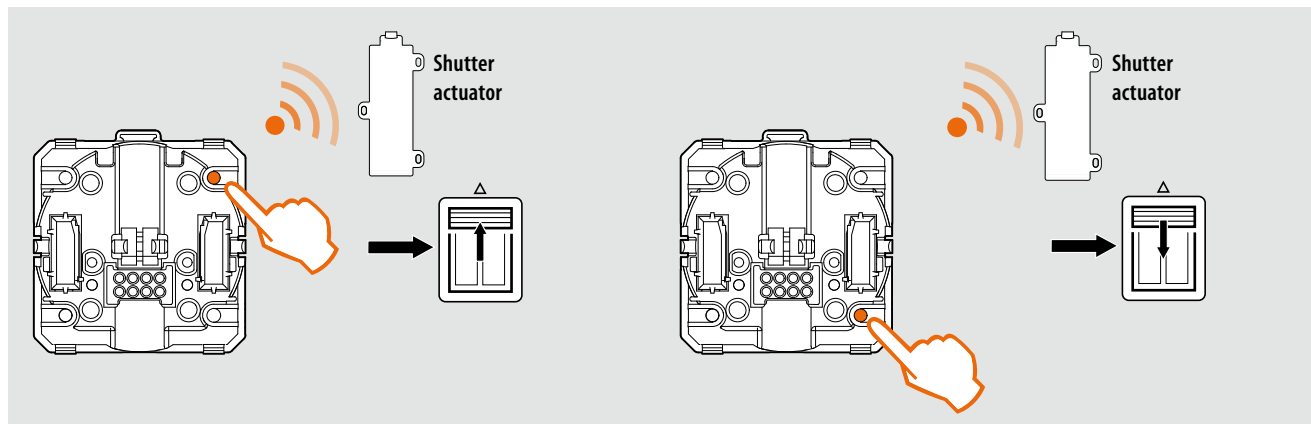


HA4599 L4599N  
HB4599 N4599N

### Use of the device in bistable mode

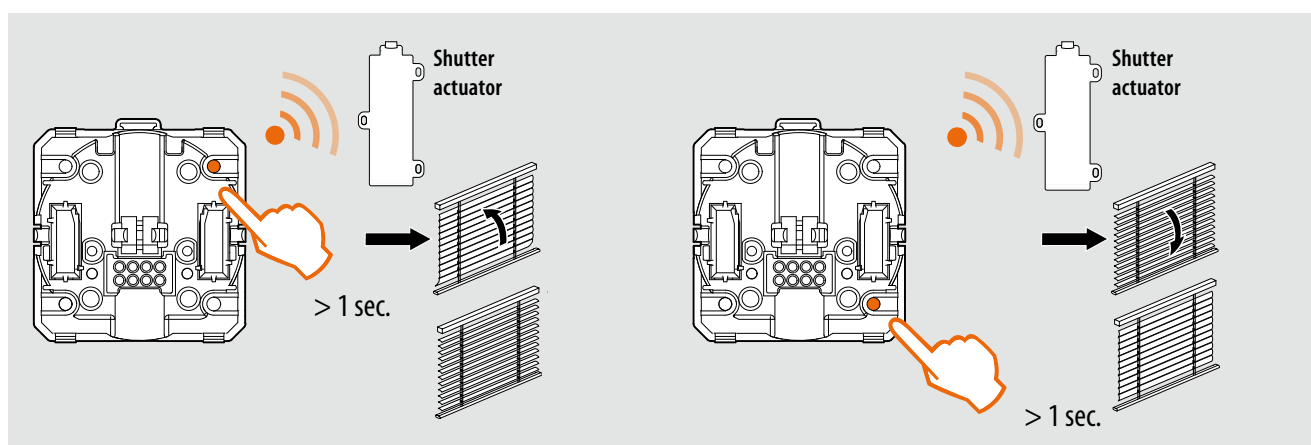
#### Opening and closing the rolling shutter:

Press and release the UP and DOWN pushbuttons.



#### Adjustment of the blade position:

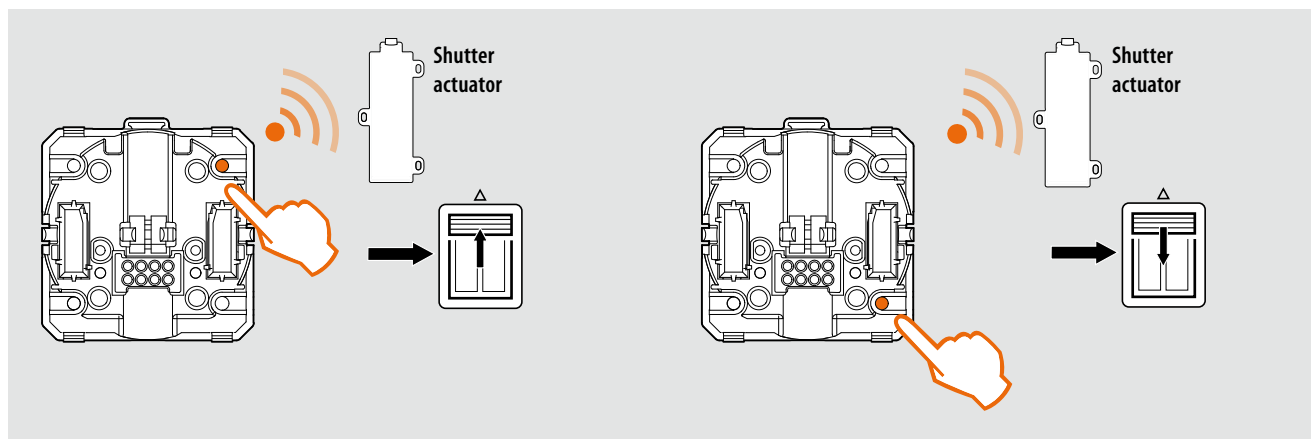
Press the UP and DOWN pushbuttons for more than 1 second.



### Use of the device in monostable mode

#### Opening and closing the rolling shutter:

Press and hold down the UP and DOWN Pushbuttons until the desired rolling shutter position.



### Saving of the PRESET position (opening the rolling shutter to a preset position)

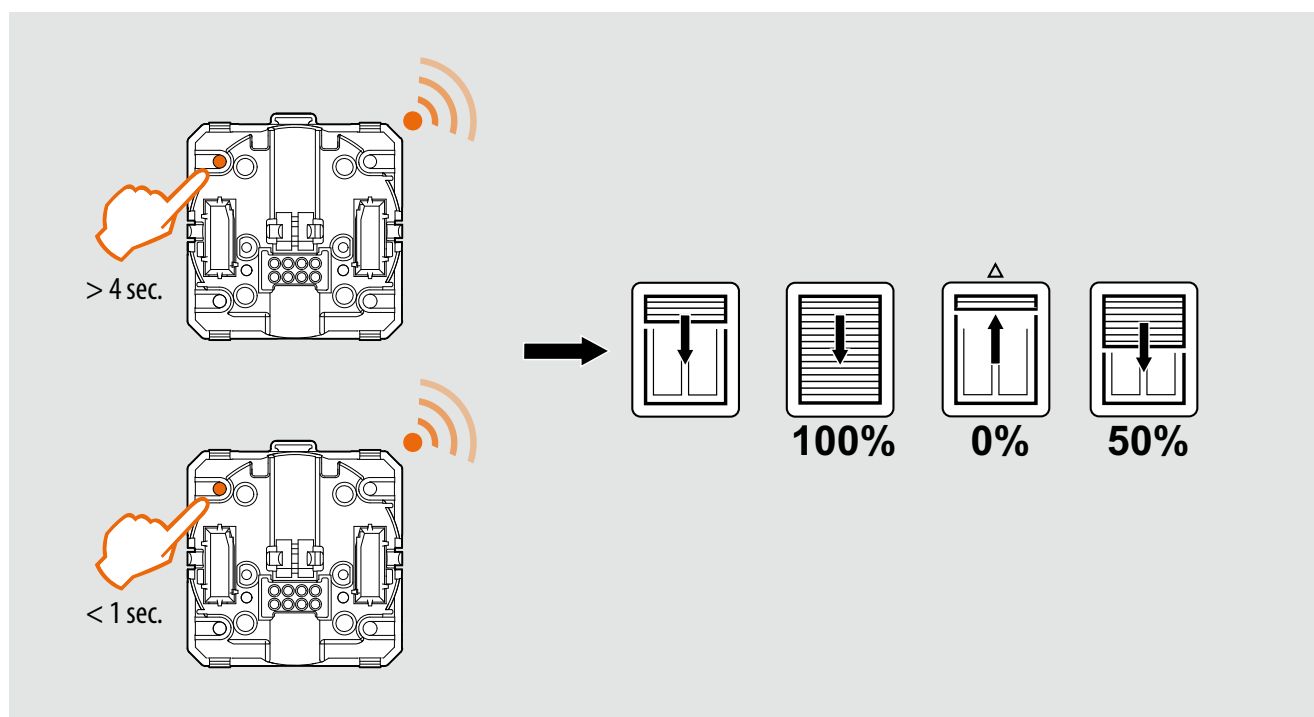
In addition to the operating modes specified, this device can be used to also set the rolling shutters to a preset position by only pressing one pushbutton.

The procedure is performed in two different stages:

- calibration of the up and down movements times of the rolling shutter;
- saving of their positions.

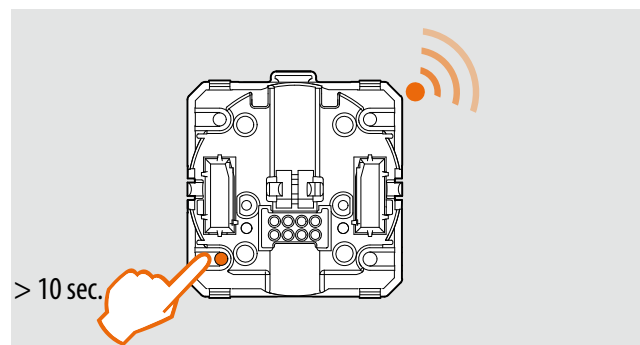
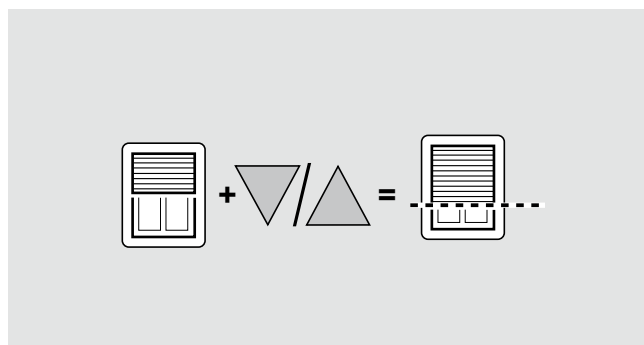
### Calibration of the up and down movements times of the rolling shutter;

1. Check if the rolling shutter motor is equipped with a traditional, or with an electronic "limit switch".
2. Fully open the rolling shutter.
3. In case of traditional limit switch, press the pushbutton shown in the picture for more than 4 seconds. Press the pushbutton for less than 1 second in case of electronic limit switch.
4. The rolling shutter will close completely, will open completely, and then will move to the half open position. During this stage do not operate the device.
5. The device has saved the rolling shutter full opening and full closing time. Now proceed with saving the desired position (Preset).



### Saving the rolling shutter position:

1. Operate the UP and DOWN PUSHbuttons of the radio control to move the rolling shutter to the desired position.
2. To save the desired position press the Preset pushbutton of the rolling shutter radio control for more than 10 seconds.



3. From now on, irrespective of its position, when the Preset pushbutton of the control device is pressed the rolling shutter will move to the previously saved position.



## Gateway SCS/ZigBee®

L/N/NT4578N  
HD/HC/HS4578

### Description

Device for interfacing the ZigBee® radio Automation system with the My Home BUS Automation system.

It makes it possible to extend a wire Automation system and to management the corresponding actuators, using the ZigBee® radio controls.

### Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Absorption:	20 mA
Maximum number of ZigBee® devices that can be managed:	32
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

### Dimensional data

Size: 2 flush mounted modules

### Configuration

The interface must be configured by assigning the address following the procedure used for BUS Automation systems.

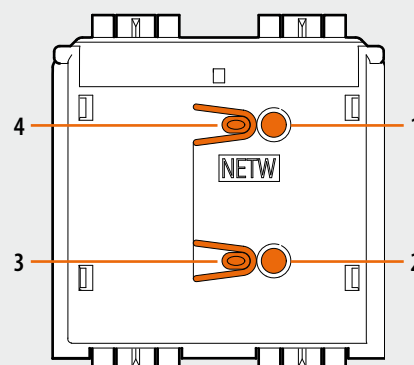
A = Room 1 – 9

PL = Light Point 1 – 9

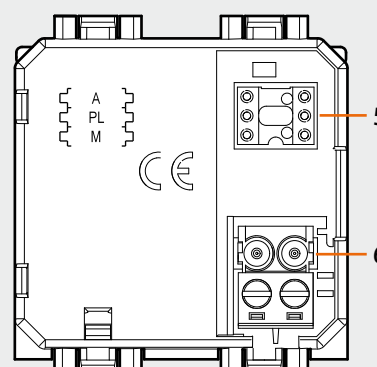
M = - (no configurator)

Note: assign an address not used for other Automation devices.

Front view

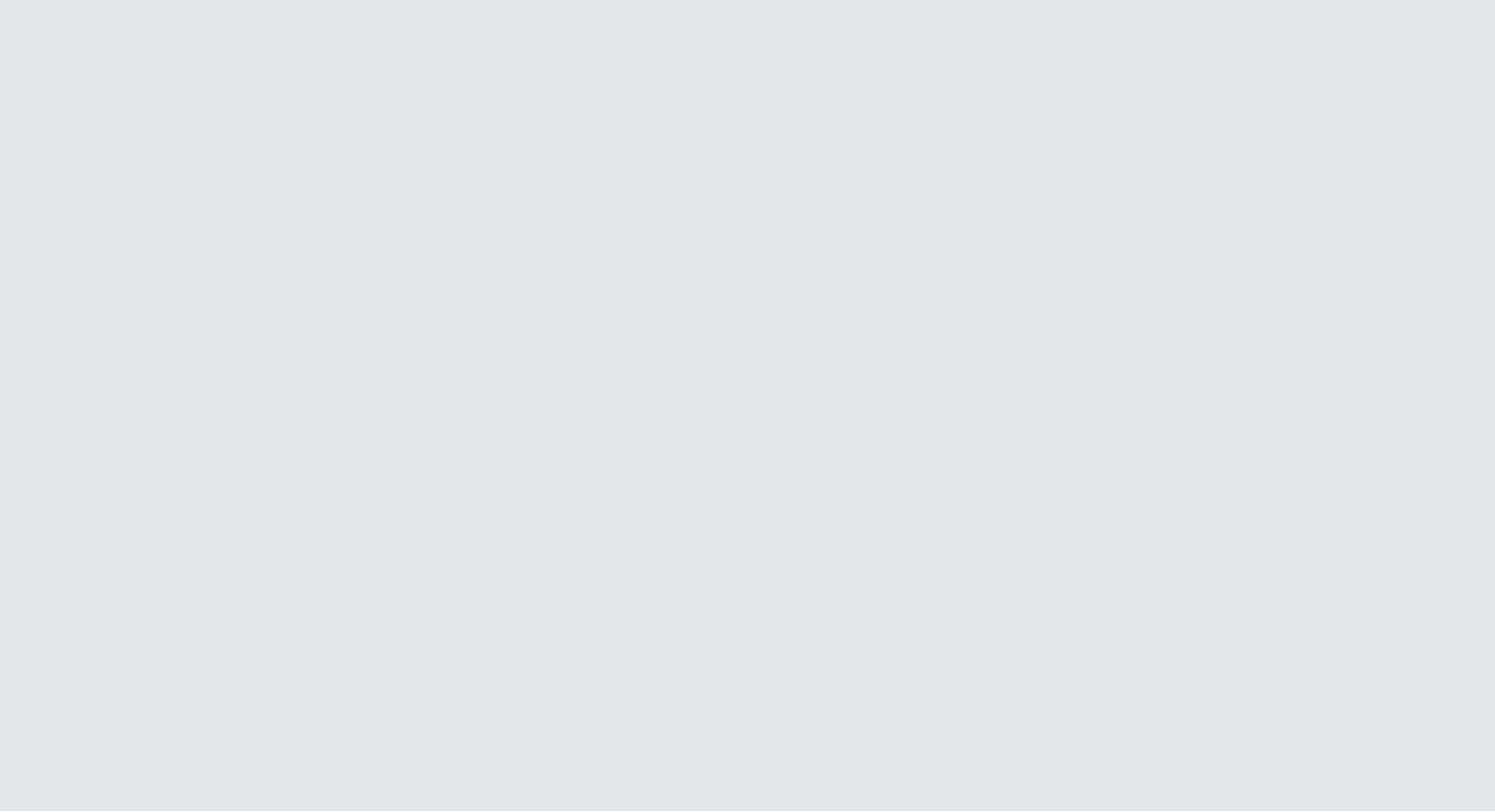


Rear view



### Legend

1. NETWORK LED
2. LEARNING LED
3. LEARNING key
4. NETWORK key
5. Configurator socket (A, PL and M)
6. BUS clamp



666	MY HOME	Technical sheets - Automation	
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## CONTENTS

Technical sheets – Automation



## Basic radio actuator

3470

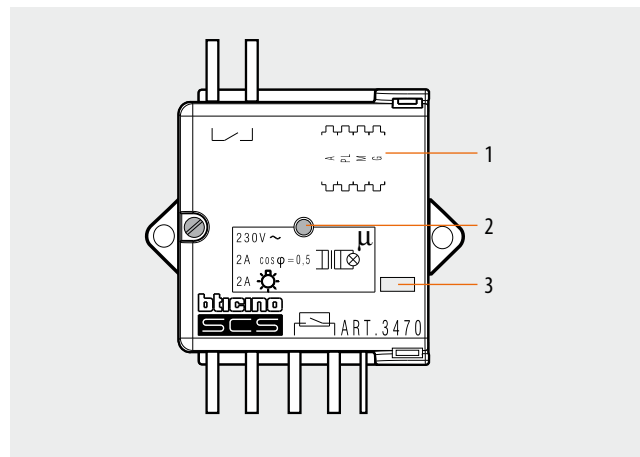
### Description

This device can be used to exploit the benefits of radio technology in a combined radio-wire BUS system. The basic radio actuator can be driven by the Automation system controls, by means of transmitting interface item L/N/NT4576N and item HC/HS4576. The device can also be installed in flush mounted boxes and is fitted with input connection cables for a switch or a traditional pushbutton.

The actuator has a LED that turns ON steadily when the load is active, and flashes in case of wrong configuration.

### Technical data

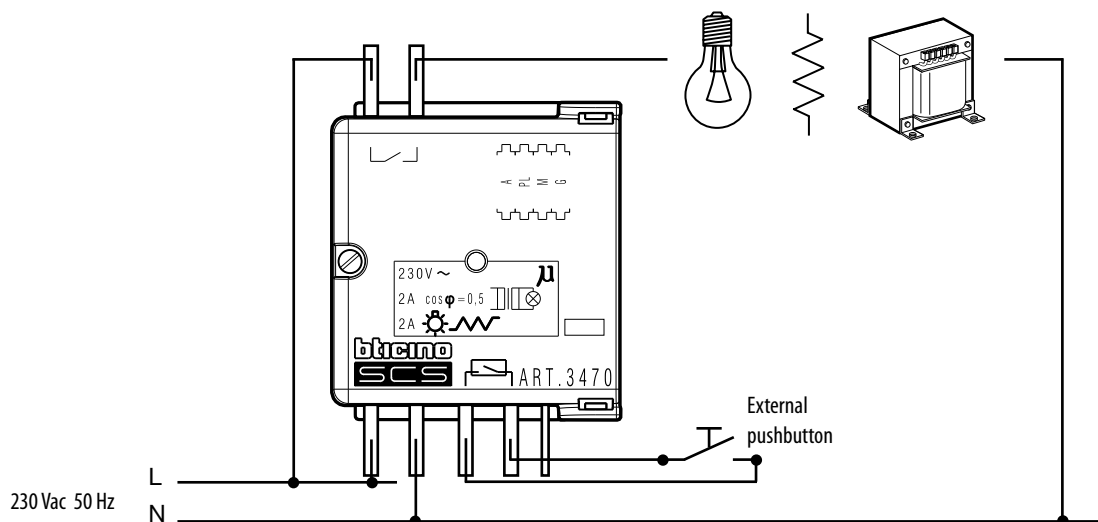
Power supply:	230 Vac 50 Hz
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads:	- incandescent lamps 500 W / 2 A - resistive loads 500 W / 2 A - ferromagnetic transformers 500 VA / 2 A cos $\phi$ 0.5
Radio frequency:	868 MHz
Size:	basic module



### Legend

1. Configurator socket
2. Programming pushbutton
3. LED

### Wiring diagram



### Configuration

The actuator must be configured by inserting the configurators in sockets A, PL, M and G. If, for example, the actuator is configured with A = 5 and PL = 3, it will be managed by the wire control with address A = 5 and PL = 3. The radio interface must have address 52 or less (A = 5 and PL = 2). The actuator performs all the basic operating modes that can be configured directly on the radio control devices, apart from those which use two interlocked relays.

If the external contact is connected to the actuator, it is possible to choose one of the operating modes included in the table below. The operating mode of the external contact is determined by the type of configurator in the M socket.

Possible function	Combination configurator in M and type of external contact	
	Pushbutton	Switch
Cyclical ON/OFF	No configurator	-
Monostable mode. If installed in a MY HOME Automation system, the actuator will ignore Room and General controls	PUL	-
ON/OFF	-	0/1
Timed ON <sup>1)</sup>	1 – 8	

- 1) If controlled by an external pushbutton, the device will turn OFF after a given time period determined by the Configurator in M, as specified in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4
5	5
6	15
7	30 sec.
8	0.5 sec.

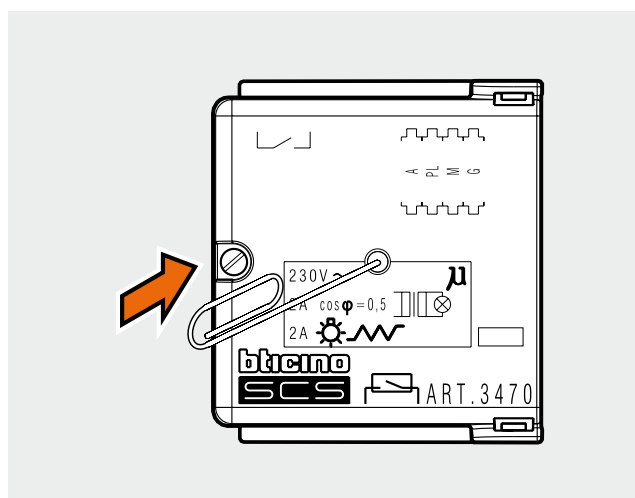
### Programming

This operation is necessary to create a link between the radio control devices and the actuator. Follow the procedure below:

- 1) Power up the device.
- 2) Hold down the programming pushbutton until the LED lights up (about 4 seconds).
- 3) Release the pushbutton.
- 4) Within 20 seconds press the programming radio interface pushbutton or press the wire control device key.
- 5) Programming will be completed when the LED flashes and then turns OFF.
- 6) Repeat the operating sequence from 2 through 5 for all the radio control devices to be programmed.

To cancel all programming in the actuator proceed as follows:

- 1) Power up the device.
- 2) Hold down the pushbutton (see figure); after 4 seconds, the LED will turn ON; hold down the pushbutton until the LED turns OFF.
- 3) Release the key.
- 4) When the LED flashes and then turns OFF, all previously programming will be cancelled.





## Basic actuator

3475




### Description

The device forms part of the Basic automation and is therefore small in size. This actuator can be used in flush mounted boxes, junction boxes, rolling shutter boxes and trunking. Particularly suitable is the installation inside junction boxes, positioning the item at the back of the flush mounted box, behind lowered automation devices, or behind traditional type devices (pushbuttons, switches, etc.).

The actuator has cords for connection to the load to be controlled and a LED.

### Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	13 mA
Power/Absorption of driven loads:	

	Incandescent lamps Halogen lamp	LED lamps Compact fluorescent lamp	Ferromagnetic transformers
			
230 Vac	460 W	2 A	40 W
		Max. 1 lamp	2 A cosφ 0.5
			460 VA

Size: basic module

### Configuration

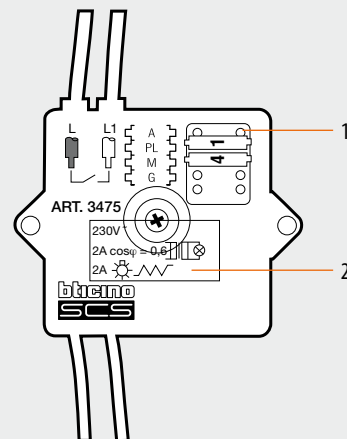
The actuator performs all the basic operating modes that can be configured directly on the control, apart from those which require the use of two interlocked relays.

Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

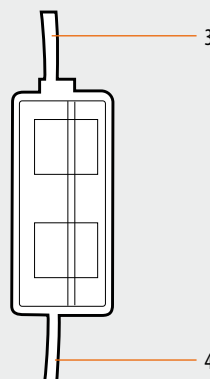
Possible function	Configurator in M
Pushbutton (monostable ON) ignores the Room and General controls	PUL
Actuator as Slave. Receives a control sent by a Master actuator which has the same address	SLA
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control.	1 – 4
With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set in the Master actuator <sup>1)</sup>	

1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light OFF immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Front view



Side view



### Legend

1. Configurator socket
2. LED
3. 0.75 mm<sup>2</sup> cords for connection to the load
4. BUS

Configurator	Time (minutes)
1	1
2	2
3	3
4	4



## Basic control actuator



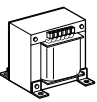
3476

### Description

The device is part of the Basic automation system, and is therefore characterized by a compact size, which makes it possible for it to be installed inside flush mounted boxes, junction boxes, other boxes and trunking. Particularly suitable is the installation inside junction boxes, positioning the item at the back of the flush mounted box, behind lowered automation devices, or behind traditional type devices (pushbuttons, switches, etc.). This actuator/ control accepts on the input a traditional pushbutton with NO contact. The control/actuation device has a BUS inlet made by means of the blue cables, an inlet to connect the external pushbutton by means of the grey and black cables and a relay contact to control the load by means of the two white cords.

### Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	13 mA
Power/Absorption of driven loads:	

	Incandescent lamps Halogen lamp	LED lamp Compact fluorescent lamp	Ferromagnetic transformers
			
230 Vac	460 W	2 A	40 W
		Max. 1 lamp	2 A cosφ 0.5
			460 VA

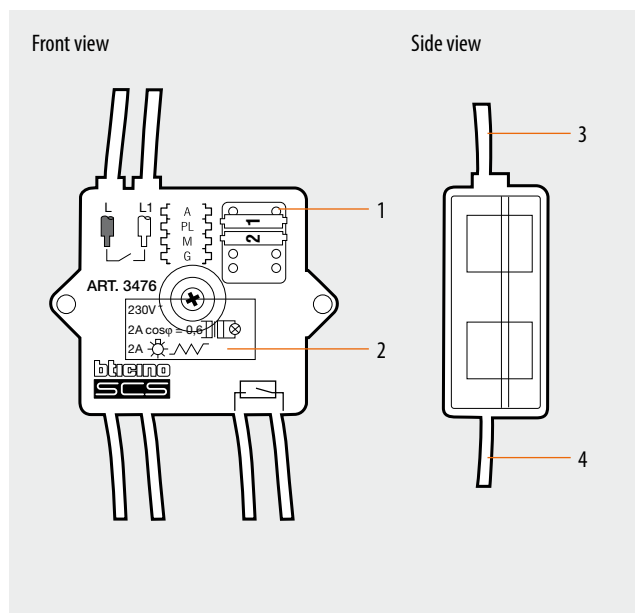
Size: basic module

### Configuration

The actuator performs all the basic operating modes that can be configured directly on the control, apart from those which require the use of two interlocked relays. Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Cyclical ON/OFF	No configurator
ON/OFF mode	0/1
Pushbutton (On monostable) ignores Room and General controls	PUL
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Timed ON <sup>1)</sup>	1 – 8 <sup>1)</sup>

1) If controlled by external pushbutton the device switches OFF after a time set by the configurator in M as indicated in the table below.



### Legend

1. Configurator socket
2. LED
3. 0.75 mm<sup>2</sup> cords for connection to the load
4. BUS

Configurator	Time (minutes)
1	1
2	2
3	3
4	4
5	5
6	15
7	30 sec.
8	0.5 sec.



## Basic contacts interface

3477

### Description

This device lets you integrate traditional control devices (switches, pushbuttons, etc.) in advanced systems with BUS operating logic.

Therefore, it is possible to extend the use of the automation system and Lighting Management in rooms where traditional systems are already present or in historic and prestigious environments whereby the complete or partial remaking of the electric system involves heavy masonry work. The old but valuable switch with its no longer compliant wiring can therefore continue to be used with it as the connection to the load to be controlled is carried out safely by connecting it with its SCS interface with no-voltage contact.

The PL1 contact drives the PL1 light point, the PL2 contact drives the PL2 light point. The interface is fitted with two LEDs for the notification of correct operation and three cables for connection to traditional devices. The device is made with Basic enclosure, with reduced dimensions and can be used in flush mounted and junction boxes and trunkings. The installation in boxes is particularly advantageous, with the positioning of the item inside the flush mounted box, behind lowered automation devices or behind traditional devices (pushbuttons, circuit breakers etc.).

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&go, Project&Download).

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	3.5 mA

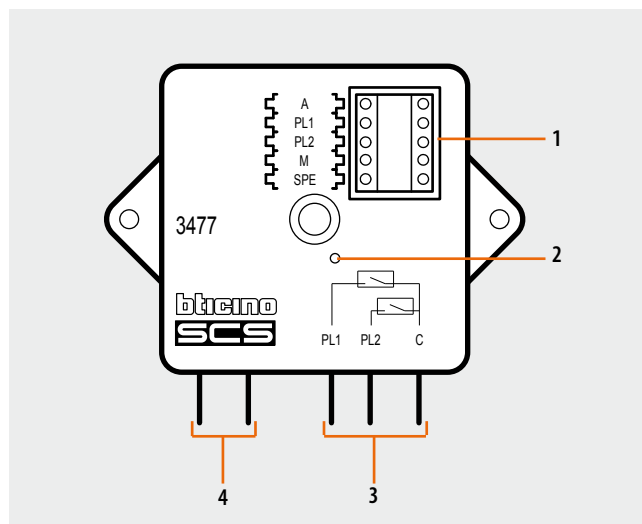
### Dimensional data

Size: basic module

### MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.



### Legend

1. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
2. LED
3. Cords for connection to traditional devices
4. BUS



3477

### Physical configuration

The interface includes two independent central units, identified with positions PL1 and PL2. The two units can send:

- controls to two actuators for two independent loads (ON, OFF or adjustment) identified with the address PL1 and PL2 and mode specified in M or;
- a control to the scenario module item F420;
- a double control intended for a single load (motor for rolling shutter UP/DOWN, OPEN-CLOSE curtains) identified with the address PL1 and PL2 and mode specified M.

The interface is fitted with a LED to signal correct operation, and three clamps for connection to traditional devices such as:

- two traditional NO (normally open) and NC (normally closed) switches or pushbuttons;
- a two-way switch.

### 1) SPE=0 mode - Standard functions - Automation

Possible function	Value configurator in M	
	single function	double function
Cyclical ON-OFF for short press and adjustment with long pressure	no configurator	-
ON	ON	-
ON timed <sup>1)</sup>	1 – 8	-
OFF	OFF	-
OFF pressing the key connected to PL1 - ON pressing the key connected to PL2 and adjustment with long pressure (dimmer) <sup>2)</sup>	-	0/1
UP/DOWN rolling shutter to end of stroke	-	↑ ↓
UP/DOWN rolling shutter monostable	-	↑ ↓ M
Pushbutton	PUL	-

1) The device sends an OFF control after a time set by the configurators used as indicated in the table below.

Configurator	Time (min.)
1	1
2	2
3	3
4	4
5	5
6	15
7	30 sec.
8	0.5 sec.

2) As a function of the receiver actuator operating mode.

NOTE: If circuits are connected to the interface clamps, the operating mode to select is PUL. If normally open (NO) pushbuttons are connected all the other operating modes indicated in the table are performed.

## 2) Operating mode with the configurator in M and in SPE

Possible function	Value configurator in SPE	Value configurator in M	
		single function	double function
Locks the status of the devices to which the control is addressed	1	1	-
Unlocks the status of the devices to which the control is addressed	1	2	-
Unlocks with key connected to PL2 and locks with key connected to PL1	1	-	3
On with flash <sup>1)</sup>	2	none – 9	-
ON (key in PL2) - OFF (key in PL1) without adjustment	1	-	0/1
Cyclical ON/OFF without adjustment (only NO contact)	1	7	-
Selection adjustment level fixed at 10 to 90 % of the dimmer <sup>2)</sup>	3	1 – 9	-
Call the scenarios of module F420	4	-	see table <sup>(3)</sup>
Management of scenario module item F420 <sup>3)</sup>	6	see table <sup>(3)</sup>	
ON timed (2 seconds)	8	1	
ON timed (10 minutes)	8	2	

1) Device to be combined with an OFF control for switching OFF.  
The flash time is indicated in the table:

Configurator	Time configurator (sec.)
none	0.5
1	1
2	1.5
3	2
4	2.5
5	3
6	3.5
7	4
8	4.5
9	5

2) Device to be combined with the dimmer actuator and an OFF control for switching OFF.  
The configurator defines the adjustment in % of the load power.

Configurator in N	% P of load
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90

3) With SPE=4 it is only possible to recall the scenario saved in the F420 module; with SPE=6 it is possible to recall and program the scenarios saved in the F420 module. M=1-8: group of scenarios to be controlled:

M	First contact (PL1)	Second contact (PL2)
1	1	2
2	3	4
3	5	6
4	7	8
5	9	10
6	11	12
7	13	14
8	15	16

A=0 to 9 and PL1=1 to 9 are the room and the light point of the scenario module to be controlled. PL2 must be the same as PL1, or not configured (in this case the second contact is disabled).

Scenario programmer: in order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F422 so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

- 1) press one of the four control keys the scenario is to be associated to for 3 seconds. The corresponding LED will begin to flash.
- 2) Set the scenario using the corresponding controls belonging to the various Automation, Temperature control, Sound system functions, etc.
- 3) confirm the scenario by quickly pressing the corresponding key on the control to exit programming mode;
- 4) To change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1.

To call a set scenario just press its pushbutton on the control quickly.

To cancel a scenario completely, keep the corresponding pushbutton pressed for about ten seconds.

### 3) Mode with SPE=7 - Automation standard functions - normally closed contact

This mode can perform the controls envisaged by the Basic operating mode with SPE = 0 when NC pushbuttons or switches are connected to the interface clamps.

### 4) Mode with SPE=5 - sound system -

When the interface is correctly configured, the following functions are performed:

M=0 ON/OFF mode:

N1 contact:

With a short pressure, the following sequence is sent:

- ON of the sources. PL2 indicates the source to activate before switching the amplifier on.  
If PL2=0, source 1 is turned on (follow-me mode)
- ON of the A/PL1 amplifier.

With extended pressure the following happens:

- For point-point controls, if the amplifier is already on, only the volume is adjusted (VOL+); if the amplifier is OFF, the switch on sequence is sent first;
- For AMB or GEN controls, only the volume is adjusted.

N2 contact:

With a short pressure, the OFF command of the A/PL1 amplifier is sent

With an extended pressure the volume is adjusted (VOL -)

In this operating mode:

Point-point control

- A = 1-9 amplifier room
- PL1 = 0-9 amplifier speaker

Room control

A = AMB

PL1 = 1-9 amplifier room the control is intended for

General control

A = GEN

PL1 = 0

PL2 = 1-4 indicates the source to activate before switching the amplifier on.  
If PL2=0, follow-me mode is activated

M=1 Source cycling/track cycling mode

N1 contact: cycle source

N2 contact: cycle track

In this operating mode:

- room controls

A = 1-9 is the amplifier room

- General controls

A = GEN for general controls

PL1=PL2=0

### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- contact;
- single light control;
- single disable control;
- single scenario control;
- single CEN control;
- single scenario PLUS control;
- single CEN PLUS control;
- single AUX control.

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

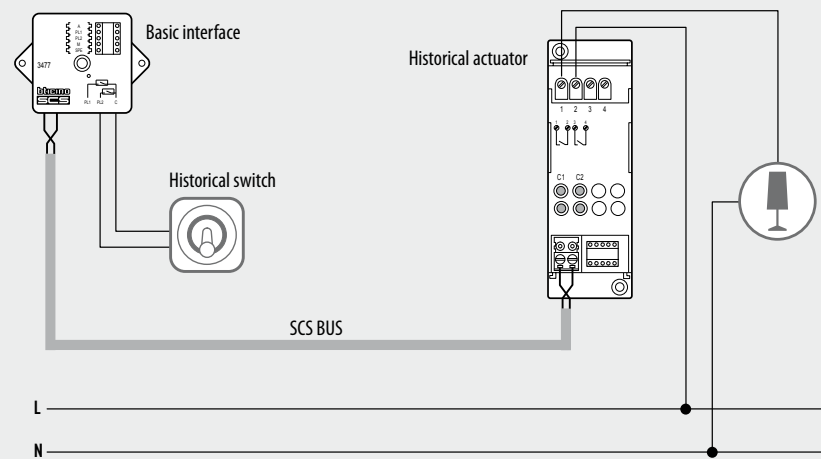
- Plug&Go
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- contact
- single light control
- single disable control
- single scenario control
- single CEN control
- single scenario PLUS control
- single CEN PLUS control
- single AUX control

For more information on the functions see the glossary before the Technical sheets chapter.

### Wiring diagram





## Mobile actuator

3526 - 3526/10 - 3526/16

### Description

This plug-in actuator provides radio control, through transmitting interfaces L/N/NT4576N or HC/HS4576, of the connected load using the internal 16 A relay. The relay contact is of the normally open type. In this way, when idle the load connected to the actuator is OFF.

The actuator is available in three versions:

- **3526** with German standard plug for connection to the network socket, and universal socket (German standard, 10 A and 16 A) for connection of the load.
- **3526/10** with 10 A plug for connection to the network socket, and German standard/10 A plug for connection of the load.
- **3526/16** with 16 A plug for connection to the network socket, and universal socket (German standard, 10 A and 16 A) for connection of the load.

### Technical data

Power supply:	230 Vac @ 50 Hz
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads for 3526 and 3526/16:	
	- incandescent lamps 2300 W / 10 A
	- resistive loads 3500 W / 16 A
	- fluorescent lamps 1000 W / 4 A
	- electronic transformers 1000 W / 4 A
	- ferromagnetic transformers 1000 VA / 4 A cosφ 0.5
Power/Absorption of driven loads for 3526/10:	
	- incandescent lamps 2300 W / 10 A
	- resistive loads 2300 W / 10 A
	- fluorescent lamps 1000 W / 4 A
	- electronic transformers 1000 W / 4 A
	- ferromagnetic transformers 1000 VA / 4 A cosφ 0.5
Radio frequency:	868 MHz

### Legend

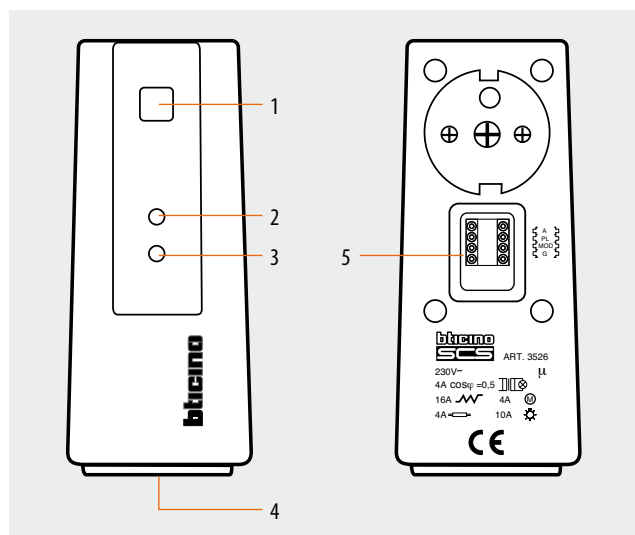
1. Set up for customisations with label.
2. LED
3. Pin pushbutton for manual activation/deactivation and programming of the load.
4. Socket for connecting the load.
5. Configurator socket.

### Configuration

No configuration is required when installed in traditional systems, or systems only consisting of radio devices. When integrating the device to a MY HOME system, or when advanced functions are required, at least the A and PL positions must be configured. The configuration as belonging to the G group is only possible if also A and PL are configured. For example, if the actuator is configured with A = 5 and PL = 3, it will be managed by the wire control with address A=5 and PL=3. The radio interface must have an address not higher than 52 (A=5 and PL=2). If a PUL configurator is connected to the MOD position, the actuator will ignore Room and General controls.

Mobile actuators execute all the basic operation modes that can be configured directly on radio control devices, except for the ones requiring interlocked relays. If the configuration is wrong, the signalling LED will start flashing, and will do so until a correct combination of configurators is connected.

Possible function	Configurator in MOD
The actuator ignores the Room and General controls	PUL
Normal operation	-



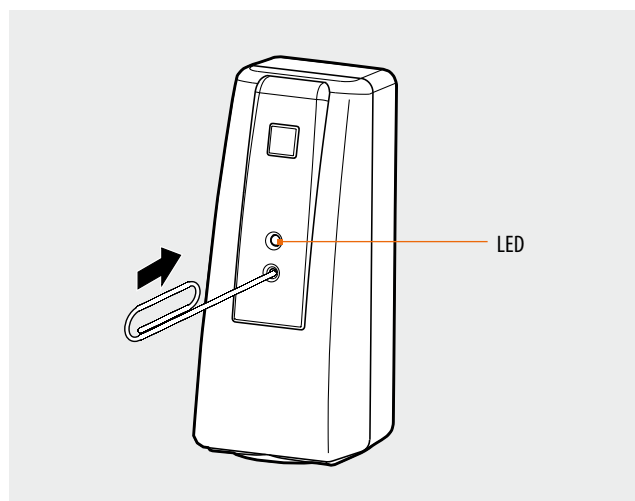
### Programming

This operation is necessary to create a link between the radio control devices and the actuator. Follow the procedure below:

- 1) Plug in the device.
- 2) Hold down the pin key until the LED lights up (about 4 seconds).
- 3) Release the key.
- 4) Within 20 seconds press the programming radio interface pushbutton or press the wire control device key.
- 5) Programming will be completed when the LED flashes and then turns OFF.
- 6) Repeat the operating sequence from 2 through 5 for all the radio control devices to be programmed.

To cancel all programming in the actuator proceed as follows:

- 1) Plug in the device.
- 2) Hold down the pin key; after 4 seconds, the LED will turn ON; hold down the pushbutton until the LED turns OFF.
- 3) Release the key.
- 4) When the LED flashes and then turns OFF, all programming will be cancelled.





## Radio remote control 6 channels

3527

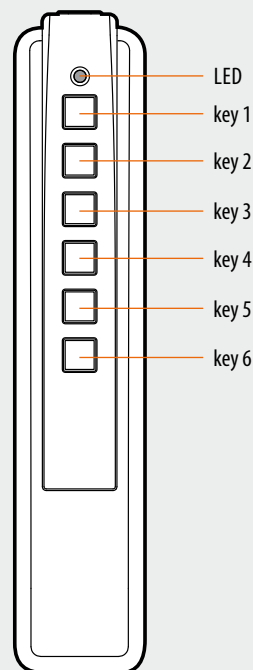
### Description

This remote control is a transmitting radio device that can drive the radio actuators item F470/1, F470/2, 3526, 3526/10 and 3526/16; when used in conjunction with receiving interfaces HC/HS4575 and L/N/NT4575N, it can also be used to control devices of the MY HOME system. This remote control has six radio channels and six customisable keys which are back-lit and emit a sound when selected.

The remote control can also be used as a flashlight. There is an orange LED which indicates that the radio transmission has occurred after pressing a key; if this indicator turns red, it means that the batteries are dead and must be replaced.

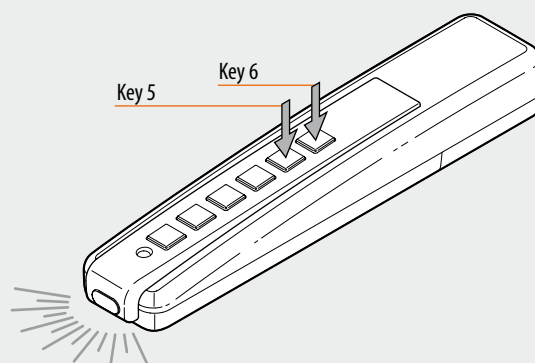
### Technical data

Power supply:	2 AA 1.5 V pen batteries (not provided, min. duration: 3 years)
Operating temperature:	0 – 40 °C
Radio frequency:	868 MHz
Range:	100 m in free field (metal and reinforced concrete walls reduce the range)
Type of modulation:	FSK



### Torch function:

When you press keys 5 and 6, the remote control will act as a flashlight. Warning, in this mode the duration of the battery is sensibly decreased.



### Configuration

To configure the remote control, it is not necessary to use traditional configurators: Switches are used instead as indicated in the following table. To access the switches remove the upper part of the remote control.

**NOTE:** Switches 3 and 4 must be left with the factory settings; switch no. 4 is used to set the volume level of the audible signal of the keys, and to change the key scanning time for the disabled function.

### Programming

To associate a different control to each of the alarm radio remote control channels, follow the procedure below:

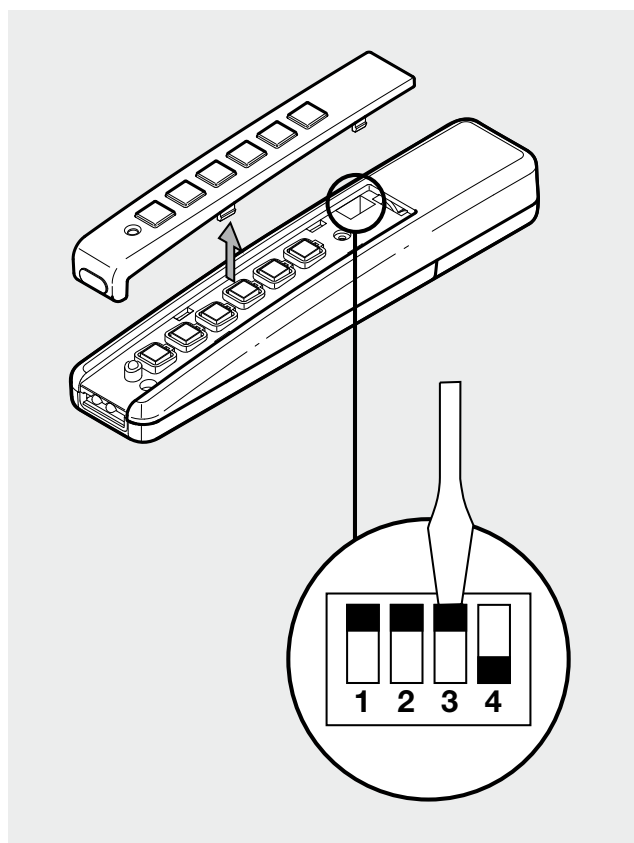
- 1) Press the interface radio programming pushbutton, configured in self-learning mode, for 3 seconds: the red LED will turn ON steadily; release the pushbutton.
- 2) Within 20 seconds press the key of the remote control you want to program; the red LED will begin to flash, hence indicating the activation of the programming mode.
- 3) Within 5 minutes, set the function you want to associate to the remote control key using the actuator and/or corresponding control; the red LED will start flashing quickly for about 2 seconds, thus indicating that the programming has been completed.
- 4) You can repeat 1), 2) and 3) for all keys, even for a key that has already been associated (in case you want to change it). A maximum of 24 self-learning operations are possible (e.g. 4 remote controls item 3527).

To cancel the programming of one of the remote control keys, follow the procedure below:

- 1) Press the programming pushbutton on the radio interface for at least 8 seconds (after 4 seconds the red LED will turn ON steadily and then after another 5 seconds it will turn OFF). Release the key. The red LED will turn ON again steadily.
- 2) If you want to cancel the programming condition of a key, press it on the remote control within 20 seconds; the red LED will start flashing quickly for about 2 seconds, thus confirming the cancellation.
- 3) From now on, the cancelled key will no longer activate any control until it is re-programmed.

To cancel all programming conditions of the interface simultaneously, press the programming pushbutton for about 12 seconds: the red LED will turn ON steadily after 3 seconds; after another 5 seconds, it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming the cancellation of all programming conditions.

Release the key. Here you can completely reset the device by cancelling both the associated radio codes and the controls associated to the various remote control keys.



### Choose the level of the key audible signal:

- 1 - Move switch no. 4 to programming mode (UP).
- 2 - Hold down keys 1 and 3 simultaneously; after 2 seconds, keys 1 and 2 will light up.
- 3 - Press one of the lit keys to listen to the audible signal associated to it (key 1 higher level).
- 4 - Hold down the key corresponding to the required level for more than 2 seconds.
- 5 - The level will be stored when an audible signal is emitted and when the key starts flashing.
- 6 - Move switch no. 4 to normal operation mode (DOWN).

Switch	Position	Operating mode
Switch 1	Up Key lighting = ON	It lights up when the remote control key is pressed.
	Down Key lighting = OFF	It does not light up when the remote control key is pressed.
Switch 2	Up Audible signal = ON	An audible signal is emitted when a key is pressed.
	Down Audible signal = OFF	No audible signal is emitted when a key is pressed.

### Remote control functions for disabled people

The radio control is provided with a 3.5 mm standard mono jack input for connecting a detector (for disabled people) and a screw connection for installation on wheelchair or on bedside.

Thanks to signals issued by an external sensor, the main functions of the remote control can also be recalled by a disabled person (control devices that enable to recover the residual capacity of movement of a disabled person).

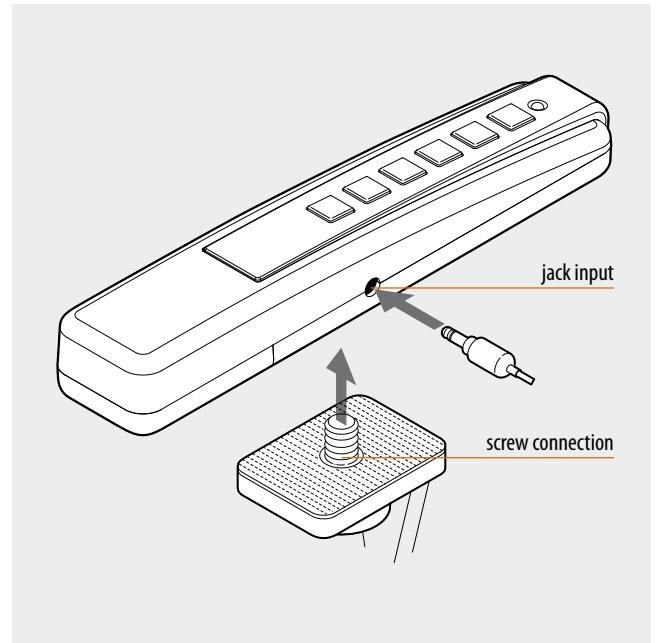
**SCANNING OF KEYS** - the first signal from the external sensor starts the remote control keys scanning sequence; the key reached by the scanning sequence may be identified by a luminous and/or audible signal.

**KEY SELECTION** - the second signal from the sensor stops the scanning sequence when the selected key is reached.

**CONTROL ACTIVATION** - the third signal from the sensor corresponds to a standard pressure of the selected key. A short pressure corresponds to the key being pressed for a short time, and then released; in case of extended pressure, the remote control will wait for a fourth signal from the sensor, which will be interpreted as the key being released. The time between the third and the fourth signal is interpreted as an extended pressure.

The scanning time for each individual key may be changed whilst in **programming** mode. The remote control is sold factory set with a standard scanning time of 1 second.

- 1 - Move switch no. 4 to programming mode (UP).
- 2 - Press keys 1 and 6 at the same time for at least 2 seconds; the first four keys light up.
- 3 - Press one of the lit keys to perform a scanning test to ascertain the associated time. Scanning times are as follows: Key 1 = 2 sec., Key 2 = 1 sec., Key 3 = 0.5 sec., Key 4 = 0.3 sec.
- 4 - Press and hold down the key corresponding to the desired time for at least 2 seconds.
- 5 - The successful completion of the programming procedure is confirmed by the pressed key flashing
- 6 - Move switch no. 4 to normal operation mode (DOWN).





# Radio remote control 4 channels

3528

## Description

This remote control is a transmitting radio device which can drive MY HOME devices, if used together with the receiving radio interface HC/HS4575 and item L/N/NT4575N; it gives the possibility of directly driving radio actuators F470/1, F470/2, 3526, 3526/10, 3526/16 and item 3470.

The remote control has 4 keys, the same as the number of radio channels available. There is an orange LED which signals, when a key is pressed, that the transmission radio has occurred.

## Technical data

Power supply:	3V battery type CR2032 (min. duration: 2 years)
Operating temperature:	0 – 40 °C
Radio frequency:	868 MHz
Range:	100 m in free field (metal and reinforced concrete walls reduce the range)
Type of modulation:	FSK

## Configuration

The remote control is supplied with 2 switches to define the operating mode for the operation in radio systems (remote control and radio actuator), as shown in the figure. In MY HOME applications leave the switch in the preset positions.

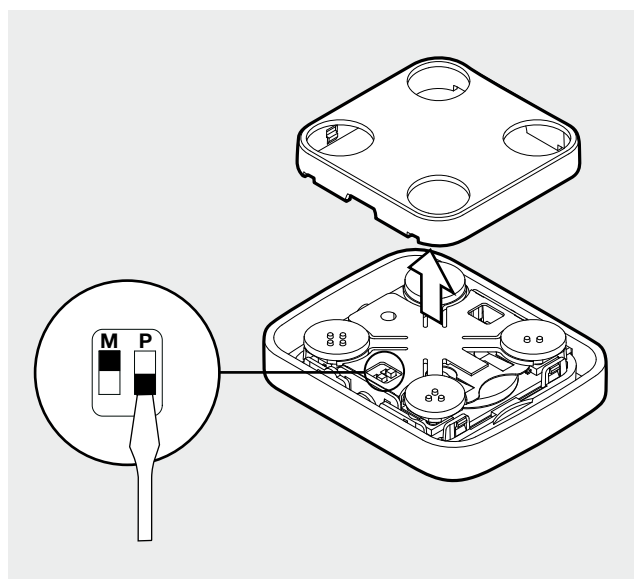
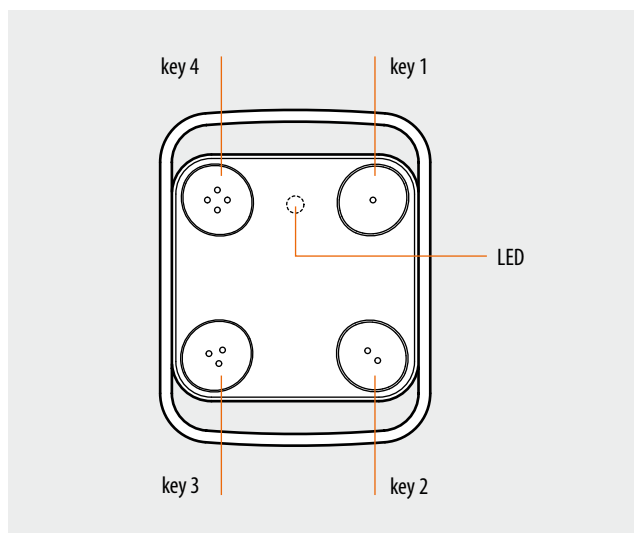
## Programming

To associate a different control to each of the alarm radio remote control channels, follow the procedure below:

- 1) Press the programming pushbutton of the radio interface, configured in self-learning mode, for 3 seconds: the red LED will turn ON steadily; release the pushbutton.
- 2) Within 20 seconds press the key of the remote control you want to program; the red LED will begin to flash, hence indicating the activation of the programming mode.
- 3) Within 5 minutes, set the function you want to associate to the remote control key using the actuator and/or corresponding control; the red LED will start flashing quickly for about 2 seconds, thus indicating that the programming has been completed.
- 4) You can repeat 1), 2) and 3) for all keys, even for a key that has already been associated (in case you want to change it).

To cancel the programming of one of the remote control keys, follow the procedure below:

- 1) Press the programming pushbutton on the radio interface for at least 8 seconds (after 4 seconds the red LED will turn ON steadily and then after another 5 seconds it will turn OFF). Release the key. The red LED will turn ON again steadily.
- 2) If you want to cancel the programming condition of a key, press it on the remote control within 20 seconds; the red LED will start flashing quickly for about 2 seconds, thus confirming the cancellation.
- 3) From now on, the cancelled key will no longer activate any control until it is re-programmed.



To cancel all programming conditions of the interface simultaneously, press the pin pushbutton for about 12 seconds: the red LED will turn ON steadily after 3 seconds; after another 5 seconds, it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming the cancellation of all programming conditions.

Release the key. Here you can completely reset the device by cancelling both the associated radio codes and the controls associated to the various remote control keys.



## Description

The IR remote control is a device capable of performing the following functions:

- directly drive traditional devices with integrated IR receivers currently on our catalogue (L4425, 1 channel receiver with relay output, and L4426, 2 channel receiver with 2 interlocked relay outputs);
- interface to the SCS BUS using the IR receiver L/N/NT4654N, HC/HS4654 and AM5834 IR receivers, for the creation of controls for 1 relay actuators for single loads, and for 2 relay actuators for double loads (shutters motor etc.), adjust the dimmer, generate or recall scenarios saved in the scenario module, or operate sound systems and video door entry systems.

The IR remote control includes:

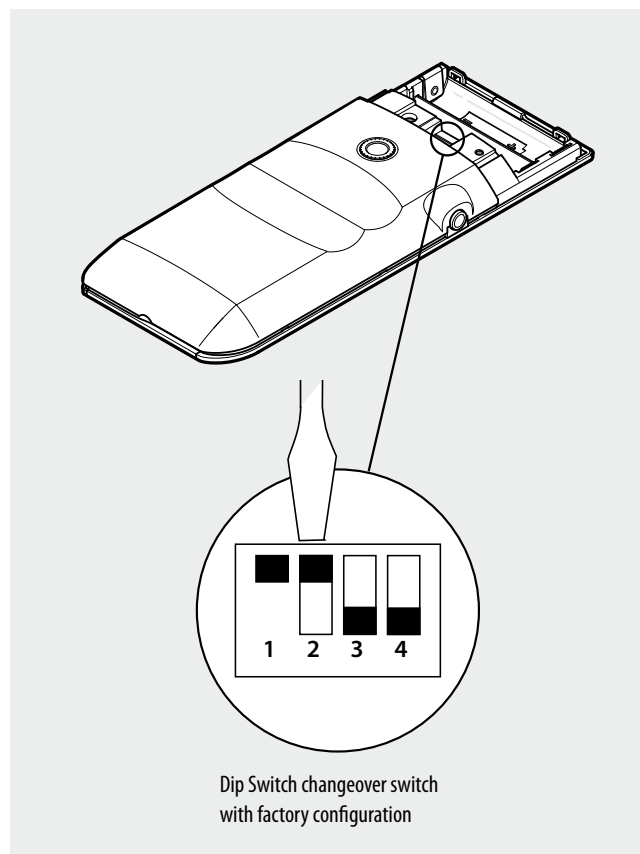
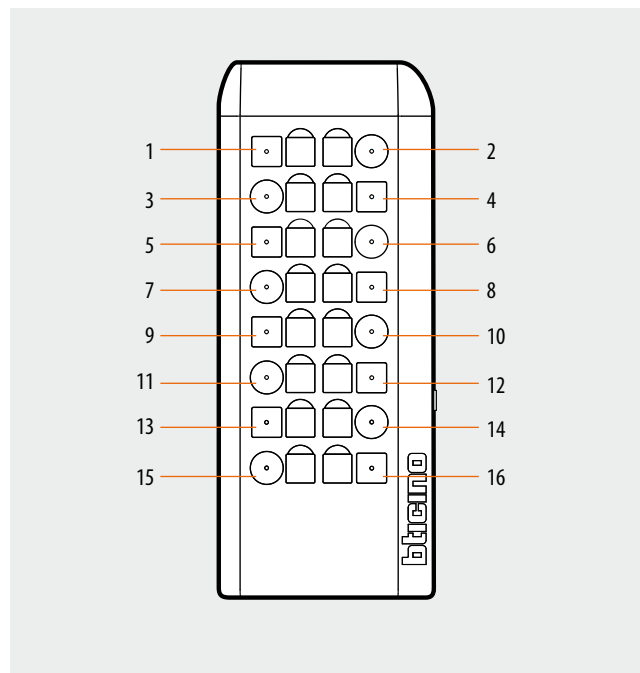
- 16 keys that may be lit individually by a blue LED.
- When a key is pressed, its light comes on and stays on until released, when the light gradually goes OFF;
- 16 windows for entering an icon representing the function saved by the pushbutton;
- a buzzer emitting an audible signal when the key is pressed
- a standard 3.5mm jack input, enabling the remote control to be used through a signal coming from a sensor for disabled people.







## Technical data

Power supply:	3 Vdc (2 AAA type, 1.5 V batteries)
Absorption:	such to ensure that the batteries will last for a period of 2 years, based on 100 pressures per day
Operating temperature:	5 – 35 °C
Frequency:	36.7 KHz in PCM modulation

## Configuration

Inside the battery housing is a 4-way Dip Switch type changeover switch with two positions, for selecting the operating modes as indicated in the table.



Switch		Position	Operating mode
Switch 1		Up Key lighting = ON	It lights up when the remote control key is pressed.
		Down Key lighting = OFF	It does not light up when the remote control key is pressed.
Switch 2		Up Audible signal = ON	An audible signal is emitted when a key is pressed.
		Down Audible signal = OFF	No audible signal is emitted when a key is pressed.
Switch 3		Up	Programming of the key scanning speed for the disabled user function.
		Down	Normal operation.

### Remote control functions for disabled people

The radio control is provided with a 3.5 mm standard mono jack input for connecting a detector (for disabled people) and a screw connection for installation on wheelchair or on bedside. Thanks to signals issued by an external sensor, the main functions of the remote control can also be recalled by a disabled person (control devices that enable to recover the residual capacity of movement of a disabled person).

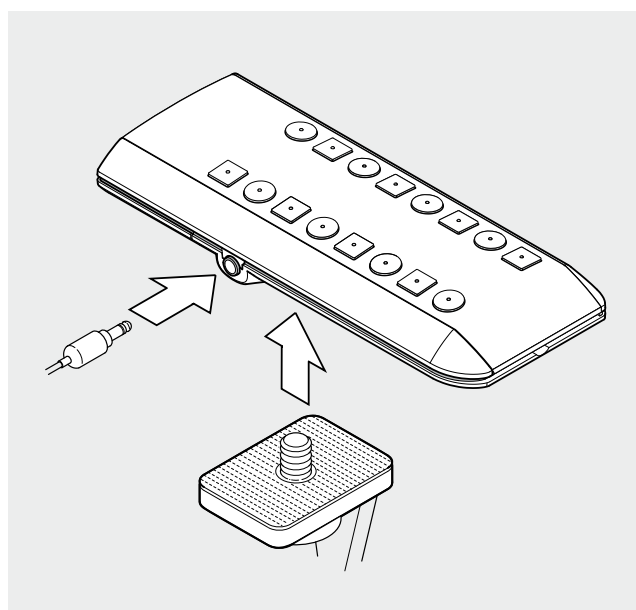
**SCANNING OF KEYS** - the first signal from the external sensor starts the remote control keys scanning sequence; the key reached by the scanning sequence may be identified by a luminous and/or audible signal.

**KEY SELECTION** - the second signal from the sensor stops the scanning sequence when the selected key is reached.

**CONTROL ACTIVATION** - the third signal from the sensor corresponds to a standard pressure of the selected key. A short pressure corresponds to the key being pressed for a short time, and then released; in case of extended pressure, the remote control will wait for a fourth signal from the sensor, which will be interpreted as the key being released. The time between the third and the fourth signal is interpreted as an extended pressure.



- If the control activation (third closing) does not occur within three times the selected scanning time, the scanning procedure starts again.
- Time out due to extended pressure from jack: 1 min.



The scanning time of each individual key may be changed whilst in **programming** mode.

- 1 - Move switch no. 3 to programming mode (UP).
- 2 - The first four keys light up.
- 3 - Press one of the lit keys to perform a scanning test to ascertain the associated time.

**Scanning times are as follows:**

**Key 1 = 2 sec.**

**Key 2 = 1 sec.**

**Key 3 = 0.5 sec.**

**Key 4 = 0.3 sec.**

- 4 - Press and hold down the key corresponding to the desired time for at least 2 seconds.
- 5 - The successful completion of the programming procedure is confirmed by the pressed key flashing
- 6 - Move switch no. 3 to normal operation mode (DOWN).



# Dimmer actuator

BMDI1001

## Description

110 – 230 Vac control device for electronic ballast or driver power supply with dimmer function; it can supply fluorescent lamps or LED lamps and adjust their brightness depending on the voltage, with values between 1 and 10V, with which they are driven. From any specially configured control point connected to the BUS system one can switch the lights connected ON and OFF or set their brightness. A short pressure of the control key will switch the load ON or OFF, while an extended pressure can be used to adjust the brightness level.

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&Go, Push&Learn, Project&Download)

## Technical data

Power supply:	110 - 230 Vac @ 50/60 Hz
Max. absorption:	165 mA
Number of outputs:	1 x 4.3 A
Operating:	dimmer
Operating temperature:	(-5) – (+ 45) °C
Max. No. of ballasts that can be connected:	160
Type of connection:	– RJ45 – clamp input 2 x 2.5 mm <sup>2</sup> – clamp output 2 x 1.5 mm <sup>2</sup> and 1 x 2.5 mm <sup>2</sup>
Power/Absorption of driven loads:	Incandescent lamps, halogen lamp and compact fluorescent lamp 4.3 A / 1000 VA

## Standards, Certifications, Marks

Standards: IEC60669 - 2 - 1

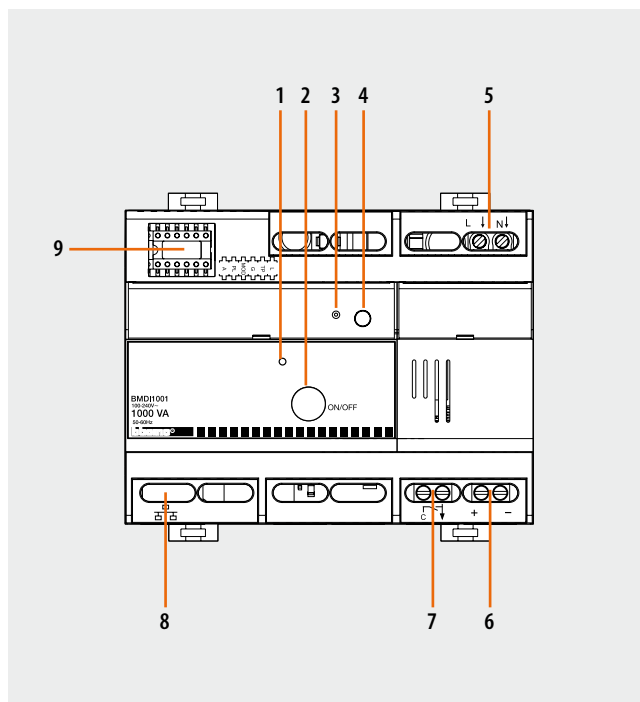
## Dimensional data

Size: 6 DIN modules

## MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the web server. The Virtual configurator software must be installed on the PC.



## Legend

1. Load status indication LED
2. Load activation pushbutton
3. Learn Mode status indication LED
4. Learn Mode pushbutton
5. Clamps for the connection to the 100 – 230 Vac power supply
6. 1 – 10 V output voltage clamps
7. Contact clamps
8. BUS RJ45 connector
9. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)

**Physical configuration**

The actuator performs all the Basic operating modes that can be configured directly on the control, apart from those which require the use of 2 interlocked relays.

## 1) Operating mode with Configurator in M

Possible function	Configurator in M
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

1) The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set with configurator 1 - 4 connected to M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4

2) Operating mode with configurator in L "Selection of the minimum brightness level": the configurator in the L position establishes the minimum output voltage between the 1 - 2 clamps when the load is ON, thus allowing the minimum intensity level to be selected. 5 different voltage levels can be selected, so that the standard 0-10V is possible as well as the standard 1-10V.

Configurator	Time (minutes)
No configurator	1
1	1.5
2	2
3	0
4	0.5

## 3) Configurator in TYPE "Selecting the type of load used":

In the TYPE position the configurator determines the type of load used on the basis of the following table. If ballasts for fluorescent lamps with typical switching ON delay of 1.5 s are used, the device will send the soft/start switching ON control taking account of the delay. If power supplies for LED lamps must be controlled instead the device will send an immediate soft/start switching ON control.

Configurator TYPE	Load driven
No configurator	Fluorescent ballast
1	LED driver

**Virtual configuration**

Using the Virtual configurator software it is possible to perform all the functions listed below:

- dimmer

**Lighting Management configuration**

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go
- Push&Learn
- Project&Download,

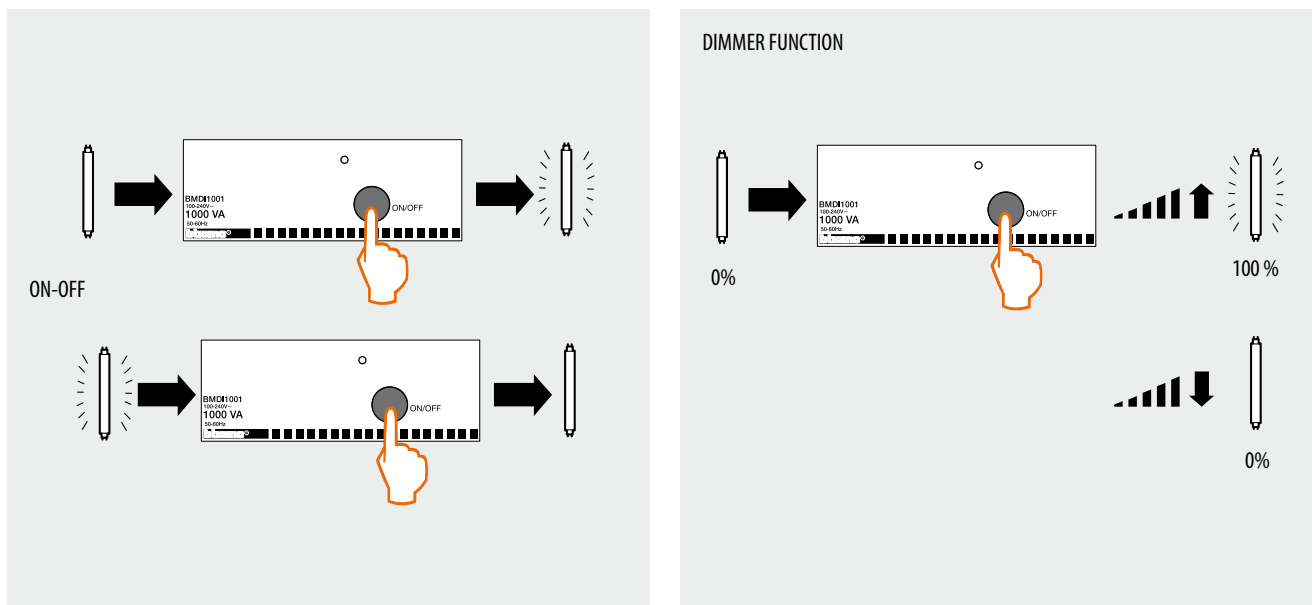
Using the Virtual Configurator software it is possible to perform all the functions listed below:

- dimmer

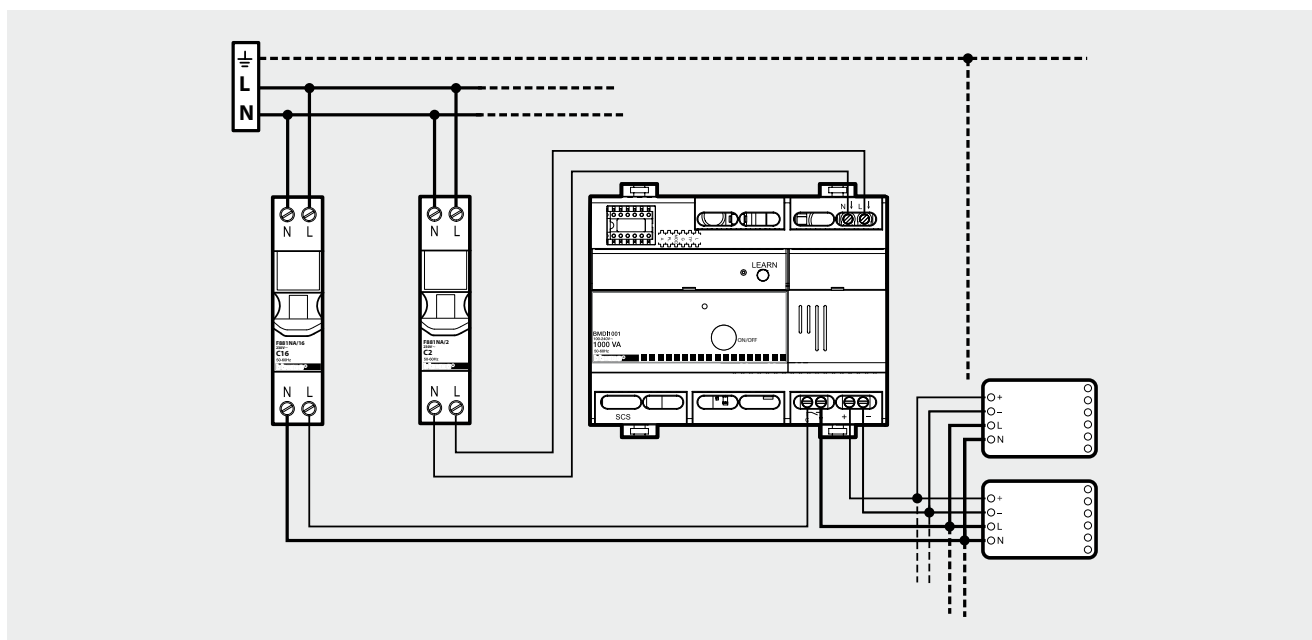
For more information on the functions see the glossary before the Technical sheets chapter.

### Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.



### Wiring diagram





# Passive infrared ceiling sensor

BMSE1001

## Description

Control and command device, powered by the SCS BUS, with two different sensors, the combination of which enables managing the light level inside the room, taking into account both the presence of people, and the level of natural light, therefore ensuring efficient energy savings and better user comfort.

The device has an IP 20 protection index, and is intended for ceiling mounted installation.

**The sensor is fitted with:**

- BUS wiring connector;
- PIR movement sensor;
- light sensor;
- internal microcontroller;
- two-colour LED;
- multifunction key;
- configurator socket.

**PIR movement sensor:**

it detects the presence of people inside the room. It's used inside rooms with free view, without obstacles, for the detection of people.

**Light sensor:**

it detects the light level inside the room, switching the load ON or OFF based on whether the light threshold set on the sensor (adjustable by the user) is lower/higher than the value detected. The light sensor has priority on the movement sensor: if the PIR sensor detects a presence, but natural light is sufficient, no load management signal is sent by the device. In order to avoid continuous switching ON and OFF, a tolerance on the threshold values must be set.

The sensor may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download).

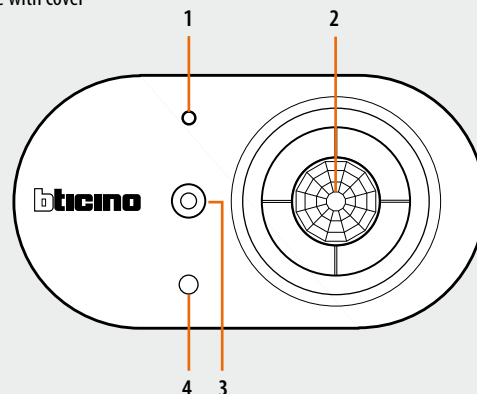
## Technical data

Power supply:	27 Vdc
Absorption:	10 mA
Operation:	ON/OFF, dimmer
Operating temperature:	(-5) – (+45) °C
Sensor type:	PIR
Protection index:	IP20
Sensitivity:	1 – 2000 lux
Time delay:	30 s – 255 h
Coverage of the PIR sensor at 2.5 m:	Ø 6m(28m <sup>2</sup> )
Covering angle:	90/360°
Maximum installation height:	4 m
Type of connection:	screw clamps

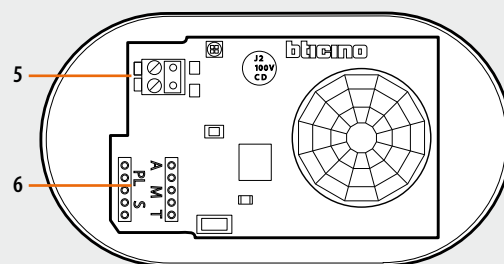
## Standards, Certifications, Marks

EN 50428

Device with cover

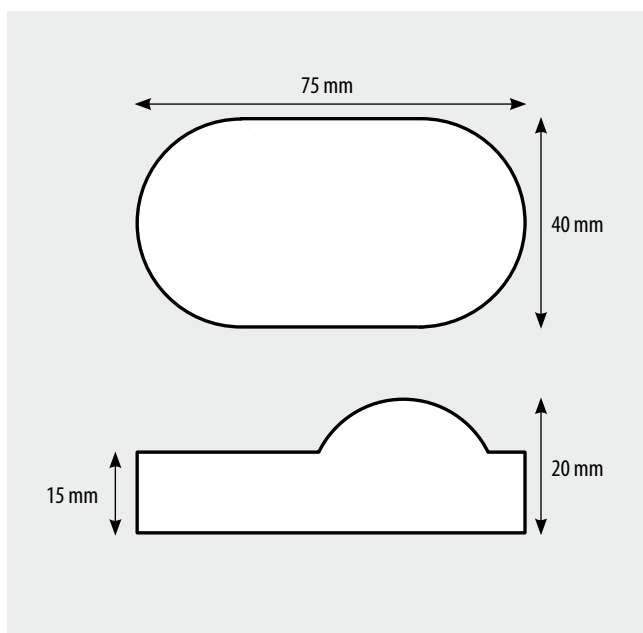


Device without cover



## Legend

- LED indicator:
  - fixed green = BUS detected
  - orange flashing once = movement detected.
  - orange-green flashing quickly = no configuration or wrong configuration.
  - orange-green flashing for 1 second = configuration being performed
  - red flashing quickly = acquiring the Set Point
  - red-green flashing quickly = sensor calibration being performed
- Light sensor
- Infrared PIR movement sensor
- Multifunction key:
  - Short pressure to select the device when using the virtual configuration.
  - Pressure for 2 seconds, for the acquisition of the Set Point when working in Stand Alone Mode.
  - Two short pressures to enter the Push&Learn procedure during operation with the Lighting Management system.
  - A short pressure, followed by an extended pressure of 10 sec. to reset the sensor.
- BUS connection screw clamps
- Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)

**Dimensional data****MY HOME configuration**

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

**Physical configuration**

The features of the device are defined by 6 configurator sockets, and their functions depend on the operating mode:

Room: A = 1 – 9

Light point: PL = 1 – 9

Mode: M = 0 – 8

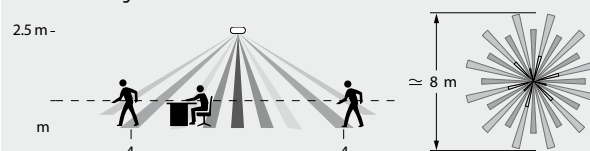
PIR movement sensor sensitivity: S = 0 – 3

Load ON time: T = 0 – 9

**WARNING:** Addresses A = 0 and PL = 0 do not exist

**Covering range for item BMSE 1001**

The movement sensor is supplied with a lens with actual covering range area as shown in the figure below.

**Adjustable sensitivity level**

A (m)	Low		Medium		High		Max.	
	Ø (m)	S (m <sup>2</sup> )	Ø (m)	S (m <sup>2</sup> )	Ø (m)	S (m <sup>2</sup> )	Ø (m)	S (m <sup>2</sup> )
2.5	2	3	3	7	5	20	6	28
3	3	7	4	13	6	28	7	38
4	3	7	5	20	7	38	8	50

Legend:

A = installation height (m)

Ø = diameter (m)

S = surface (m<sup>2</sup>)

Possible function	Configurator in M
The device controls the load with the address indicated in A and PL. When a movement is detected, if the light level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires (Auto Mode). The PIR movement sensor sensitivity is set with the configurator connected to S. For correct operation, the sensor lighting set point must be set (see procedure). If the user switches the light OFF manually with a control device, the movement sensor is disabled until a movement is detected, for a time set in T.	0
In this mode the sensor operates as a pure twilight switch, the movement sensor is disabled. When the light level falls below the set threshold, the device switches the load on, and switches it OFF when the light level exceeds the threshold again (Auto Mode). Configure A = 1-9 and PL = 1-9. GEN, ROOM and GR configurators cannot be connected. In this mode configurators S and T are not connected.	1
In this mode the device does not directly manage a load, but sends to the MH200N scenario programmer the notification of a movement and the lighting value. In this case the device address will be connected to A and PL, which must be unique within the system. Therefore, the GEN, ROOM and GR configurators cannot be connected. In this mode the S and T configurators are not connected, as these parameters are managed directly by the scenario programmer.	2
In this mode the device directly manages the load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer); when a movement is detected the device switches the light on and keeps it on based on the presence of people and the desired light level (Auto Mode). When a movement is detected, if the light level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the outside light level increases, the device decreases the brightness of the load driven. For correct operation, the sensor lighting set point must be set (see procedure). It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor set-point until the next switching ON.	3
In this mode the device operate as a pure twilight switch and manages the load directly, maintaining a constant light level inside the room, disabling the presence sensor (this mode is only valid if the sensor manages a dimmer). The switching ON of the load is manual, while the switching OFF is managed automatically by the sensor based on the desired light level (Eco Mode). When the light is OFF the sensor therefore does not switch the load on, but waits for the user to do so using a manual control. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. Once the load has been switched OFF, if the natural light level decreases the sensor will no longer switch the load on, but will wait for the user to do so manually. For correct operation, the sensor lighting set point must be set (see procedure). It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor set-point until the next switching ON.	4
The device controls the load with the address indicated in A and PL (SEE FUNCTION WITH M=0). The switching ON of the load is manual and the device keeps the load on based on the presence of people and the desired light level (Eco Mode).	5
In this mode the device maintains a constant light level inside the room (SEE FUNCTION WITH M=3). The switching ON of the load is manual and the device keeps the load on based on the presence of people and the desired light level (Eco Mode).	6
In this mode the sensor operates as a pure twilight switch, the movement sensor is disabled (SEE FUNCTION WITH M=1). The switching ON of the load is manual and the device keeps the load on based on desired light level (Eco Mode).	7
In this mode the device operates as a pure twilight switch and directly manages a load, maintaining a constant light level inside the room, disabling the movement sensor (SEE FUNCTION WITH M=4). When the light level falls below the set threshold, the device switches the load on, and switches it OFF when the light level exceeds the threshold again (Auto Mode).	8

**WARNING:** when managing scenarios using the information from the sensor, using the MH200N scenario programmer, the sensor must be configured exclusively in M=2 mode.

**1) Table of the active load times based on the configurator connected to T:**

Configurator in T	Active load time in min.
No configurator	15
1	30 sec.
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

**Virtual configuration**

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- central lighting detector
- central lighting sensor
- central movement sensor

**Installation mode**

The sensor must never be installed near heat sources or near the splitter of the cooling system.

**2) Sensitivity table for the PIR movement sensor based on the configurator connected to S:**

Configurator in S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

**Procedure for the acquisition of the sensor lighting set-point:**

- Press the pushbutton for two seconds.
- The LED will start flashing red quickly.
- Move away from under the sensor, so that it can perform a correct measurement
- After about 20 sec. the LED stops flashing and the sensor finishes the acquisition.

NOTE: it is important that the set-point is reacquired every time the sensor position is changed, and every time that what is under the sensor changes.

**Lighting Management configuration**

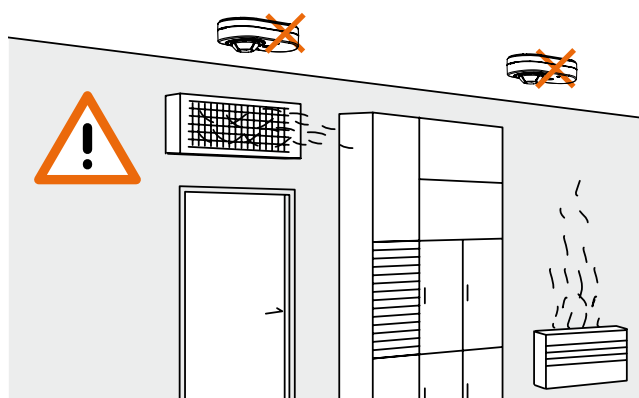
When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

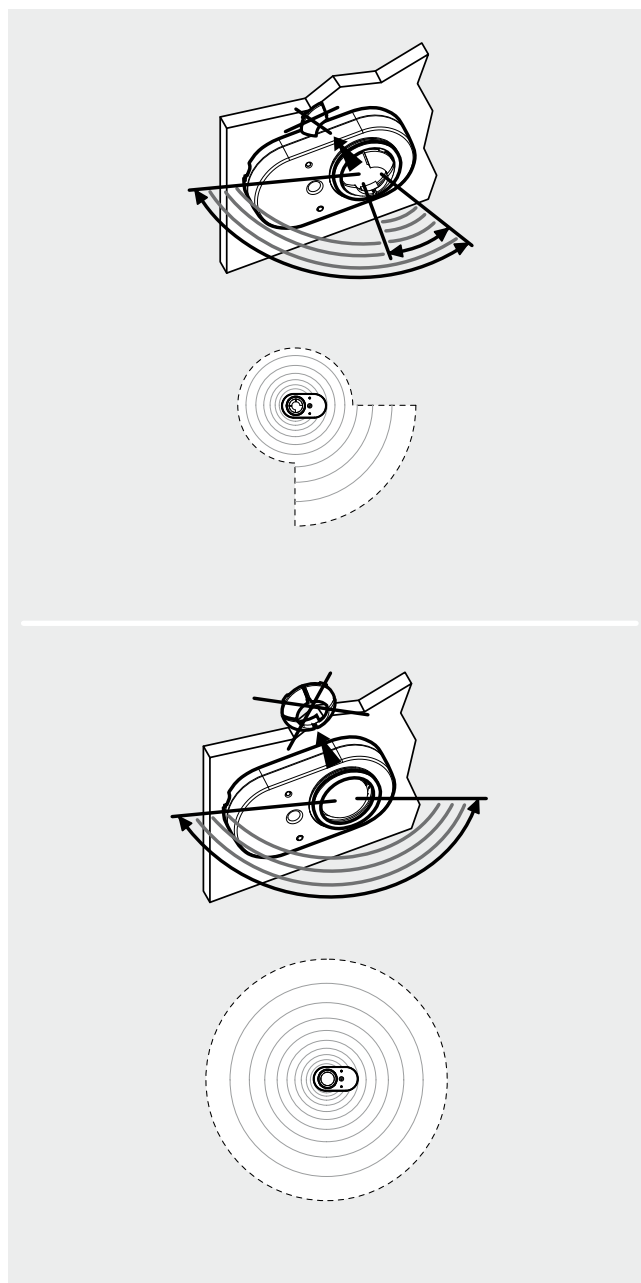
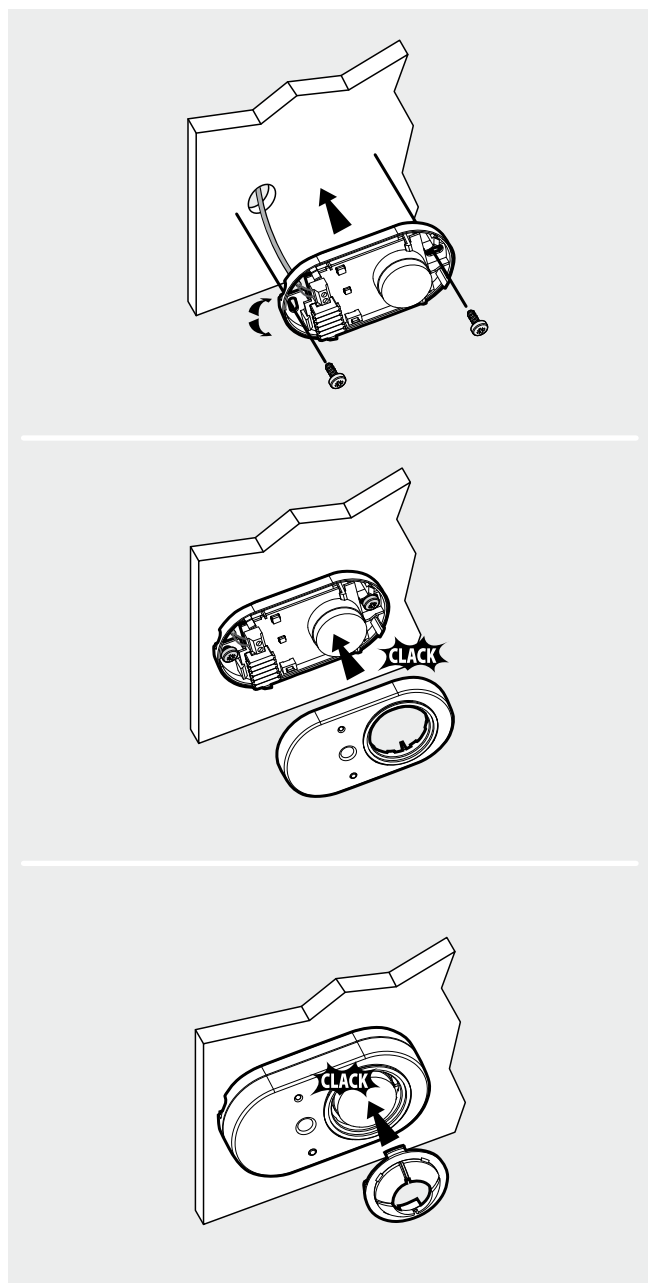
Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- central lighting detector
- central lighting sensor
- central movement sensor

For more information on the functions see the glossary before the Technical sheets chapter.



BMSE1001





# Wide band wall/ceiling sensor

BMSE2001

## Description

Control and command device, powered by the SCS BUS, with two different sensors, the combination of which enables managing the light level inside the room, taking into account both the presence of people, and the level of natural light, therefore ensuring efficient energy savings and better user comfort.

The device has an IP42 protection index and must be installed indoors, either on the wall or the ceiling, using the bracket supplied.

### The sensor is fitted with:

- RJ45 clamp for the connection of the BUS cable;
- passive infrared PIR movement sensor;
- light sensor;
- two-way IR receiver for adjustment using the remote control BMS04001 and BMS04002;
- pushbutton for enabling the adjustment of the parameters using the remote control;
- configurator socket.

### PIR movement sensor:

it detects the presence of people inside the room. It's used inside rooms with free view, without obstacles, for the detection of people.

### Light sensor:

it detects the light level inside the room, switching the load ON or OFF based on whether the light threshold set on the sensor (adjustable by the user) is lower/higher than the value detected. The light sensor has priority on the movement sensor: if the PIR sensor detects a presence, but natural light is sufficient, no load management signal is sent by the device. In order to avoid continuous switching ON and OFF, a tolerance on the threshold values must be set.

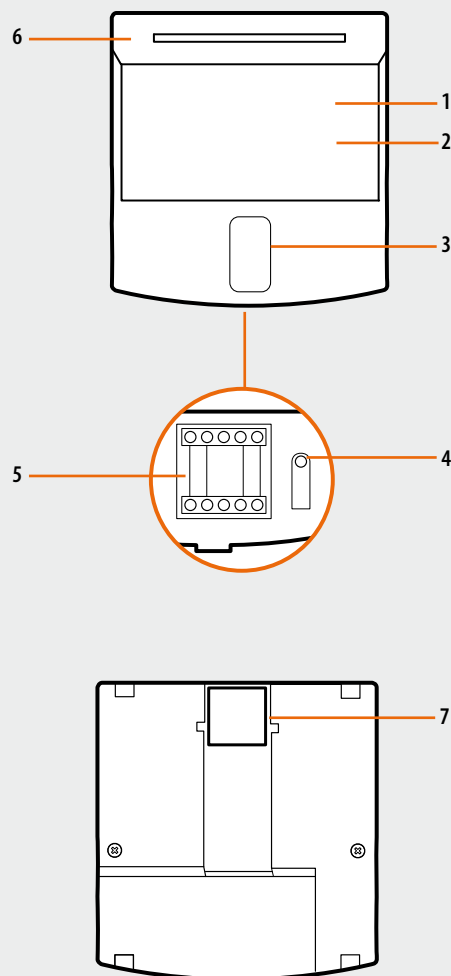
The sensor may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download).

## Standards, Certifications, Marks

Standards:	Safety standard:
- CE directive	EN 60669-2-1

## Technical data

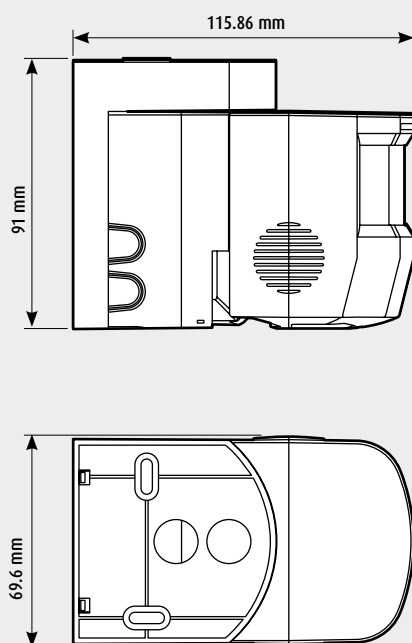
Power supply:	27 Vdc
Absorption:	12 mA
Operation:	ON/OFF and dimmer
Functions:	Auto/Eco/ Walktrough
Operating temperature:	(-5) – (+45) °C
Sensor type:	PIR
Protection index:	IP42
Sensitivity:	1 – 2000 lux
Time delay:	30 s-255 h
Coverage of the PIR sensor at 2.5 m:	2 m x 12 m(24 m <sup>2</sup> )
Covering angle:	90/30°
Maximum installation height:	6 m
Type of connection:	RJ45



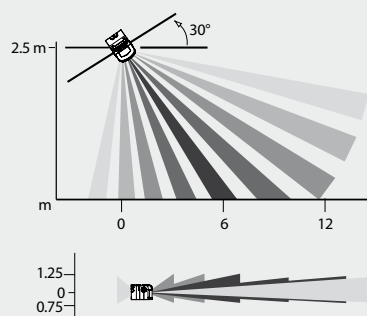
## Legend

1. Light sensor
2. Infrared PIR movement sensor
3. Two-way IR receiver
4. Pushbutton enabling remote control adjustments
5. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
6. LED indicator
7. RJ45 clamp for the connection of the BUS cable - RJ45/SCS BMAC1001 adaptor

## Dimensional data



## Coverage of the PIR sensor



A (m)	Low			Medium			High			Max.		
	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )
2.5	1.5	11	15.5	1.5	11	15.5	1.5	11	17	1.5	11	17
3	1.5	11	15.5	1.5	11	15.5	1.5	11.5	17	1.5	11.5	17
4	1.5	11.5	17	1.5	11.5	17	1.5	12	20	2	12	20
5	1.5	11.5	17	1.5	11.5	17	1.5	12	20	2	12	20
6	1.5	11.5	17	1.5	11.5	17	1.5	12	20	2	12	20

## Legend:

A = installation height (m)

L = width (m)

P = depth (m)

S = surface (m<sup>2</sup>)

## MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

## Physical configuration

The features of the device are defined by 6 configurator sockets, and their functions depend on the operating mode:

Room: A = 1 – 9

Light point: PL = 1 – 9

Mode: M = 0 – 4

PIR movement sensor sensitivity: S = 0 – 3

Load ON time: T = 0 – 9

Lighting sensor sensitivity: D = 0 – 5

WARNING: Addresses A = 0 and PL = 0 do not exist

Possible function	Configurator in M
The device controls the load with the address indicated in A and PL. When a movement is detected, if the lighting level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires (auto mode). The PIR movement sensor sensitivity is set with the configurator connected to S. For correct operation, it is necessary to set the sensitivity of the lighting sensor with the configurator connected to D. If the user switches the light OFF manually using a control device, the movement sensor is disabled until a movement is detected, for a time indicated by T.	0
In this mode the sensor operates as a pure twilight switch, the movement sensor is disabled. When the light level falls below the set threshold, the device switches the load on, and switches it OFF when the light level exceeds the threshold again (Auto Mode). Configure A = 1-9 and PL = 1-9. GEN, ROOM and GR configurators cannot be connected. In this mode configurators S and T are not connected.	1
In this mode the device does not directly manage a load, but sends to the MH200N scenario programmer the notification of a movement and the lighting value. In this case the device address will be connected to A and PL, which must be unique within the system. Therefore, the GEN, ROOM and GR configurators cannot be connected. In this mode the S and T configurators are not connected, as these parameters are managed directly by the scenario programmer.	2
In this mode the device directly manages the load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer); when a movement is detected the device switches the light on and keeps it on based on the presence of people and the desired light level (Auto Mode). When a movement is detected, if the lighting level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	3
In this mode the device operates as a twilight device, and directly manages a load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer), and disabling the movement sensor. The load is switched on manually and switched OFF automatically by the sensor, depending on the desired light level (Eco mode). When the light is OFF the sensor therefore does not switch the load on, but waits for the user to do so using a manual control. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. Once the load has been switched OFF, if the natural light level decreases the sensor will no longer switch the load on, but will wait for the user to do so manually. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor set-point until the next switching ON. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	4

**WARNING:** when managing scenarios using the information from the sensor, using the MH200N scenario programmer, the sensor must be configured exclusively in M=2 mode.

1) Table of the active load times based on the configurator connected to T:

Configurator in T	Active load time in min.
No configurator	15
1	30 sec.
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

2) Sensitivity table for the PIR movement sensor based on the configurator connected to S:

Configurator in S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

3) Sensitivity table for the lighting sensor based on the configurator connected to D:

Configurator in D	Sensitivity in Lux
No configurator	Wall mounted: 300 Ceiling mounted: 500
1	20
2	100
3	300
4	500
5	1000

**Virtual configuration**

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

**Lighting Management configuration**

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

For more information on the functions see the glossary before the Technical sheets chapter.

## Operating mode

### Auto mode:

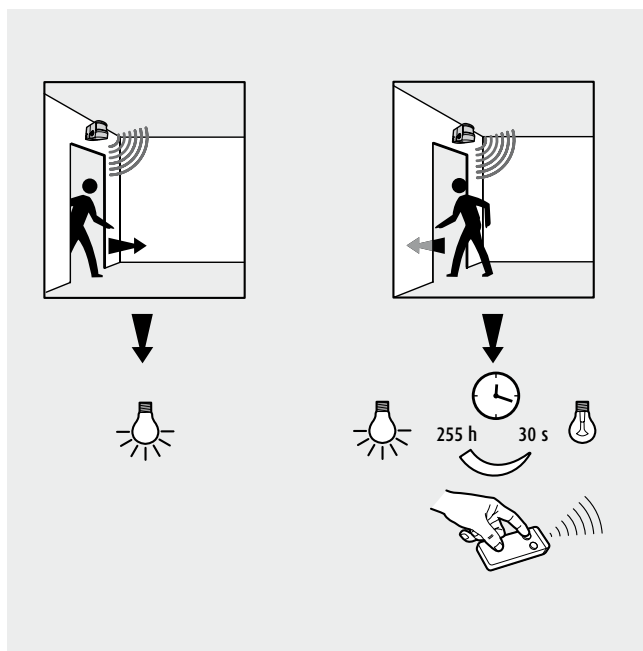
The switching ON/OFF of the load are ordered automatically by the dimmer/actuator, depending on people's presence and the desired light level as detected by the BUS sensor. The AUTO mode does not require the installation of a BUS control.

However, it is nevertheless possible to add a BUS control, with the function of forcing the switching ON/OFF of the automatism set by the dimmer/actuator.

The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode.

### Eco mode:

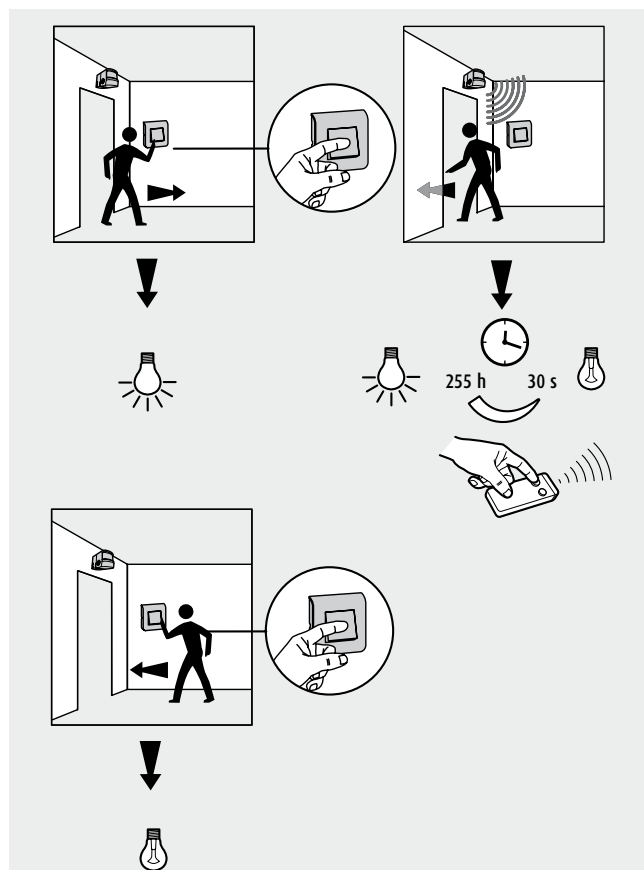
The load is switched ON manually and switched OFF automatically by the sensor, depending on people's presence and the desired light level. The ECO mode requires the installation of a control. The function of the pushbutton is mainly to activate the automatism of the sensor: at the first pressure, the sensor compares the desired light level with the actual light level inside the room, and decides if the lights must be switched ON or not. A subsequent pressure of the pushbutton will force the switching ON/OFF of the automatism determined by the sensor. The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode. A further functionality of the ECO mode is the temporary AUTO mode operation (30 seconds), following a switching OFF due to no presence being detected. After 30 seconds from switching OFF, the sensor returns to operate in ECO mode, therefore without performing an automatic switching ON.



In addition to the two modes above, the following functions are also available:

**Walkthrough:** the device switches the lights OFF 3 minutes after somebody has entered the room, if no presence is detected for 20 seconds (if the time delay is set to less than 3 minutes, that value will apply). If a presence is detected within the 20 seconds, the system uses the set time delay.

**Audible signal:** 1 minute, 30 seconds, and 10 seconds before the expiry of the set time delay, an audible signal is emitted



### Settable parameters

Parameters	Adjustment range	Factory settings
Time delay	30 s – 255 h	15 min
PIR Sensitivity (%)	0 – 100	100
LUX Sensitivity (Lux)	1 – 2000	300 +/- 15%
Operating mode <sup>1)</sup>	Auto/Eco	Auto
Walkthrough	Enabled/Disabled	Enabled

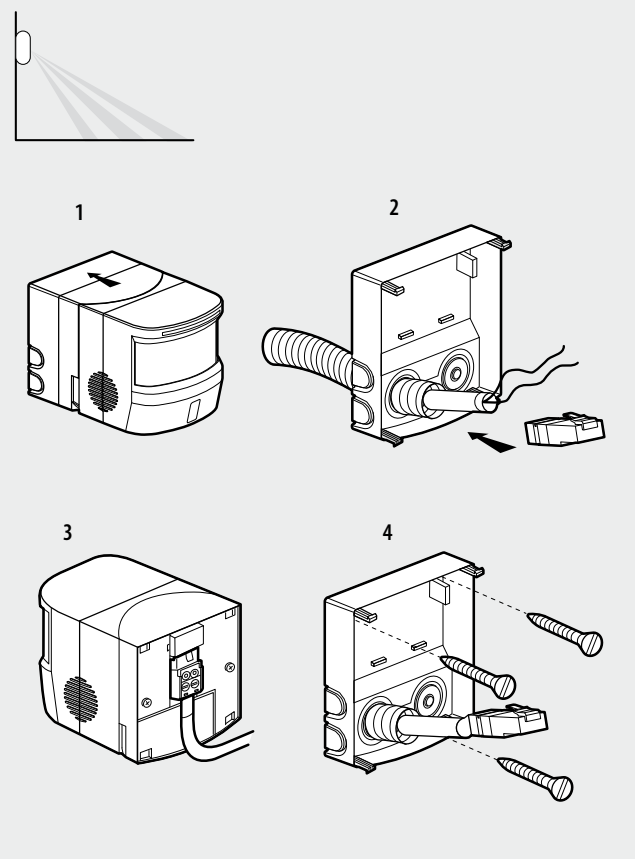
**NOTE:** All parameter adjustments can be performed using the physical configuration, the IR remote control, or the PC.

<sup>1)</sup> these modes may be set using the physical configuration

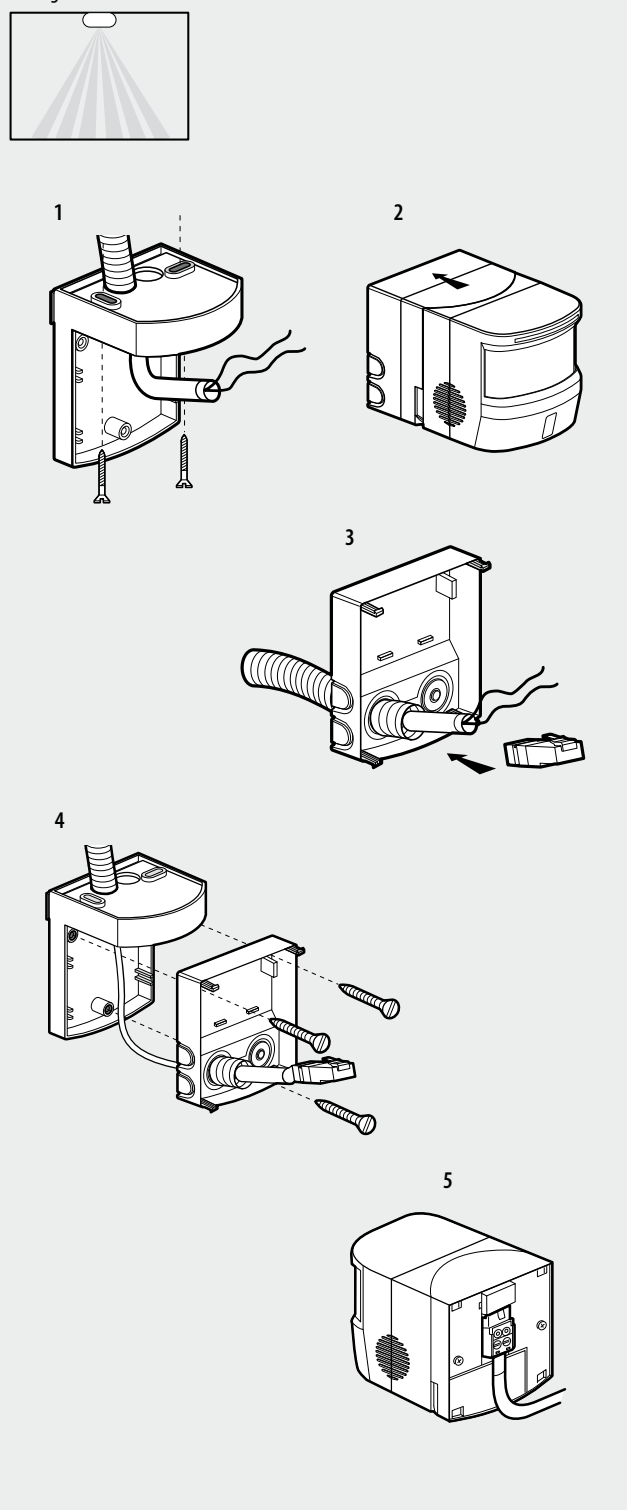
## Assembly, installation

The device is intended for indoor installation, on the wall or the ceiling, using the bracket supplied.

Wall mounted installation



Ceiling mounted installation





## Narrow beam wall/ceiling mounted sensor

BMSE2002

### Description

Control and command device, powered by the SCS BUS, with two different sensors, the combination of which enables managing the light level inside the room, taking into account both the presence of people, and the level of natural light, therefore ensuring efficient energy savings and better user comfort.

The device has an IP42 protection index and must be installed indoors, either on the wall or the ceiling, using the bracket supplied.

#### The sensor is fitted with:

- RJ45 clamp for the connection of the BUS cable;
- passive infrared PIR movement sensor;
- light sensor;
- two-way IR receiver for adjustment using the remote control BMS04001 and BMS04002;
- pushbutton for enabling the adjustment of the parameters using the remote control;
- configurator socket.

#### PIR movement sensor:

it detects the presence of people inside the room. It's used inside rooms with free view, without obstacles, for the detection of people.

#### Light sensor:

it detects the light level inside the room, switching the load ON or OFF based on whether the light threshold set on the sensor (adjustable by the user) is lower/higher than the value detected. The light sensor has priority on the movement sensor: if the PIR sensor detects a presence, but natural light is sufficient, no load management signal is sent by the device. In order to avoid continuous switching ON and OFF, a tolerance on the threshold values must be set.

The sensor may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download).

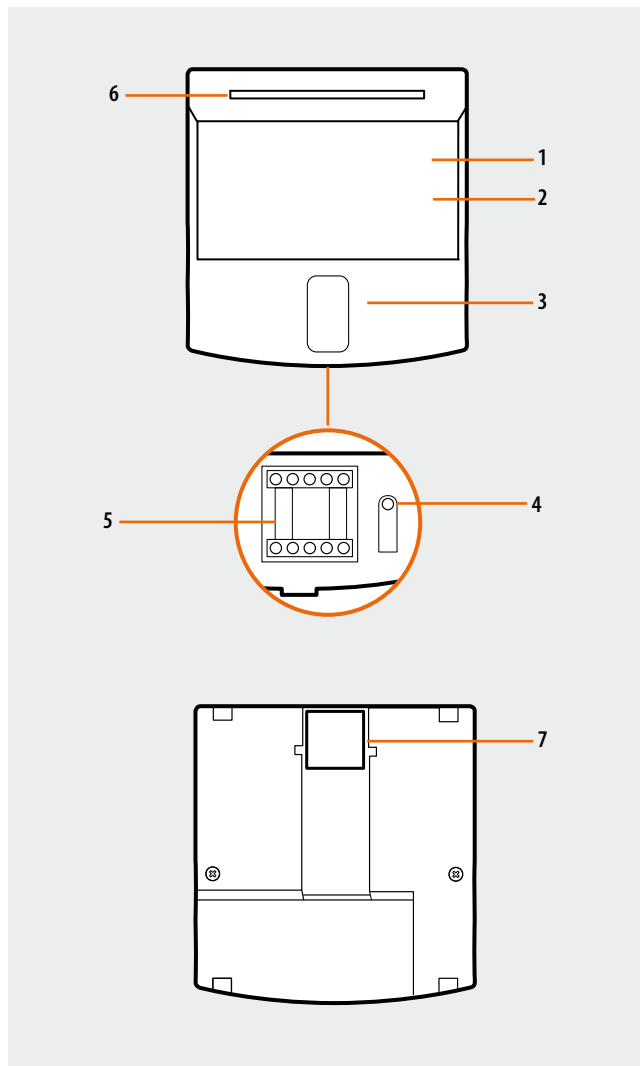
### Standards, Certifications, Marks

Standards:  
- CE directive

Safety standard:  
EN 60669-2-1

### Technical data

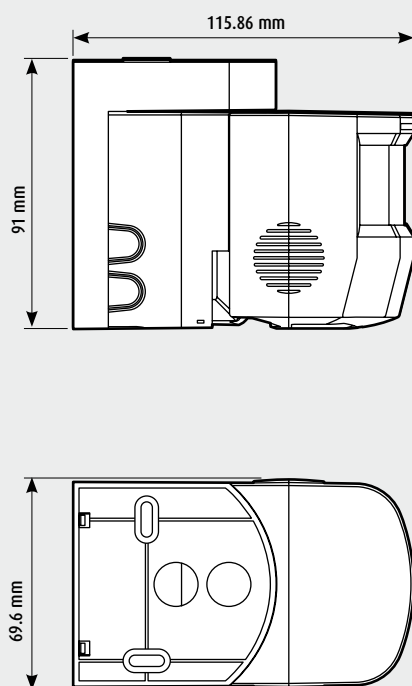
Power supply:	27 Vdc
Absorption:	12 mA
Operation:	ON/OFF and dimmer
Functions:	Auto/Eco/Walkthrough
Operating temperature:	(-5) – (+45) °C
Sensor type:	PIR
Protection index:	IP42
Sensitivity:	1 – 2000 lux
Time delay:	30 s - 255 h
Coverage of the PIR sensor at 2.5 m:	11 m x 14 m (120 m <sup>2</sup> )
Covering angle:	60/90°
Maximum installation height:	6 m
Type of connection:	RJ45



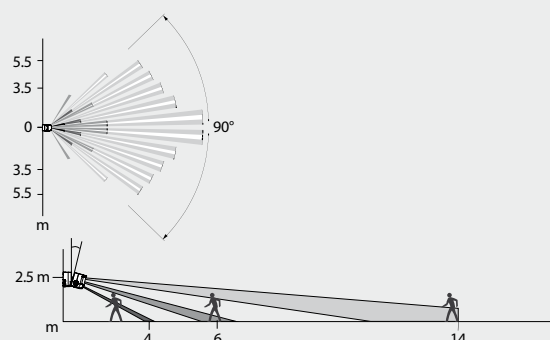
### Legend

1. Light sensor
2. Infrared PIR movement sensor
3. Two-way IR receiver
4. Pushbutton enabling remote control adjustments
5. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
6. LED indicator
7. RJ45 clamp for the connection of the BUS cable - RJ45/SCS BMAC1001 adaptor

## Dimensional data



## Coverage of the PIR sensor



## Adjustable sensitivity level

A (m)	Low				Medium			High			Max.		
	L (m)	P (m)	S (m <sup>2</sup> )		L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )
2.5	10	13.5	65		10	14	68	10.5	14	68	11	14	70
3	10	13.5	66		10.5	14	68	10.5	14	70	11	14	70
4	10	14	68		10.5	14	70	11.0	14	76	11	14.5	76
5	10	14	68		10.5	14	70	11.0	14	76	11	14.5	76
6	10	14	68		10.5	14	70	11.0	14	76	11	14.5	76

## Legend:

A = installation height (m)

L = width (m)

P = depth (m)

S = surface (m<sup>2</sup>)

## MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

## Physical Configuration

The features of the device are defined by 6 configurator sockets, and their functions depend on the operating mode:

Room: A = 1 – 9

Light point: PL = 1 – 9

Mode: M = 0 – 4

PIR movement sensor sensitivity: S = 0 – 3

Load ON time: T = 0 – 9

Sensitivity of the lighting sensor: D = 0 – 5

WARNING: Addresses A = 0 and PL = 0 do not exist

Possible function	Configurator in M
The device controls the load with the address indicated in A and PL. When a movement is detected, if the light level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires (Auto Mode). The PIR movement sensor sensitivity is set with the configurator connected to S. For correct operation, it is necessary to set the sensitivity of the lighting sensor with the configurator connected to D. If the user switches the light OFF manually using a control device, the movement sensor is disabled until a movement is detected, for a time indicated by T.	0
In this mode the sensor operates as a pure twilight switch, the movement sensor is disabled. When the light level falls below the set threshold, the device switches the load on, and switches it OFF when the light level exceeds the threshold again (Auto Mode). Configure A = 1-9 and PL = 1-9. GEN, ROOM and GR configurators cannot be connected. In this mode configurators S and T are not connected.	1
In this mode the device does not directly manage a load, but sends to the MH200N scenario programmer the notification of a movement and the lighting value. In this case the device address will be connected to A and PL, which must be unique within the system. Therefore, the GEN, ROOM and GR configurators cannot be connected. In this mode the S and T configurators are not connected, as these parameters are managed directly by the scenario programmer.	2
In this mode the device directly manages the load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer); when a movement is detected the device switches the light on and keeps it on based on the presence of people and the desired light level (Auto Mode). When a movement is detected, if the lighting level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	3
In this mode the device operates as a twilight device, and directly manages a load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer), and disabling the movement sensor. The load is switched on manually and switched OFF automatically by the sensor, depending on the desired light level (Eco mode). When the light is OFF the sensor therefore does not switch the load on, but waits for the user to do so using a manual control. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. Once the load has been switched OFF, if the natural light level decreases the sensor will no longer switch the load on, but will wait for the user to do so manually. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor set-point until the next switching ON. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	4

**WARNING:** when managing scenarios using the information from the sensor, using the MH200N scenario programmer, the sensor must be configured exclusively in M=2 mode.

1) Table of the active load times based on the configurator connected to T:

Configurator in T	Active load time in min.
No configurator	15
1	30 sec.
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

2) Sensitivity table for the PIR movement sensor based on the configurator connected to S:

Configurator in S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

3) Sensitivity table for the lighting sensor based on the configurator connected to D:

Configurator in D	Sensitivity in Lux
No configurator	Wall mounted: 300    Ceiling mounted: 500
1	20
2	100
3	300
4	500
5	1000

**Virtual configuration**

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

**Lighting Management configuration**

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

For more information on the functions see the glossary before the Technical sheets chapter.

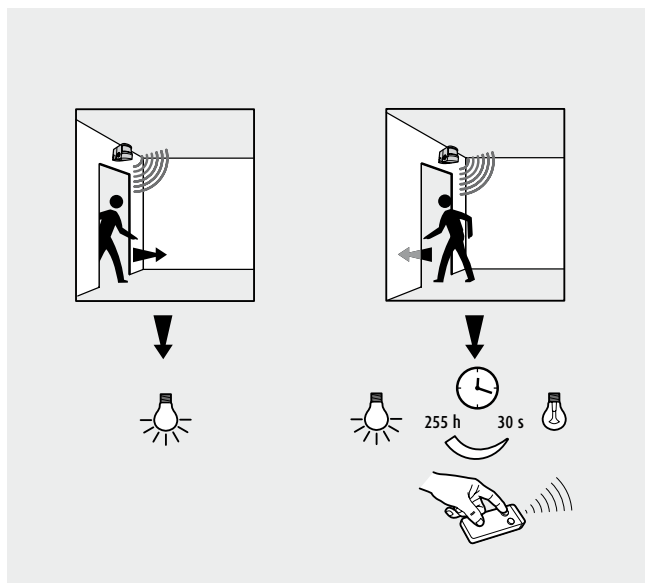
### Operating mode

#### Auto mode:

The switching ON/OFF of the load are ordered automatically by the dimmer/actuator, depending on people's presence and the desired light level as detected by the BUS sensor. The AUTO mode does not require the installation of a BUS control.

However, it is nevertheless possible to add a BUS control, with the function of forcing the switching ON/OFF of the automatism set by the dimmer/actuator.

The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode.



In addition to the two modes above, the following functions are also available:

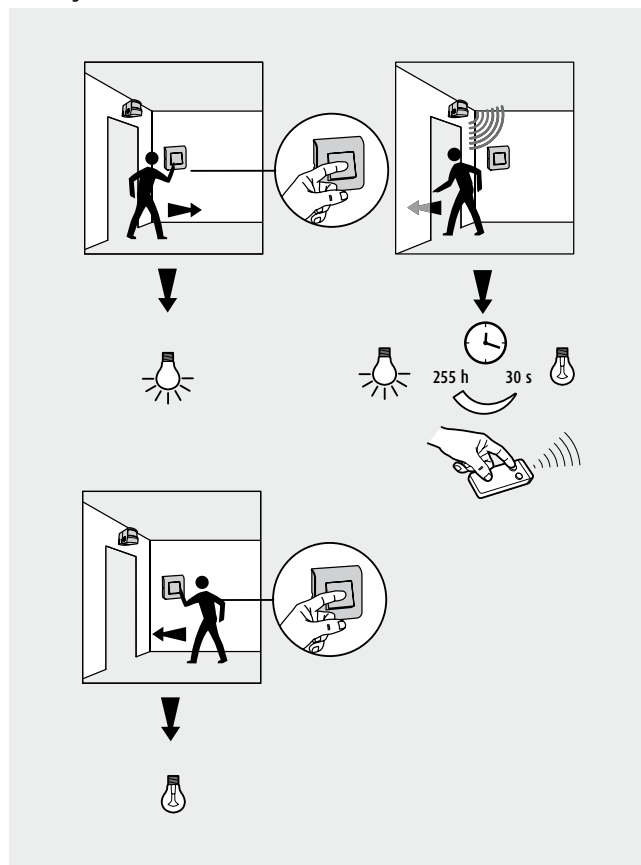
**Walkthrough:** The device switches the lights OFF 3 minutes after somebody has entered the room, if no presence is detected for 20 seconds (if the time delay is set to less than 3 minutes, that value will apply). If a presence is detected within the 20 seconds, the system uses the set time delay.

**Audible signal:** 1 minute, 30 seconds, and 10 seconds before the expiry of the set time delay, an audible signal is emitted

#### Eco mode:

The load is switched ON manually and switched OFF automatically by the sensor, depending on people's presence and the desired light level. The ECO mode requires the installation of a control. The function of the pushbutton is mainly to activate the automatism of the sensor: at the first pressure, the sensor compares the desired light level with the actual light level inside the room, and decides if the lights must be switched ON or not.

A subsequent pressure of the pushbutton will force the switching ON/OFF of the automatism determined by the sensor. The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode. A further functionality of the ECO mode is the temporary AUTO mode operation (30 seconds), following a switching OFF due to no presence being detected. After 30 seconds from switching OFF, the sensor returns to operate in ECO mode, therefore without performing an automatic switching ON.



### Settable parameters

Parameters	Adjustment range	Factory settings
Time delay	30 s – 255 h	15 min
PIR Sensitivity (%)	0 – 100	100
LUX Sensitivity (Lux)	1 – 2000	300 +/- 15%
Operating mode <sup>1)</sup>	Auto/Eco	Auto
Walkthrough	Enabled/Disabled	Enabled

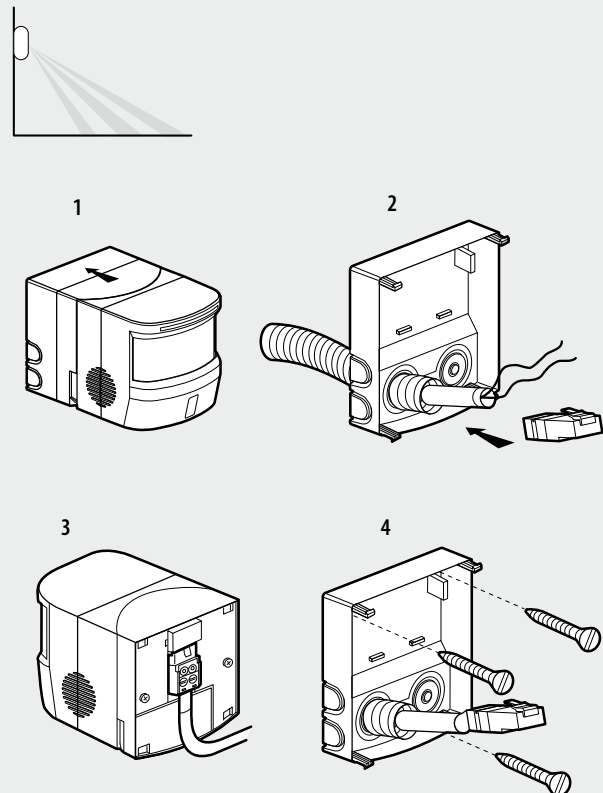
**NOTE:** All parameters adjustments can be performed using the physical configuration, the IR remote control, or the PC.

<sup>1)</sup> these modes may be set using the physical configuration

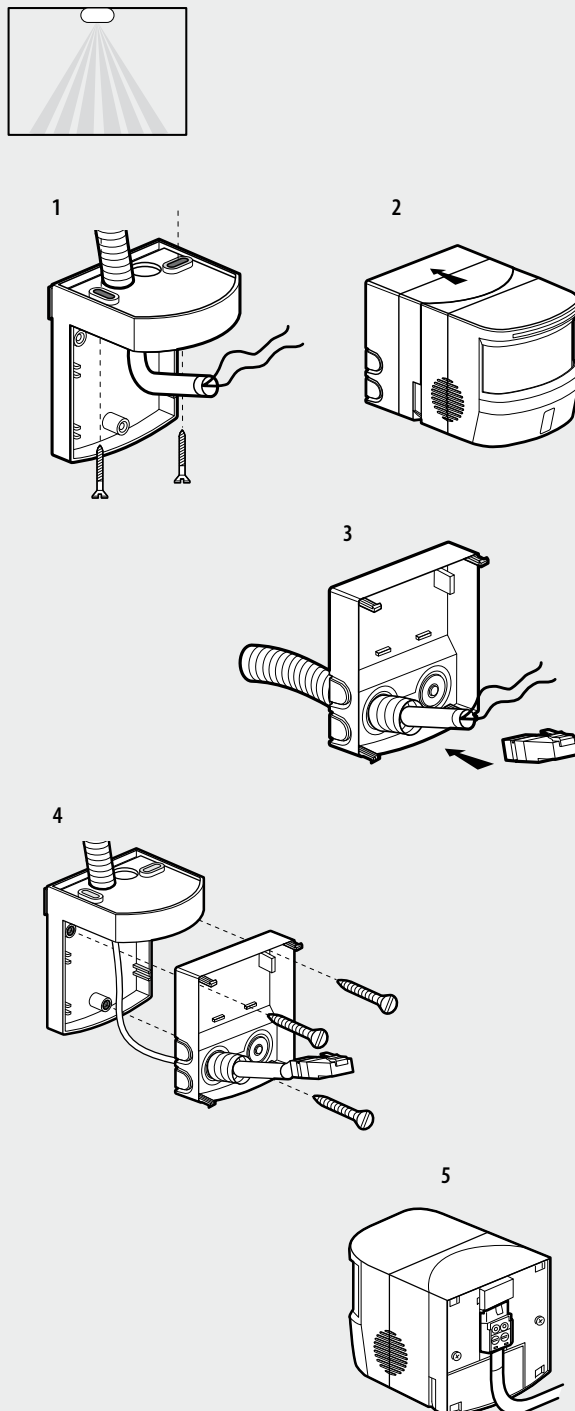
## Assembly, installation

The device is intended for indoor installation, on the wall or the ceiling, using the bracket supplied.

### Wall mounted installation



### Ceiling mounted installation





## Two-way narrow beam wall/ceiling mounted sensor

BMSE2003

### Description

Control and command device, powered by the SCS BUS, with two different sensors, the combination of which enables managing the light level inside the room, taking into account both the presence of people, and the level of natural light, therefore ensuring efficient energy savings and better user comfort.

The device has an IP42 protection index and must be installed indoors, either on the wall or the ceiling, using the bracket supplied.

#### The sensor is fitted with:

- RJ45 clamp for the connection of the BUS cable;
- passive infrared PIR movement sensor;
- light sensor;
- two-way IR receiver for adjustment using the remote control BMS04001 and BMS04002;
- pushbutton for enabling the adjustment of the parameters using the remote control;
- configurator socket.

#### PIR movement sensor:

it detects the presence of people inside the room. It's used inside rooms with free view, without obstacles, for the detection of people.

#### Light sensor:

it detects the light level inside the room, switching the load ON or OFF based on whether the light threshold set on the sensor (adjustable by the user) is lower/higher than the value detected. The light sensor has priority on the movement sensor: if the PIR sensor detects a presence, but natural light is sufficient, no load management signal is sent by the device. In order to avoid continuous switching ON and OFF, a tolerance on the threshold values must be set.

The sensor may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download).

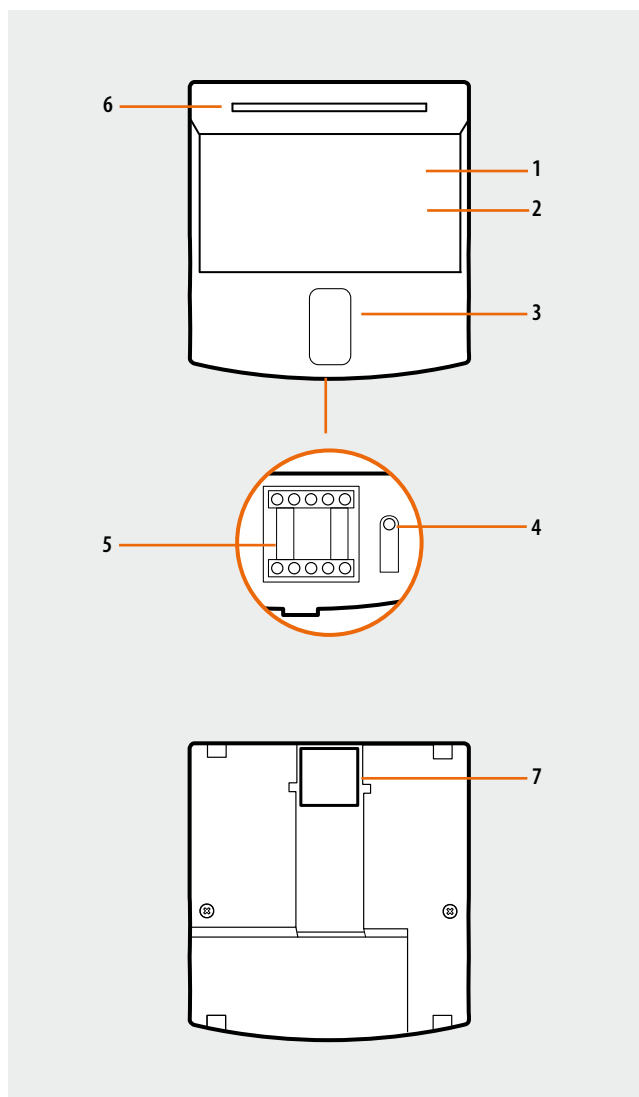
### Standards, Certifications, Marks

Standards:  
- CE directive

Safety standard:  
EN 60669-2-1

### Technical data

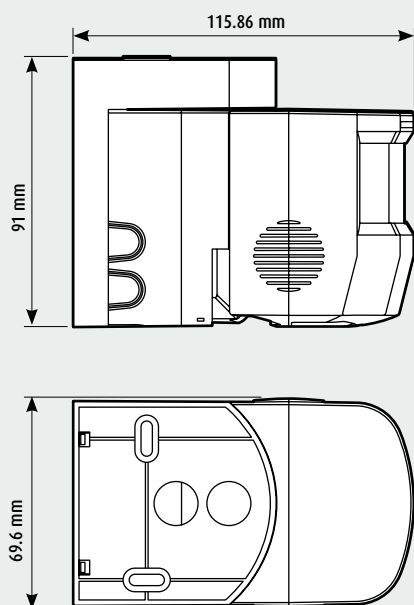
Power supply:	27 Vdc
Absorption:	12 mA
Operation:	ON/OFF and dimmer
Functions:	Auto/Eco/Walkthrough
Operating temperature:	(-5) – (+45) °C
Sensor type:	PIR
Protection index:	IP42
Sensitivity:	1 – 2000 lux
Time delay:	30 s - 255 h
Coverage of the PIR sensor at 2.5 m:	2 m x 9 m + 9 m (36 m <sup>2</sup> )
Covering angle:	90/30°
Maximum installation height:	6 m
Type of connection:	RJ45



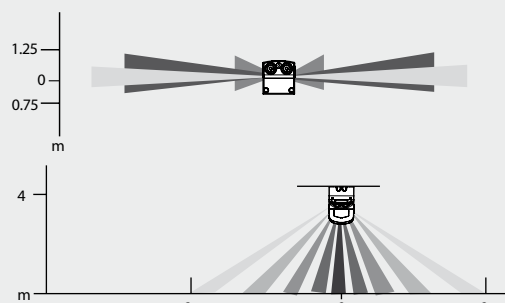
### Legend

1. Light sensor
2. Infrared PIR movement sensor
3. Two-way IR receiver
4. Pushbutton enabling remote control adjustments
5. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
6. LED indicator
7. RJ45 clamp for the connection of the BUS cable - RJ45/SCS BMAC1001 adaptor

## Dimensional data



## Coverage of the PIR sensor



## Adjustable sensitivity level

A (m)	Low				Medium				High				Max.			
	L (m)	P (m)	S (m <sup>2</sup> )		L (m)	P (m)	S (m <sup>2</sup> )		L (m)	P (m)	S (m <sup>2</sup> )		L (m)	P (m)	S (m <sup>2</sup> )	
2.5	1	15.5	20		1.5	16	22		1.5	16	24		1.5	16.5	26	
3	1.5	16	22		1.5	16	24		1.5	16.5	28		2	17	31	
4	1.5	16	26		1.8	17	31		2	18	32		2	18	34	
5	1.5	16	26		1.8	17	31		2	18	32		2	18	34	
6	1.5	16	26		1.8	17	31		2	18	32		2	18	34	

## Legend:

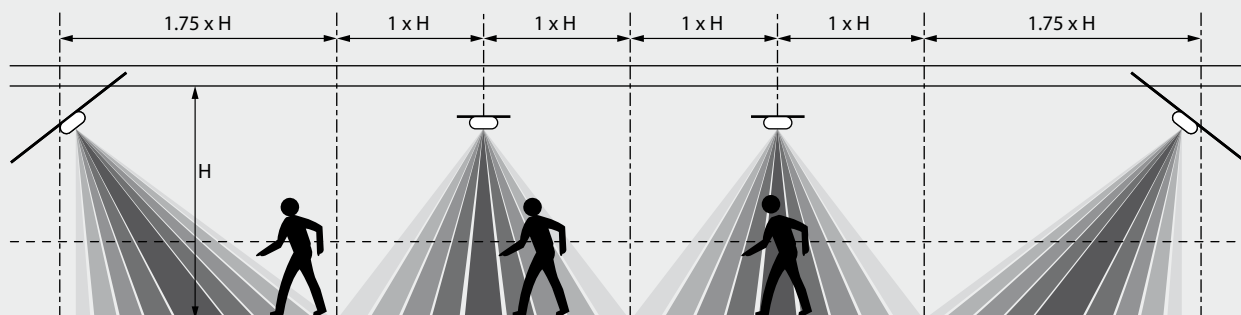
A = installation height (m)

L = width (m)

P = depth (m)

S = surface (m<sup>2</sup>)

Example of coverage of the PIR sensor with devices BMSE2003 and BMSE2004 (e.g. a corridor).



## MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

## Physical configuration

The features of the device are defined by 6 configurator sockets, and their functions depend on the operating mode:

Room: A = 1 – 9

Light point: PL = 1 – 9

Mode: M = 0 – 4

PIR movement sensor sensitivity: S = 0 – 3

Load ON time: T = 0 – 9

Sensitivity of the lighting sensor: D = 0 – 5

WARNING: Addresses A = 0 and PL = 0 do not exist

Possible function	Configurator in M
The device controls the load with the address indicated in A and PL. When a movement is detected, if the light level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires (Auto Mode). The PIR movement sensor sensitivity is set with the configurator connected to S. For correct operation, it is necessary to set the sensitivity of the lighting sensor with the configurator connected to D. If the user switches the light OFF manually using a control device, the movement sensor is disabled until a movement is detected, for a time indicated by T.	0
In this mode the sensor operates as a pure twilight switch, the movement sensor is disabled. When the light level falls below the set threshold, the device switches the load on, and switches it OFF when the light level exceeds the threshold again (Auto Mode). Configure A = 1-9 and PL = 1-9. GEN, ROOM and GR configurators cannot be connected. In this mode configurators S and T are not connected.	1
In this mode the device does not directly manage a load, but sends to the MH200N scenario programmer the notification of a movement and the lighting value. In this case the device address will be connected to A and PL, which must be unique within the system. Therefore, the GEN, ROOM and GR configurators cannot be connected. In this mode the S and T configurators are not connected, as these parameters are managed directly by the scenario programmer.	2
In this mode the device directly manages the load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer); when a movement is detected the device switches the light on and keeps it on based on the presence of people and the desired light level (Auto Mode). When a movement is detected, if the lighting level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	3
In this mode the device operates as a twilight device, and directly manages a load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer), and disabling the movement sensor. The load is switched on manually and switched OFF automatically by the sensor, depending on the desired light level (Eco mode). When the light is OFF the sensor therefore does not switch the load on, but waits for the user to do so using a manual control. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. Once the load has been switched OFF, if the natural light level decreases the sensor will no longer switch the load on, but will wait for the user to do so manually. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor set-point until the next switching ON. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	4

**WARNING:** when managing scenarios using the information from the sensor, using the MH200N scenario programmer, the sensor must be configured exclusively in M=2 mode.

1) Table of the active load times based on the configurator connected to T:

Configurator in T	Active load time in min.
No configurator	15
1	30 sec.
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

2) Sensitivity table for the PIR movement sensor based on the configurator connected to S:

Configurator in S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

3) Sensitivity table for the lighting sensor based on the configurator connected to D:

Configurator in D	Sensitivity in Lux
No configurator	Wall mounted: 300 Ceiling mounted: 500
1	20
2	100
3	300
4	500
5	1000

**Virtual configuration**

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

**Lighting Management configuration**

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

For more information on the functions see the glossary before the Technical sheets chapter.

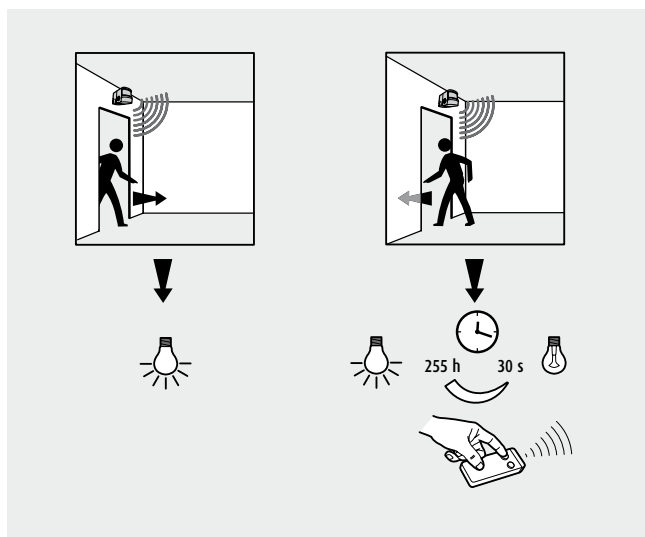
### Operating mode

#### Auto mode:

The switching ON/OFF of the load are ordered automatically by the dimmer/actuator, depending on people's presence and the desired light level as detected by the BUS sensor. The AUTO mode does not require the installation of a BUS control.

However, it is nevertheless possible to add a BUS control, with the function of forcing the switching ON/OFF of the automatism set by the dimmer/actuator.

The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode.



In addition to the two modes above, the following functions are also available:

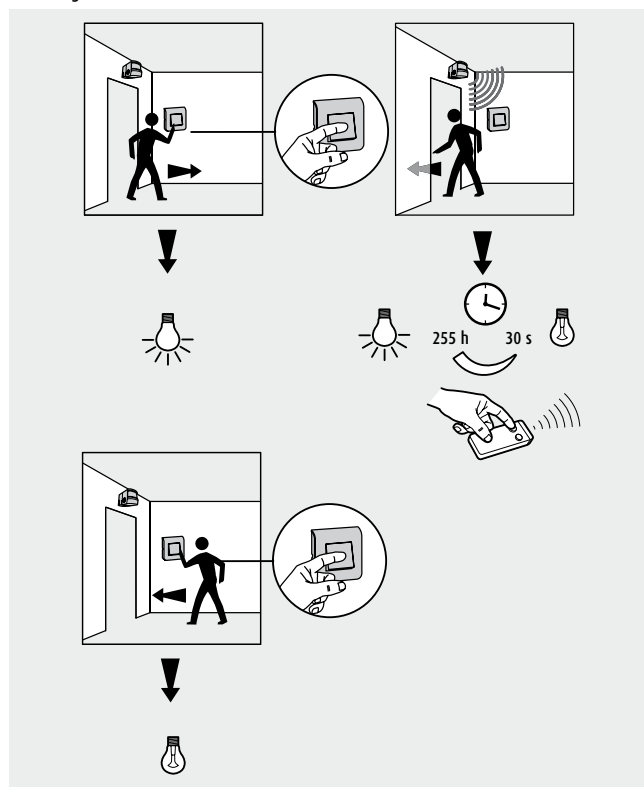
**Walkthrough:** The device switches the lights off 3 minutes after somebody has entered the room, if no presence is detected for 20 seconds (if the time delay is set to less than 3 minutes, that value will apply). If a presence is detected within the 20 seconds, the system uses the set time delay.

**Audible signal:** 1 minute, 30 seconds, and 10 seconds before the expiry of the set time delay, an audible signal is emitted

#### Eco mode:

The load is switched on manually and switched OFF automatically by the sensor, depending on people's presence and the desired light level. The ECO mode requires the installation of a control. The function of the pushbutton is mainly to activate the automatism of the sensor: at the first pressure, the sensor compares the desired light level with the actual light level inside the room, and decides if the lights must be switched ON or not.

A subsequent pressure of the pushbutton will force the switching ON/OFF of the automatism determined by the sensor. The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode. A further functionality of the ECO mode is the temporary AUTO mode operation (30 seconds), following a switching OFF due to no presence being detected. After 30 seconds from switching OFF, the sensor returns to operate in ECO mode, therefore without performing an automatic switching ON.



### Settable parameters

Parameters	Adjustment range	Factory settings
Time delay	30 – 255 h	15 min
PIR Sensitivity (%)	0 – 100	100
LUX Sensitivity (Lux)	1 – 2000	300 +/- 15%
Operating mode <sup>1)</sup>	Auto/Eco	Auto
Walkthrough	Enabled/Disabled	Enabled

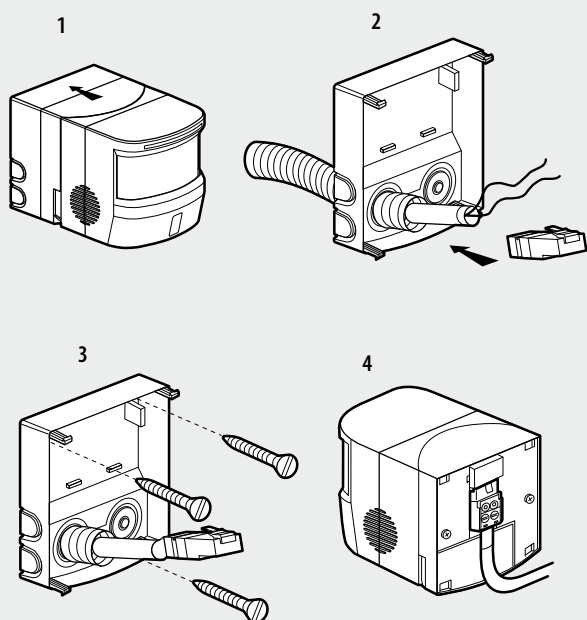
**Note:** all the parameter adjustments can be performed using the physical configuration, the IR remote control, or the PC.

<sup>1)</sup> these modes may be set using the physical configuration

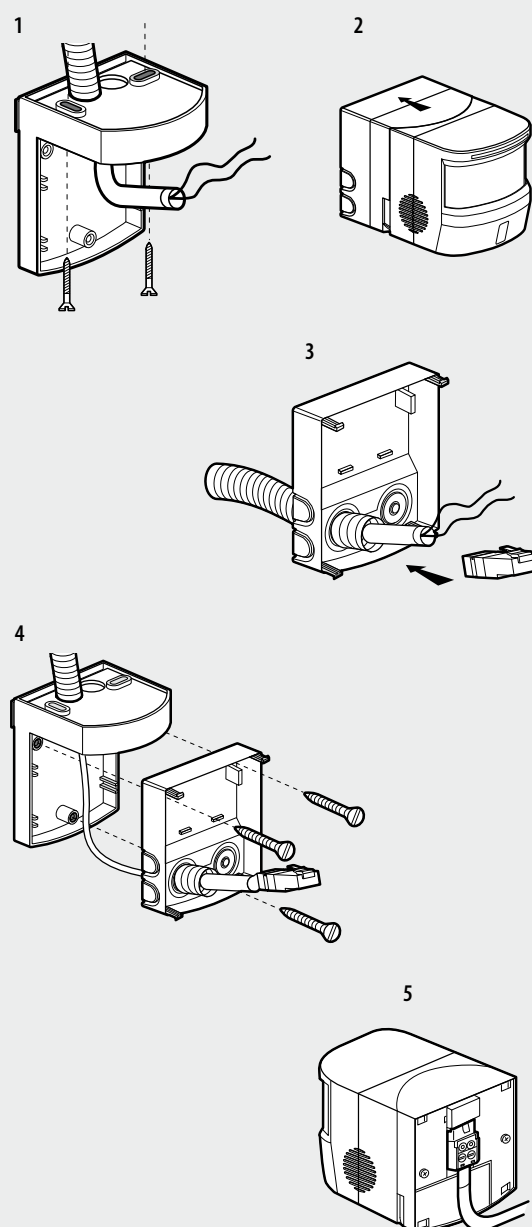
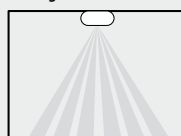
## Assembly, installation

The device is intended for indoor installation, on the wall or the ceiling, using the bracket supplied.

### Wall mounted installation



### Ceiling mounted installation





# One-way narrow beam wall/ceiling mounted sensor

BMSE2004

## Description

Control and command device, powered by the SCS BUS, with two different sensors, the combination of which enables managing the light level inside the room, taking into account both the presence of people, and the level of natural light, therefore ensuring efficient energy savings and better user comfort.

The device has an IP42 protection index and must be installed indoors, either on the wall or the ceiling, using the bracket supplied.

### The sensor is fitted with:

- RJ45 clamp for the connection of the BUS cable;
- passive infrared PIR movement sensor;
- light sensor;
- two-way IR receiver for adjustment using the remote control BMS04001 and BMS04002;
- pushbutton for enabling the adjustment of the parameters using the remote control;
- configurator socket.

### PIR movement sensor:

it detects the presence of people inside the room. It's used inside rooms with free view, without obstacles, for the detection of people.

### Light sensor:

it detects the light level inside the room, switching the load ON or OFF based on whether the light threshold set on the sensor (adjustable by the user) is lower/higher than the value detected. The light sensor has priority on the movement sensor: if the PIR sensor detects a presence, but natural light is sufficient, no load management signal is sent by the device. In order to avoid continuous switching ON and OFF, a tolerance on the threshold values must be set.

The sensor may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download).

## Standards, Certifications, Marks

Standards:

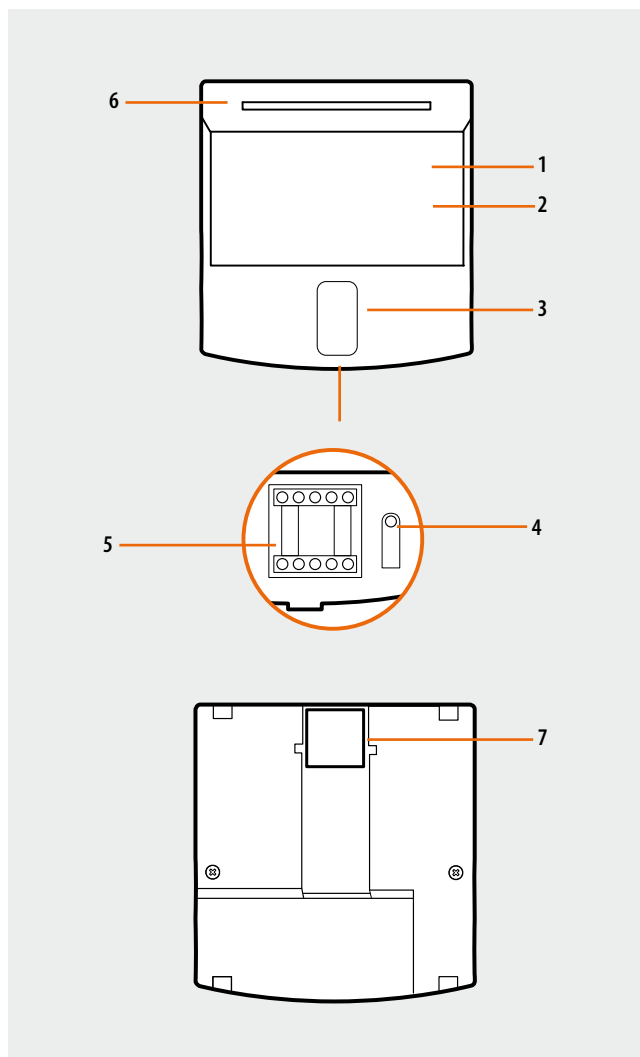
- CE directive

Safety standard:

EN 60669-2-1

## Technical data

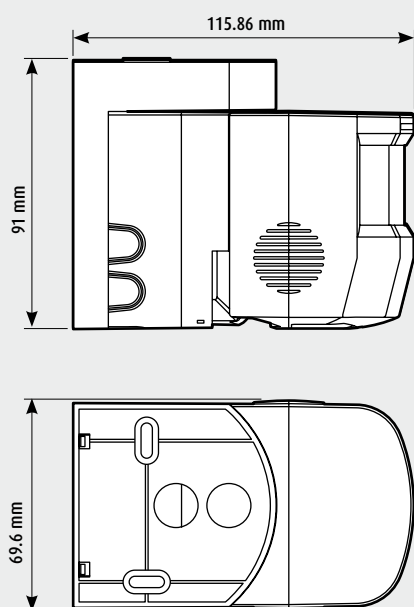
Power supply:	27 Vdc
Absorption:	12 mA
Operation:	ON/OFF and dimmer
Functions:	Auto/Eco/Walkthrough
Operating temperature:	(-5) – (+45) °C
Sensor type:	PIR
Protection index:	IP42
Sensitivity:	1 – 2000 lux
Time delay:	30 s - 255 h
Coverage of the PIR sensor at 2.5 m:	10 m x 27 m (210 m²)
Covering angle:	60/140°
Maximum installation height:	6 m
Type of connection:	RJ45



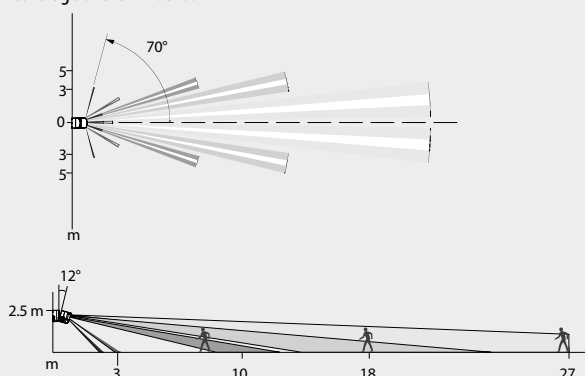
## Legend

1. Light sensor
2. Infrared PIR movement sensor
3. Two-way IR receiver
4. Pushbutton enabling remote control adjustments
5. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
6. LED indicator
7. RJ45 clamp for the connection of the BUS cable - RJ45/SCS BMAC1001 adaptor

## Dimensional data



## Coverage of the PIR sensor



## Adjustable sensitivity level

	Low			Medium			High			Max.		
A	L	P	S	L	P	S	L	P	S	L	P	S
(m)	(m)	(m)	(m²)	(m)	(m)	(m²)	(m)	(m)	(m²)	(m)	(m)	(m²)
2.5	8.5	25.5	95	9	26	103	9.5	27	115	9.5	27	115
3	9.5	26	107	9.5	26.5	111	9.5	27	116	10	27	117
4	9.5	26.5	110	9.5	27	116	10	28	123	10	28.5	128
5	9.5	26.5	110	9.5	27	116	10	28	123	10	28.5	128
6	9.5	26.5	110	9.5	27	116	10	28	123	10	28.5	128

## Legend:

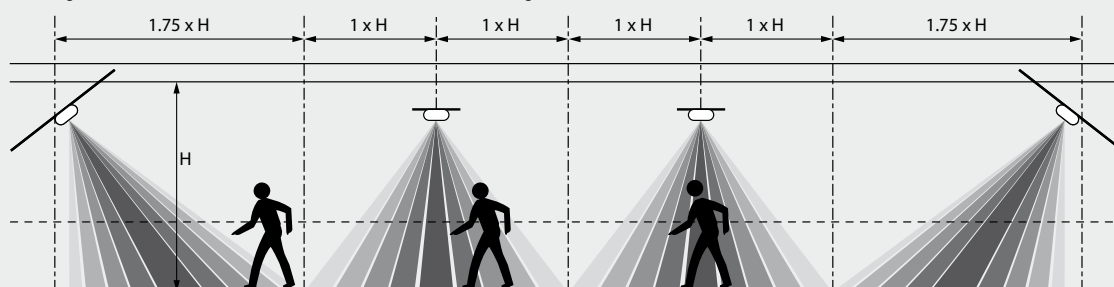
A = installation height (m)

L = width (m)

P = depth (m)

S = surface (m²)

Example of coverage of the PIR sensor with devices BMSE2003 and BMSE2004 (e.g. a corridor).



## MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

## Physical configuration

The features of the device are defined by 6 configurator sockets, and their functions depend on the operating mode:

Room: A = 1 – 9

Light point: PL = 1 – 9

Mode: M = 0 – 4

PIR movement sensor sensitivity: S = 0 – 3

Load ON time: T = 0 – 9

Lighting sensor sensitivity: D = 0 – 5

WARNING: there is no address A = 0 and PL = 0

Possible function	Configurator in M
The device controls the load with the address indicated in A and PL. When a movement is detected, if the light level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires (Auto Mode). The PIR movement sensor sensitivity is set with the configurator connected to S. For correct operation, it is necessary to set the sensitivity of the lighting sensor with the configurator connected to D. If the user switches the light OFF manually using a control device, the movement sensor is disabled until a movement is detected, for a time indicated by T.	0
In this mode the sensor operates as a pure twilight switch, the movement sensor is disabled. When the light level falls below the set threshold, the device switches the load on, and switches it OFF when the light level exceeds the threshold again (Auto Mode). Configure A = 1-9 and PL = 1-9. GEN, ROOM and GR configurators cannot be connected. In this mode configurators S and T are not connected.	1
In this mode the device does not directly manage a load, but sends to the MH200N scenario programmer the notification of a movement and the lighting value. In this case the device address will be connected to A and PL, which must be unique within the system. Therefore, the GEN, ROOM and GR configurators cannot be connected. In this mode the S and T configurators are not connected, as these parameters are managed directly by the scenario programmer.	2
In this mode the device directly manages the load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer); when a movement is detected the device switches the light on and keeps it on based on the presence of people and the desired light level (Auto Mode). When a movement is detected, if the lighting level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	3
In this mode the device operates as a twilight device, and directly manages a load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer), and disabling the movement sensor. The load is switched on manually and switched OFF automatically by the sensor, depending on the desired light level (Eco mode). When the light is OFF the sensor therefore does not switch the load on, but waits for the user to do so using a manual control. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. Once the load has been switched OFF, if the natural light level decreases the sensor will no longer switch the load on, but will wait for the user to do so manually. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor set-point until the next switching ON. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	4

**WARNING:** when managing scenarios using the information from the sensor, using the MH200N scenario programmer, the sensor must be configured exclusively in M=2 mode.

**1) Table of the active load times based on the configurator connected to T:**

Configurator in T	Active load time in min.
No configurator	15
1	30 sec.
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

**2) Sensitivity table for the PIR movement sensor based on the configurator connected to S:**

Configurator in S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

**3) Sensitivity table for the lighting sensor based on the configurator connected to D:**

Configurator in D	Sensitivity in Lux
No configurator	Wall mounted: 300 Ceiling mounted: 500
1	20
2	100
3	300
4	500
5	1000

**Virtual configuration**

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

**Lighting Management configuration**

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

For more information on the functions see the glossary before the Technical sheets chapter.

### Operating mode

#### Auto mode:

The switching ON/OFF of the load are ordered automatically by the dimmer/actuator, depending on people's presence and the desired light level as detected by the BUS sensor. The AUTO mode does not require the installation of a BUS control.

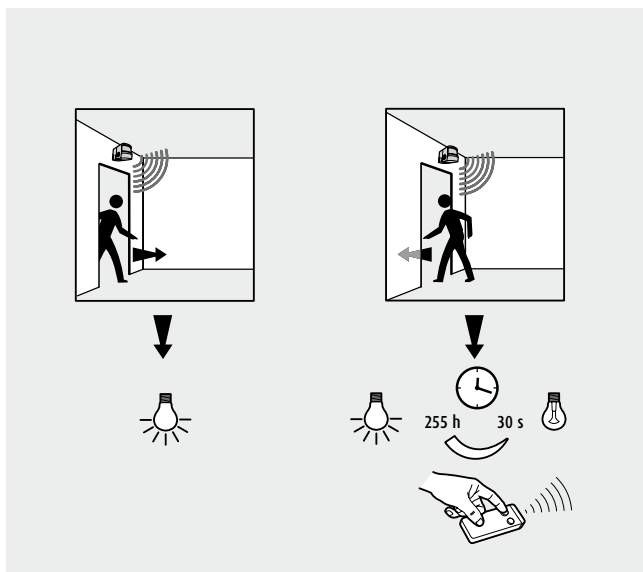
However, it is nevertheless possible to add a BUS control, with the function of forcing the switching ON/OFF of the automatism set by the dimmer/actuator.

The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode.

#### Eco mode:

The load is switched ON manually and switched OFF automatically by the sensor, depending on people's presence and the desired light level. The ECO mode requires the installation of a control. The function of the pushbutton is mainly to activate the automatism of the sensor: at the first pressure, the sensor compares the desired light level with the actual light level inside the room, and decides if the lights must be switched ON or not.

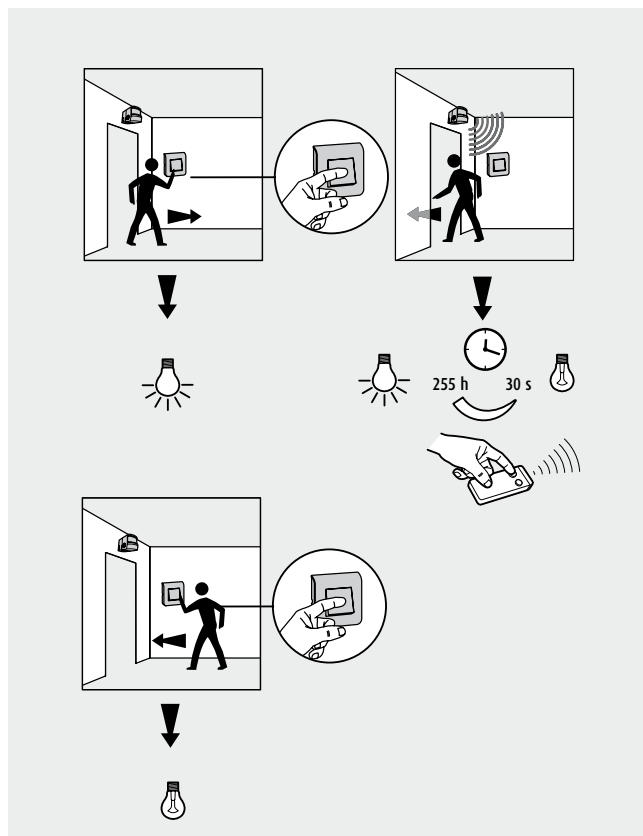
A subsequent pressure of the pushbutton will force the switching ON/OFF of the automatism determined by the sensor. The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode. A further functionality of the ECO mode is the temporary AUTO mode operation (30 seconds), following a switching OFF due to no presence being detected. After 30 seconds from switching OFF, the sensor returns to operate in ECO mode, therefore without performing an automatic switching ON.



In addition to the two modes above, the following functions are also available:

**Walkthrough:** The device switches the lights OFF 3 minutes after somebody has entered the room, if no presence is detected for 20 seconds (if the time delay is set to less than 3 minutes, that value will apply). If a presence is detected within the 20 seconds, the system uses the set time delay.

**Audible signal:** 1 minute, 30 seconds, and 10 seconds before the expiry of the set time delay, an audible signal is emitted



### Settable parameters

Parameters	Adjustment range	Factory settings
Time delay	30 – 255 h	15 min
PIR Sensitivity (%)	0 – 100	100
LUX Sensitivity (Lux)	1 – 2000	300 +/- 15%
Operating mode <sup>1)</sup>	Auto/Eco	Auto
Walkthrough	Enabled/Disabled	Enabled

**NOTE:** All parameter adjustments can be performed using the physical configuration, the IR remote control, or the PC.

<sup>1)</sup> these modes may be set using the physical configuration

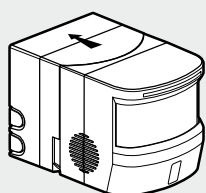
## Assembly, installation

The device is intended for indoor installation, on the wall or the ceiling, using the bracket supplied.

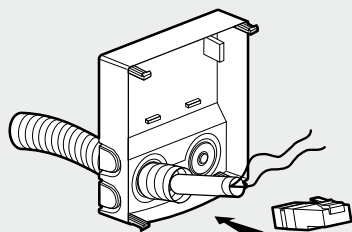
### Wall mounted installation



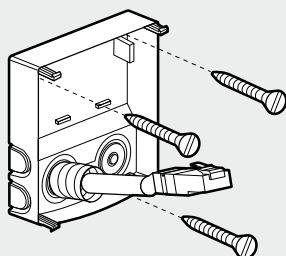
1



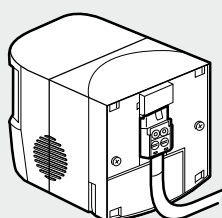
2



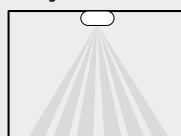
3



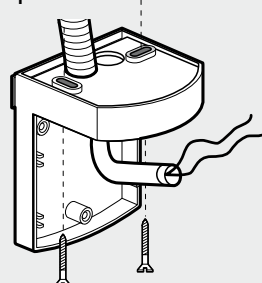
4



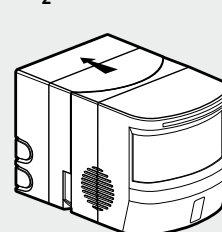
### Ceiling mounted installation



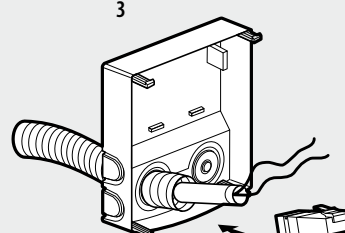
1



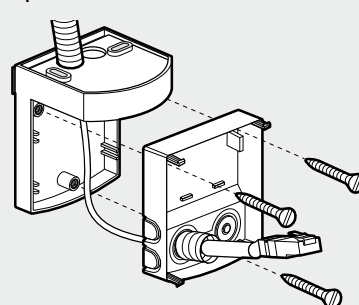
2



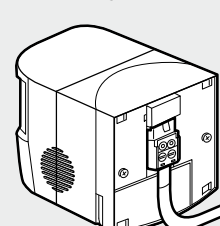
3



4



5





## Double technology wall/ceiling mounted sensor

BMSE2005

### Description

Control and command device, powered by the SCS BUS, with three different sensors, the combination of which enables managing the light level inside the room, taking into account both the presence of people, and the level of natural light, therefore ensuring efficient energy savings and better user comfort.

The device has an IP42 protection index and must be installed indoors, either on the wall or the ceiling, using the bracket supplied.

#### The sensor is fitted with:

- RJ45 clamp for the connection of the BUS cable
- passive infrared PIR movement sensor;
- US ultrasound movement sensor
- light sensor;
- two-way IR receiver for adjustment using the remote control BMS04001 and BMS04002
- pushbutton for enabling the adjustment of the parameters using the remote control
- configurator socket

#### PIR movement sensor:

it detects the presence of people inside the room. It's used inside rooms with free view, without obstacles, for the detection of people.

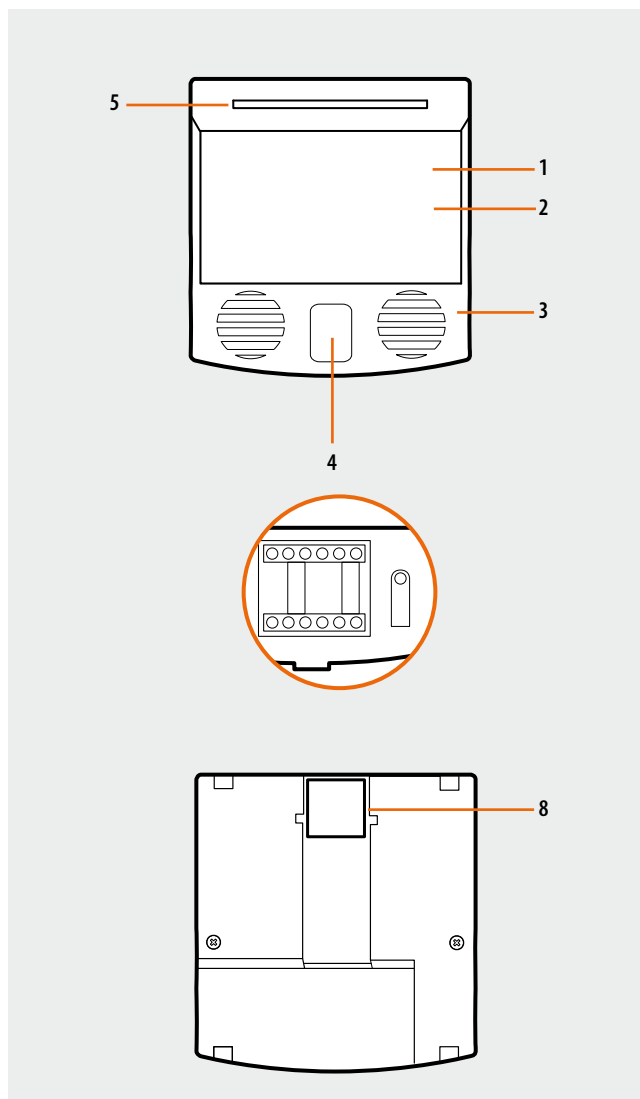
#### US movement sensor:

it detects the presence of people inside the controlled room thanks to the emission of ultrasound pulses, detecting any return echo caused by the presence of people within the rated covering range. It's used in rooms where obstacles are present.

#### Light sensors:

it detects the light level inside the room, switching the load ON or OFF based on whether the light threshold set on the sensor (adjustable by the user) is lower/higher than the value detected. The light sensor has priority on the movement sensor: if the PIR sensor detects a presence, but natural light is sufficient, no load management signal is sent by the device. In order to avoid continuous switching ON and OFF, a tolerance on the threshold values must be set.

The sensor may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download).



### Standards, Certifications, Marks

Standards:	Safety standard:
- CE directive	EN 60669-2-1

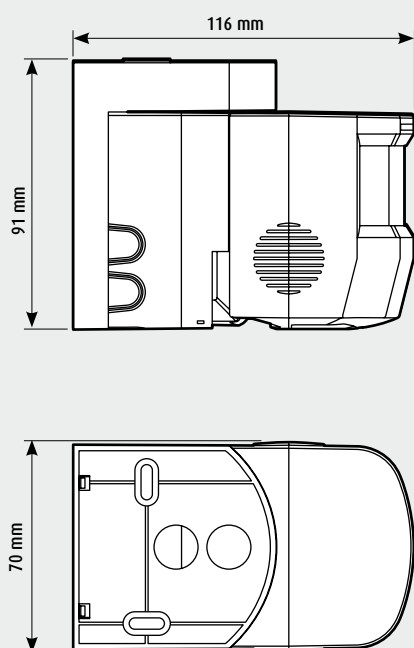
### Technical data

Power supply:	27 Vdc
Absorption:	17 mA
Operation:	ON/OFF and dimmer
Functions:	Auto/Eco/Walkthrough
Operating temperature:	(-5) – (+45) °C
Sensor type:	PIR and US
Protection index:	IP42
Sensitivity:	1 – 2000 lux
Time delay:	30 s – 255 h
Coverage of the PIR sensor at 2.5 m:	14 m x 7 m (77 m <sup>2</sup> )
Covering angle:	60/180°
Maximum installation height:	6 m
Type of connection:	RJ45

### Legend

1. Light sensor
2. Infrared PIR movement sensor
3. US ultrasound movement sensor
4. Two-way IR receiver
5. LED indicator
6. Pushbutton enabling remote control adjustments
7. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
8. RJ45 clamp for the connection of the BUS cable - RJ45/SCS BMAC1001 adaptor

## Dimensional data

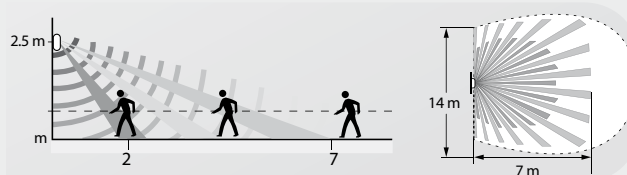


## MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

## Coverage of the PIR sensor



## Adjustable sensitivity level

PIR	Low			Medium			High			Max.		
	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )
2.5	3	1	10	5	3	20	8	4	29	10	5	39
3	3	1	10	5	3	20	8	4	29	10	5	39
4	3	2	14	6	3	28	9	5	42	12	6	57
5	4	2	19	7	4	38	11	5	58	14	7	77
6	4	2	25	8	4	50	12	6	75	16	8	100

## Adjustable sensitivity level

US	Low			Medium			High			Max.		
	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )	L (m)	P (m)	S (m <sup>2</sup> )
2.5	4	2	19	7	4	38	11	5	58	14	7	77
3	4	2	19	7	4	38	11	5	58	14	7	77
4	4	2	19	7	4	38	11	5	58	14	7	77
5	4	2	19	7	4	38	11	5	58	14	7	77
6	3	2	14	6	3	28	9	5	42	12	6	57

## Legend:

A = installation height (m)

L = width (m)

P = depth (m)

S = surface (m<sup>2</sup>)

## Physical configuration

The features of the device are defined by 6 configurator sockets, and their functions depend on the operating mode:

Room: A = 1 – 9

Light point: PL = 1 – 9

Mode: M = 0 – 4

PIR movement sensor sensitivity: S = 0 – 3

Load ON time: T = 0 – 9

Lighting sensor sensitivity: D = 0 – 5

WARNING: Addresses A = 0 and PL = 0 do not exist

Possible function	Configurator in M
The device controls the load with the address indicated in A and PL. When a movement is detected, if the light level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires (Auto Mode). The PIR movement sensor sensitivity is set with the configurator connected to S. For correct operation, it is necessary to set the sensitivity of the lighting sensor with the configurator connected to D. If the user switches the light OFF manually using a control device, the movement sensor is disabled until a movement is detected, for a time indicated by T.	0
In this mode the sensor operates as a pure twilight switch, the movement sensor is disabled. When the light level falls below the set threshold, the device switches the load on, and switches it OFF when the light level exceeds the threshold again (Auto Mode). Configure A = 1-9 and PL = 1-9. GEN, ROOM and GR configurators cannot be connected. In this mode configurators S and T are not connected.	1
In this mode the device does not directly manage a load, but sends to the MH200N scenario programmer the notification of a movement and the lighting value. In this case the device address will be connected to A and PL, which must be unique within the system. Therefore, the GEN, ROOM and GR configurators cannot be connected. In this mode the S and T configurators are not connected, as these parameters are managed directly by the scenario programmer.	2
In this mode the device directly manages the load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer); when a movement is detected the device switches the light on and keeps it on based on the presence of people and the desired light level (Auto Mode). When a movement is detected, if the lighting level is lower than the set level, the device switches the assigned load on, and keeps it on until the time set with the configurator connected to T expires. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	3
In this mode the device operates as a twilight device, and directly manages a load, maintaining a constant light level inside the room (this mode is only valid if the sensor manages a dimmer), and disabling the movement sensor. The load is switched on manually and switched OFF automatically by the sensor, depending on the desired light level (Eco mode). When the light is OFF the sensor therefore does not switch the load on, but waits for the user to do so using a manual control. During its operation the sensor maintains a constant light level based on the configurator connected to D; for example, when the natural light level increases, the device decreases the brightness of the load driven. Once the load has been switched OFF, if the natural light level decreases the sensor will no longer switch the load on, but will wait for the user to do so manually. For correct operation, it is necessary to set the sensitivity (Set point) of the lighting sensor with the configurator connected to D. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor set-point until the next switching ON. It is possible to change the threshold set using a control that changes the brightness: this new value is set as a new sensor Set point until the next switching ON.	4

**WARNING:** when managing scenarios using the information from the sensor, using the MH200N scenario programmer, the sensor must be configured exclusively in M=2 mode.

1) Table of the active load times based on the configurator connected to T:

Configurator in T	Active load time in min.
No configurator	15
1	30 sec.
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

2) Sensitivity table for the PIR movement sensor based on the configurator connected to S:

Configurator in S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

3) Sensitivity table for the lighting sensor based on the configurator connected to D:

Configurator in D	Sensitivity in Lux
No configurator	Wall mounted: 300 Ceiling mounted: 500
1	20
2	100
3	300
4	500
5	1000

**Virtual configuration**

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

**Lighting Management configuration**

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual configurator software it is possible to perform all the functions listed below:

- local lighting/movement detector
- local lighting sensor
- local movement sensor
- local lighting/movement detector
- central lighting sensor
- central movement sensor
- PLUS IR scenario control

For more information on the functions see the glossary before the Technical sheets chapter.

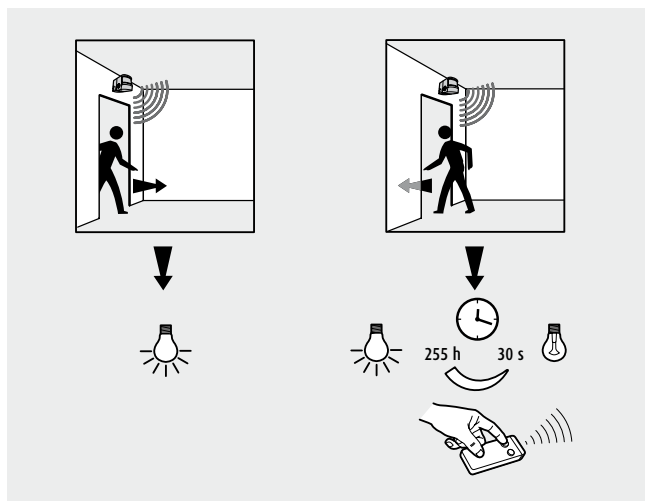
### Operating mode

#### Auto mode:

The switching ON/OFF of the load are ordered automatically by the dimmer/actuator, depending on people's presence and the desired light level as detected by the BUS sensor. The AUTO mode does not require the installation of a BUS control.

However, it is nevertheless possible to add a BUS control, with the function of forcing the switching ON/OFF of the automatism set by the dimmer/actuator.

The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode.



In addition to the two modes above, the following functions are also available:

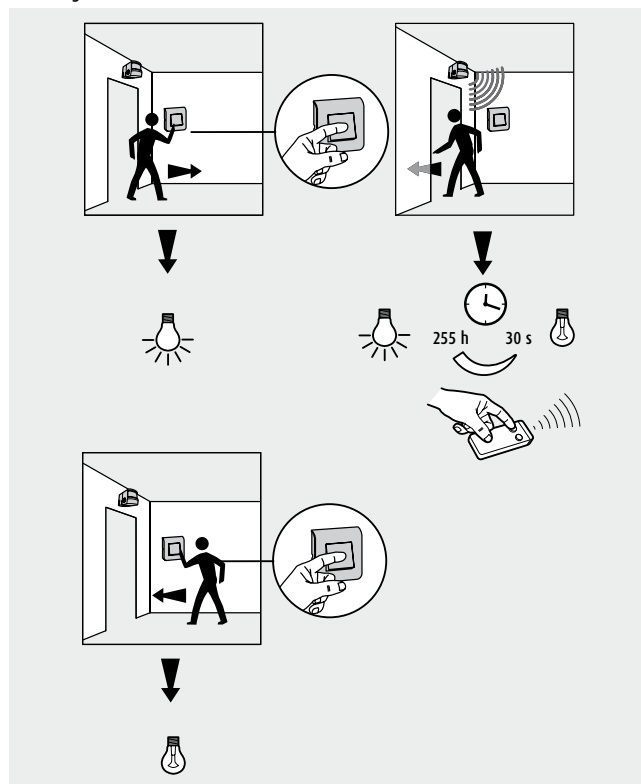
**Walkthrough:** The device switches the lights off 3 minutes after somebody has entered the room, if no presence is detected for 20 seconds (if the time delay is set to less than 3 minutes, that value will apply). If a presence is detected within the 20 seconds, the system uses the set time delay.

**Audible signal:** 1 minute, 30 seconds, and 10 seconds before the expiry of the set time delay, an audible signal is emitted

#### Eco mode:

The load is switched on manually and switched OFF automatically by the sensor, depending on people's presence and the desired light level. The ECO mode requires the installation of a control. The function of the pushbutton is mainly to activate the automatism of the sensor: at the first pressure, the sensor compares the desired light level with the actual light level inside the room, and decides if the lights must be switched on or not.

A subsequent pressure of the pushbutton will force the switching ON/OFF of the automatism determined by the sensor. The system remains in manual operation while a presence is being detected: after the switching OFF time delay due to non-detection of presence has elapsed, the system returns to automatic mode. A further functionality of the ECO mode is the temporary AUTO mode operation (30 seconds), following a switching OFF due to no presence being detected. After 30 seconds from switching OFF, the sensor returns to operate in ECO mode, therefore without performing an automatic switching ON.



### Settable parameters

Parameters	Adjustment range	Factory settings
Time delay	30 s – 255 h	15 min
PIR Sensitivity (%)	30 s – 100	100
US Sensitivity (%)	0 – 100	100
LUX Sensitivity (Lux)	1 – 2000	300 +/- 15%
Operating mode <sup>1)</sup>	Auto/Eco	Auto
Walkthrough	Enabled/Disabled	Enabled

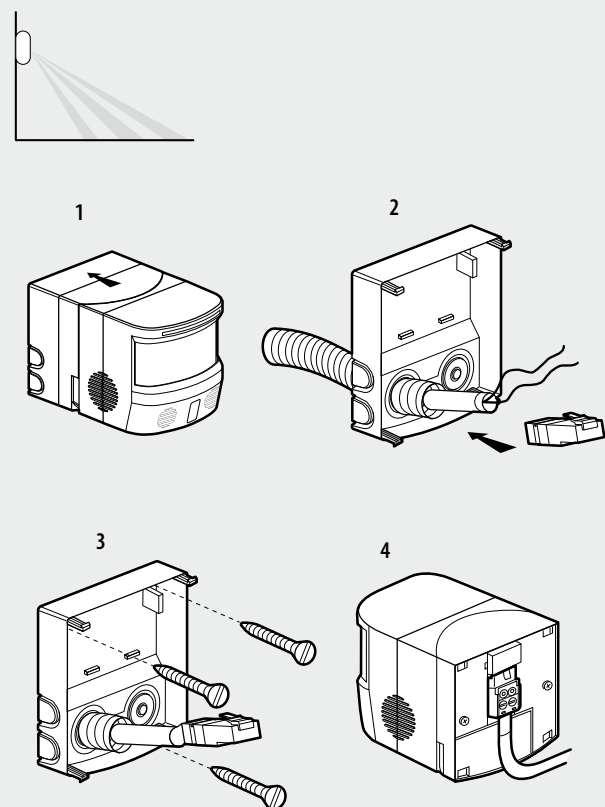
**Note:** all the parameter adjustments can be performed using the physical configuration, the IR remote control, or the PC.

<sup>1)</sup> these modes may be set using the physical configuration

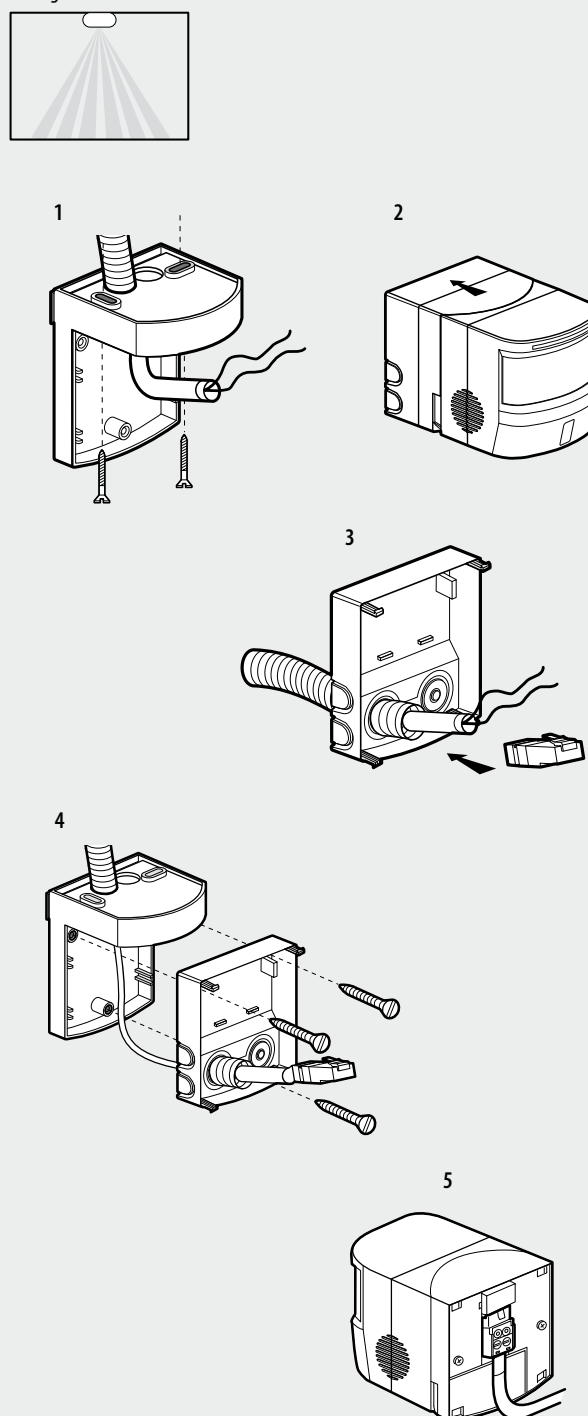
## Assembly, installation

The device is intended for indoor installation, on the wall or the ceiling, using the bracket supplied.

Wall mounted installation



Ceiling mounted installation





# 1 relay actuator in DIN module

BMSW1001

## Description

1 relay actuator for single loads up to 16 A at 230 Vac and installation inside DIN rail switchboards or distribution boards. This device is fitted with local load control pushbuttons.

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download)

## Technical data

Power supply:	100 - 240 Vac @ 50/60 Hz
Absorption:	5 mA
Dissipated power with max. load:	2.8 W
Number of outputs:	1 x 16 A
Operation:	ON/OFF
Operating temperature:	(- 5) – (+45) °C
Type of connection:	– RJ45 – clamp input 2 x 2.5 mm <sup>2</sup> – clamp output 2 x 1.5 mm <sup>2</sup> and 1 x 2.5 mm <sup>2</sup>
Protection index:	IP20
Cable section	2.5 mm <sup>2</sup>

Power/Absorption of driven loads:

Incandescent lamps - Halogen lamp Electronic transformer - Ferromagnetic transformers			LED lamp	
230 Vac	3680 W	16 A	500 VA	2.1 A

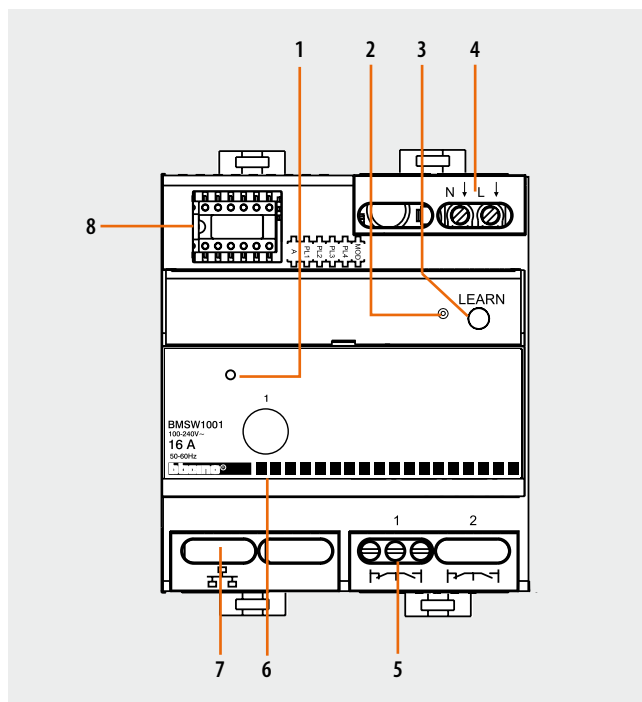
Linear fluorescent lamp		Compact fluorescent lamp	
10 X (2 X 36 W)	4.3 A	1150 W	5 A

## Standards, Certifications, Marks

Standards: IEC60669 - 2 - 1

## Dimensional data

Size: 4 DIN modules



## Legend

1. L1 Load status indication LED
2. Learn Mode status indication LED
3. Learn Mode pushbutton
4. Clamps for the connection to the 100 – 240 Vac power supply
5. L1 load connection clamps
6. L1 Load activation pushbutton
7. BUS RJ45 connector- RJ45 BUS connector – RJ45/SCS adaptor, item BMAC1001 -
8. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)

### MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

#### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control, apart from those which require the use of two interlocked relays. Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Pushbutton (ON monostable) ignores Room and General controls	PUL
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light OFF immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4

#### Virtual configuration

Using the Virtual configurator software it is possible to perform all the functions listed below:

- light actuator

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- light actuator

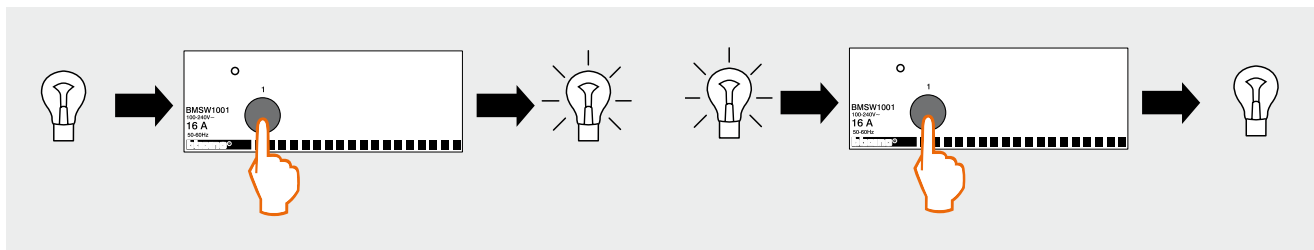
For more information on the functions see the glossary before the Technical sheets chapter.



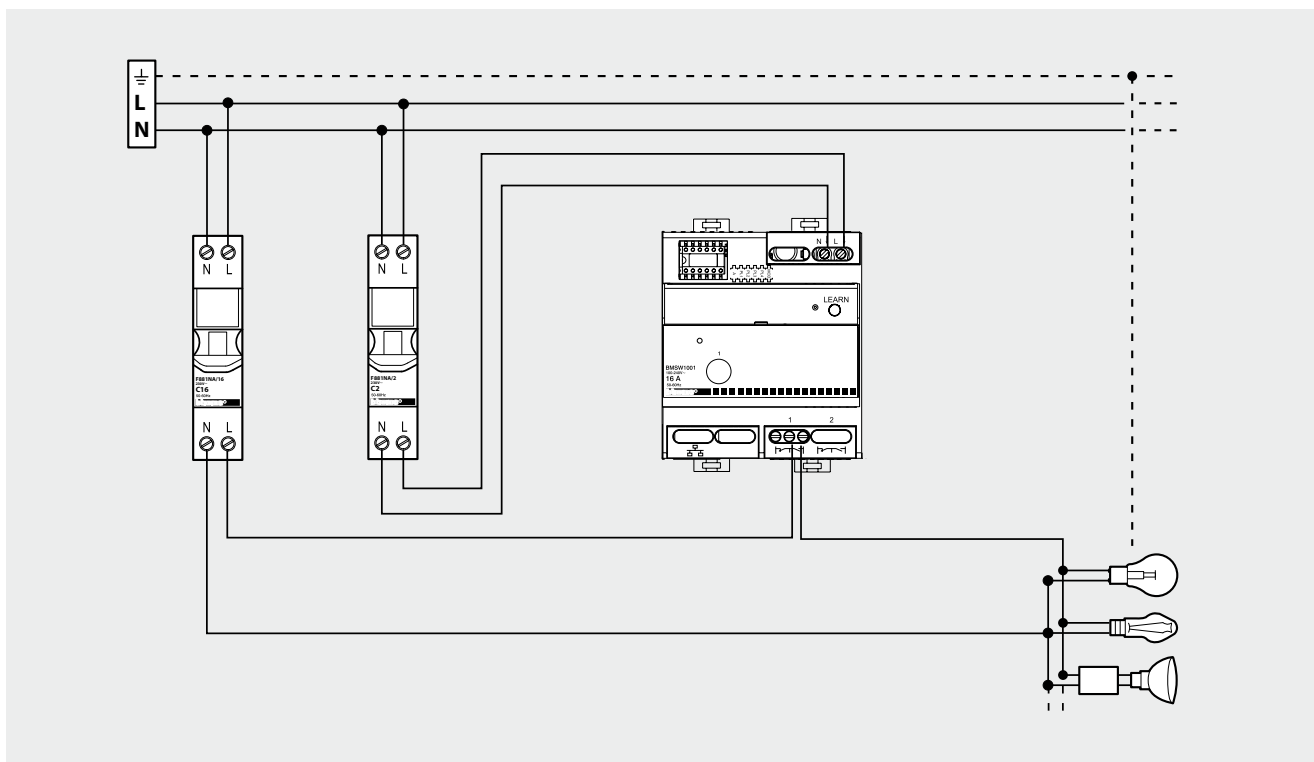
## BMSW1001

### Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.



### Wiring diagram





## 2 relay actuator in DIN module

BMSW1002

### Description

Actuator with 2 independent relays for single loads up to 16 A at 230 Vac and installation inside DIN rail switchboards or distribution boards.

This device is fitted with local load control pushbuttons.

The PL1 and PL2 positions can never have the same configurator, because the device cannot manage the interlock of the 2 relays. This means that it cannot manage motors of rolling shutters, curtains, etc.

The actuator may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&Go, Push&Learn, Project&Download).

### Technical data

Power supply:	100 - 240 Vac @ 50/60 Hz
Number of outputs:	2 x 16 A
Absorption:	5 mA
Dissipated power with max. load:	1.7 W
Operation:	ON/OFF
Operating temperature:	(-5) – (+45) °C
Type of connection:	– RJ45 – clamp input 2 x 2.5 mm <sup>2</sup> – clamp output 2 x 1.5 mm <sup>2</sup> and 1 x 2.5 mm <sup>2</sup>
Protection index:	IP20
Cable section:	2.5 mm <sup>2</sup>

Power/Absorption of driven loads:

Incandescent lamps - Halogen lamp			LED lamp	
Electronic transformer - Ferromagnetic transformers				
230 Vac	3680 W	16 A	500 VA	2.1 A

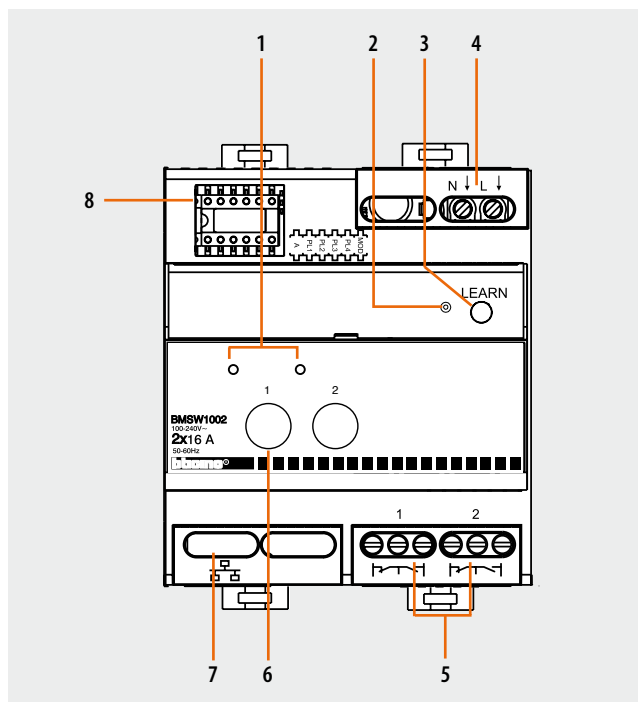
Linear fluorescent lamp		Compact fluorescent lamp	
10 X (2 X 36 W)	4.3 A	1150 W	5 A

### Standards, Certifications, Marks

Standards: IEC60669 - 2 - 1

### Dimensional data

Size: 4 DIN modules



### Legend

1. L1, L2 Load status indication LED
2. Learn Mode status indication LED
3. Learn Mode pushbutton
4. Clamps for the connection to the 100 – 240 Vac power supply
5. L1, L2 load connection clamps
6. L1, L2 Load activation pushbutton
7. BUS RJ45 connector
8. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)

### MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the kit or the Web server. The Virtual Configurator software must be installed on the PC.

#### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control, apart from those which require the use of two interlocked relays.

Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Master Actuator with OFF control delayed on the corresponding Slave actuator. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup> . This mode is only operative if PL1≠PL2.	none – 4 <sup>1)</sup>
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL

1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light OFF immediately and leaves the fan working for the time set with configurator 0 to 4 in M of the Master actuator as indicated in the table.

WARNING: the PL1 and PL2 positions must never have the same configurator.

Configurator	Time (minutes)
No configurator	0
1	1
2	2
3	3
4	4

#### Virtual configuration

Using the Virtual configurator software it is possible to perform all the functions listed below:

- light actuator

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go
- Push&Learn
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

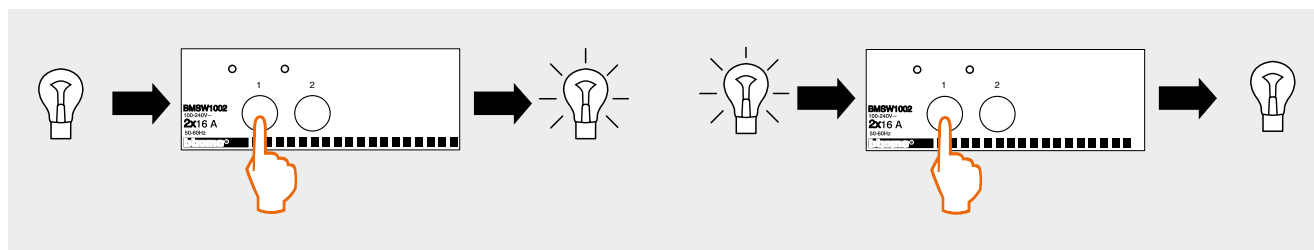
- light actuator

For more information on the functions see the glossary before the Technical sheets chapter.

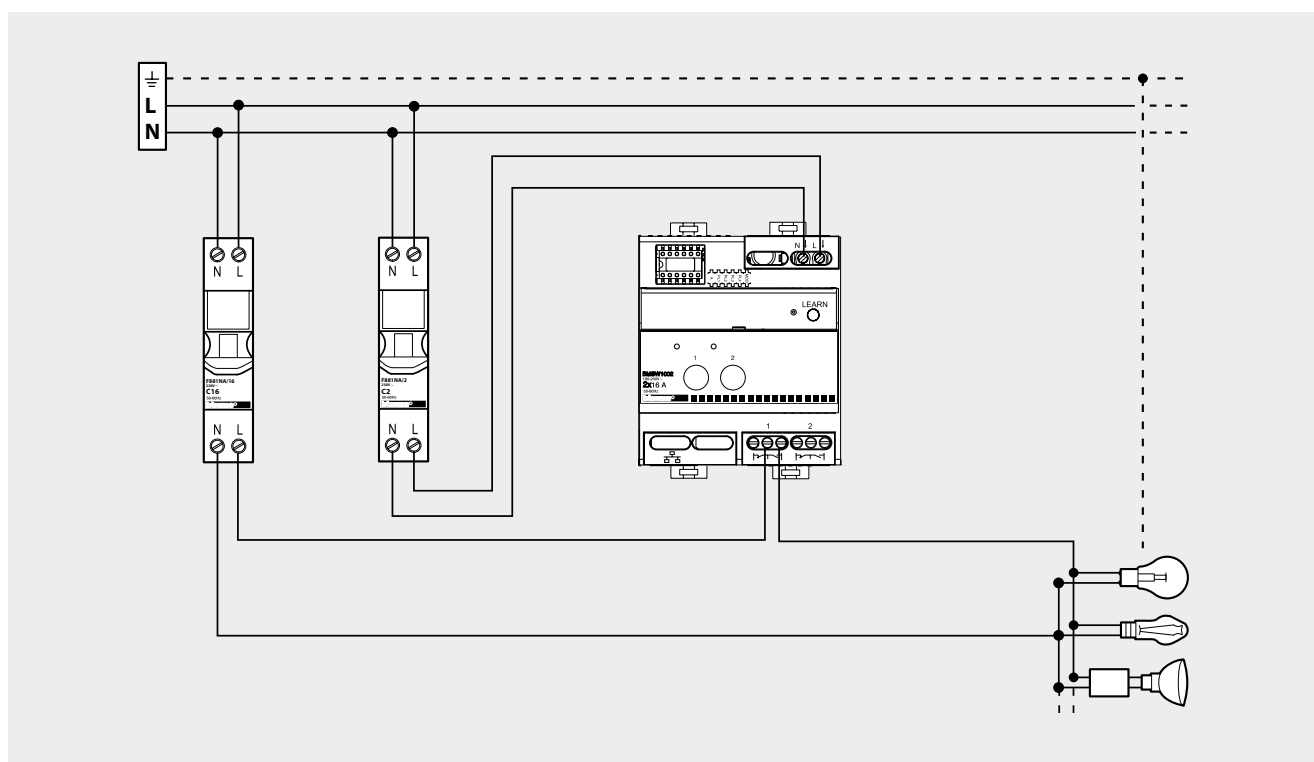
# BMSW1002

## Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.



## Wiring diagram





## 4 relay actuator in DIN module

BMSW1003

### Description

Actuator with 4 independent relays for single loads up to 16 A at 230 Vac, and installation inside DIN rail switchboards or distribution boards.

This device is fitted with local load control pushbuttons.

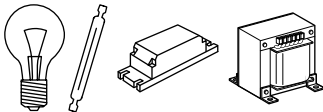

The PL1, PL2, PL3 and PL4 positions can never have the same configurator, because the device cannot manage the interlocking of the 2 relays. This means that it cannot manage motors of rolling shutters, curtains, etc.



The actuator may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&Go, Push&Learn, Project&Download).

### Technical data

Power supply:	110 - 230 Vac @ 50/60 Hz
Number of outputs:	4 x 16 A
Operation:	ON/OFF
Operating temperature:	(-5) – (+45) °C
Type of connection:	– RJ45 – clamp input 2 x 2.5 mm <sup>2</sup> – clamp output 2 x 1.5 mm <sup>2</sup> and 1 x 2.5 mm <sup>2</sup>
Protection index:	IP20
Cable section:	2.5 mm <sup>2</sup>

Power/Absorption of driven loads:

	Incandescent lamps - Halogen lamp		LED lamp	
	Electronic transformer - Ferromagnetic transformers			
				
230 Vac	3680 W	16 A	500 VA	2.1 A

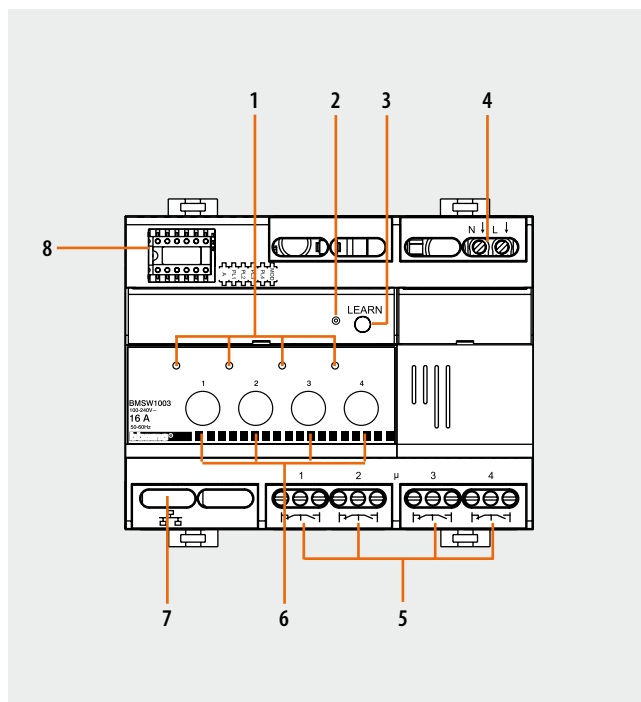
Linear fluorescent lamp		Compact fluorescent lamp	
			
10 X (2 X 36 W)	4.3 A	1150 W	5 A

### Standards, Certifications, Marks

Standards: IEC60669 - 2 - 1

### Dimensional data

Size: 4 DIN modules



### Legend

1. L1, L2, L3, L4 Load status indication LED.
2. Learn Mode status indication LED
3. Learn Mode pushbutton
4. Clamps for the connection to the 230 Vac power supply
5. L1, L2, L3, L4 load connection clamps.
6. L1, L2, L3, L4 Load activation pushbutton.
7. BUS RJ45 connector
8. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)

### MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the web server. The Virtual configurator software must be installed on the PC.

Questa modalità è operativa solo se PL1≠PL2≠PL3≠PL42).

### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control, apart from those which require the use of two interlocked relays.

Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Master Actuator with OFF control delayed on the corresponding Slave actuator. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup> . This mode is only operative if PL1≠PL2≠PL3≠PL42).	none – 4 <sup>1)</sup>
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL

1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light OFF immediately and leaves the fan working for the time set with configurator 0 to 4 in M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
No configurator	0
1	1
2	2
3	3
4	4

### Virtual configuration

Using the Virtual configurator software it is possible to perform all the functions listed below:

- light actuator

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go
- Push&Learn
- Project&Download,

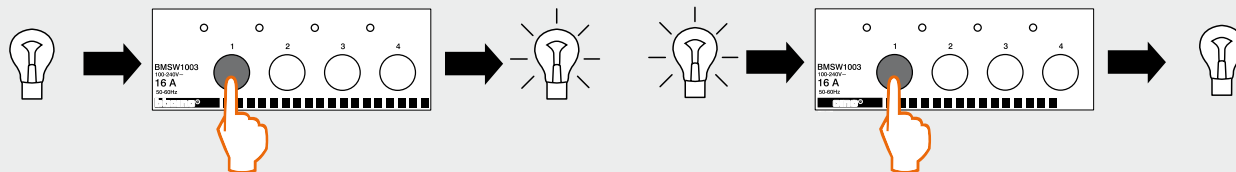
Using the Virtual configurator software it is possible to perform all the functions listed below:

- light actuator

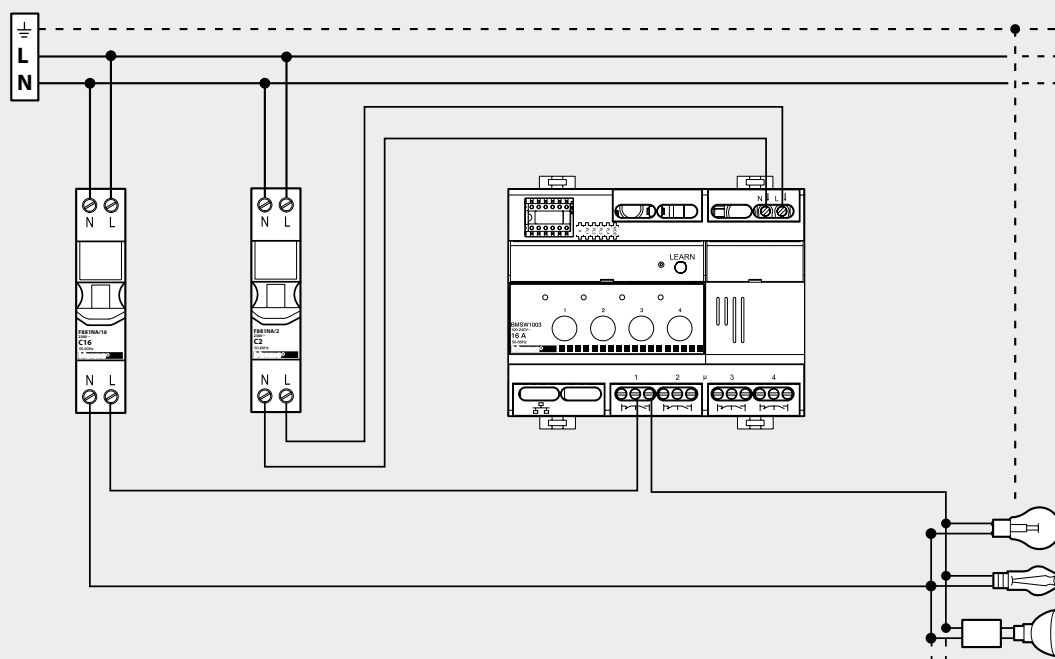
For more information on the functions see the glossary before the Technical sheets chapter.

### Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.



### Wiring diagram





## Power supply

E46ADCN

### Description

The power supply must be used to supply power to the MY HOME and Lighting Management systems. On the output, the unit supplies a 27 Vdc continuous low voltage, with a maximum current of 1 A. It is electronically protected (without fuses) against short circuit and overload.

It's a double insulation safety device in accordance with CEI EN60065, and can therefore be used in conjunction with a SELV source in accordance with paragraph 11.1.2.5 of CEI 64-8-4.

The power supply unit is fitted inside a 8 DIN rail module enclosure, and its installation must be in accordance with the regulations of the country of use.

In general, the following requirements must be met:

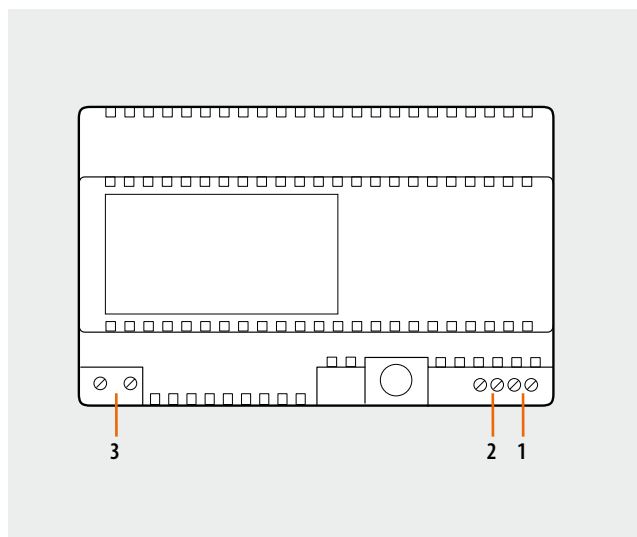
- The power supply must always be installed in appropriate enclosures.
- The device must be kept away from water drips and sprays.
- Care must be taken not to obstruct the air vents.
- A two-pole circuit breaker must be installed, with contact separation of at least 3 mm located nearby the power supply. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.

### Technical data

Power supply voltage:	230 Vac $\pm$ 10% @ 50/60 Hz
Input MAX power consumption:	300 mA
Output voltage:	27 Vdc
Maximum power delivered:	1.2 A
Maximum power consumption:	11 W
Reference standards:	EN60065
Protection index:	IP30
Operating temperature:	5 – 40 °C

### Dimensional data

Size: 8 DIN modules



### Legend

1. Clamps (1-2) with 27 Vdc output voltage
2. Clamps (BUS) for the connection of the BUS/SCS
3. Clamps for connection to the power supply voltage



# 1 relay actuator in DIN module

F411/1N



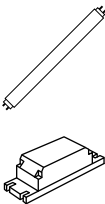

## Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates a two-way relay and a local load control pushbutton, only active if the actuator has been configured.

The device can be installed in a MY HOME system and can be configured both physically or virtually. In the last case, by configuring the G1, G2, and G3 positions, the actuator may be associated to a maximum of three separate groups. When installed as a component of the Lighting Management system, specific configuration procedures are used (Plug&go, Project&Download).

## Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	22 mA
Number of outputs:	1x10 A
Power/Absorption of driven loads:	

Incandescent lamps Halogen lamp			LED lamp Compact fluorescent lamp		Linear fluorescent lamp Electronic transformer		Ferromagnetic transformers	
								
230 Vac	2300 W	10 A	500 W	Max. 10 lamps	920 W	4 A	4 A cosφ 0.5	920 VA

Dissipated power with max. load:	1,5 W
Operating temperature:	(-5) – (+45) °C

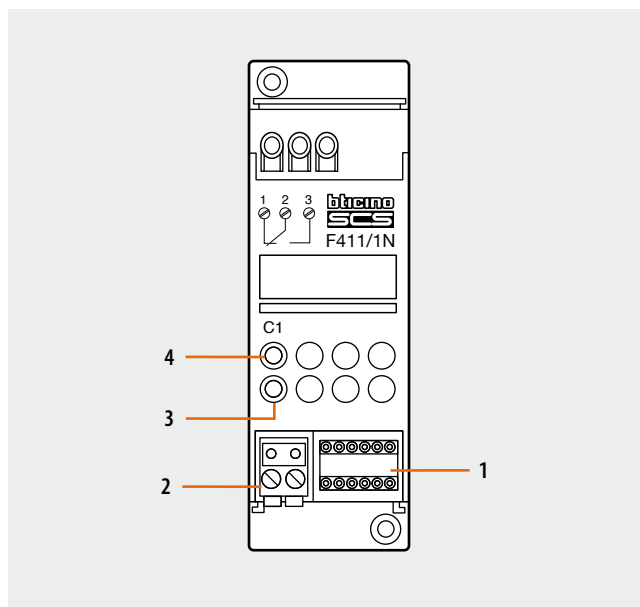
## Dimensional data

Size: 2 DIN modules

## Configuration MY HOME

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the web server. The Virtual configurator software must be installed on the PC.



## Legend

1. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
2. BUS
3. LED
4. Pushbutton

### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control, apart from those which require the use of two interlocked relays. Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Pushbutton (ON monostable) ignores Room and General controls	PUL
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light OFF immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4

### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- light actuator

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

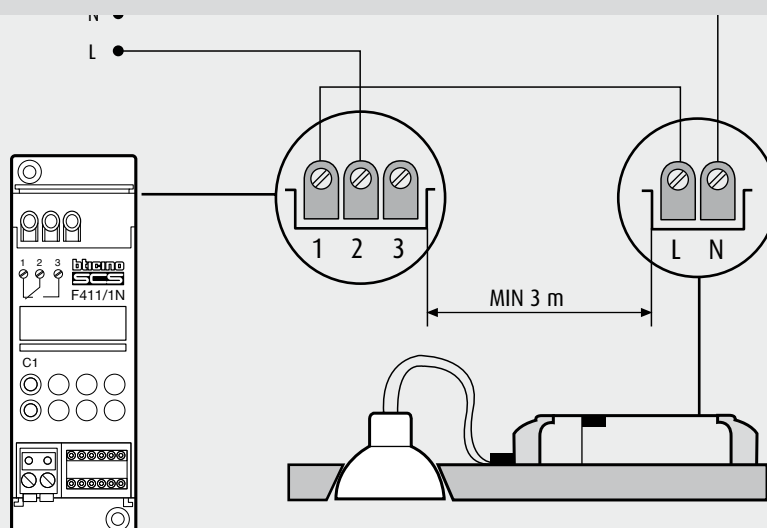
- Plug&Go
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- light actuator

For more information on the functions see the glossary before the Technical sheets chapter.

### Wiring diagram





# 1 NC relay actuator in DIN module



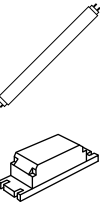

F411/1NC

## Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates a two-way NC relay and a local load control pushbutton. When compared with actuator F411/11, the device inverts the relay control logic: at switching ON the relay contacts are always closed (status ON – LED ON), and open following an OFF control (LED OFF) In this way, if there is no power input from the BUS, the device will remain in the ON status, keeping the load ON. In the configurator sockets the device shows the positions G1, G2 and G3, in additions to positions A, PL, and M, which make it possible for up to 3 separate belonging groups to be associated to the actuator.

## Technical data

Power supply from BUS: 27 Vdc  
Operating power supply with SCS BUS: 18 – 27 Vdc  
Absorption: 22 mA  
Power/Absorption of driven loads:

Incandescent lamps Halogen lamp			LED lamp Compact fluorescent lamp		Linear fluorescent lamp Electronic transformer		Ferromagnetic transformers	
								
230 Vac	2300 W	10 A	500 W	Max. 10 lamps	920 W	4 A	4 A cosφ 0.5	920 VA

Operating temperature: 5 - 35 °C  
Size: 2 DIN modules

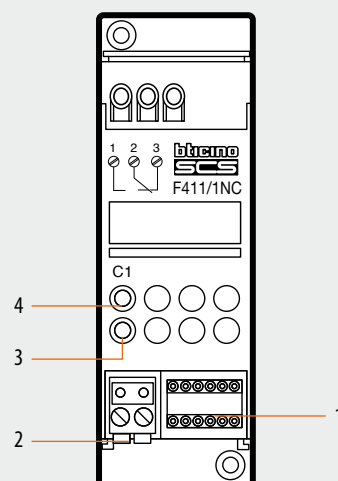
## Configuration

The actuator performs all the basic operating modes that can be configured directly on the control, apart from those which require the use of two interlocked relays.

Possible function	Configurator in M
Pushbutton (ON monostable) ignores Room and General controls	PUL
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

1) The value of the configurator listed in the table defines the final time, after which expiry the actuator deactivates its own SLAVE

Front view



## Legend

1. Configurator socket
2. BUS
3. LED
4. Pushbutton

Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4



## 2 relay actuator in DIN module

F411/2

### Description


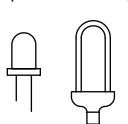
Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates two independent relays for the activation of 2 loads, and includes local control pushbuttons for each individual load, which are only active if the actuator has been configured.

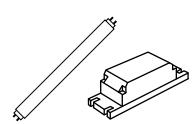
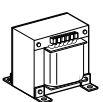
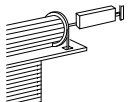
The device can be installed in a MY HOME system and configured physically or virtually. In this case when the PL1 and PL2 positions are configured using the same configurator the device interlocks the relays, to which it is possible to connect motors of rolling shutters, curtains, etc.

When installed as a component of the Lighting Management system, specific configuration procedures are used (Plug&go, Project&Download).

### Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	28 mA
Number of outputs:	2x6A
Power/Absorption of driven loads:	

	Incandescent lamps Halogen lamp	LED lamp Compact fluorescent lamp
		
230 Vac	1380 W 6 A	250 W Max. 4 lamps

Linear fluorescent lamp Electronic transformer	Ferromagnetic transformers	Motor reducers for rolling shutters
		
230 W 1 A	2 A cosφ 0.5 460 VA	460 W 2 A

Dissipated power with max. load:	1.7 W <sup>1)</sup>
Operating temperature:	(-5) – (+45) °C
Number of outputs:	2x6A

NOTE: 1) the dissipated power indicated is that corresponding to the device with all the relays loaded at the maximum load.

With lower loads also the dissipated power is lower and may be calculated by means of the following formula:  $P[mW] = 140 + 400 \cdot N + 10 \cdot [I_{c1} + I_{c2}]$

P: dissipated power in mW, N: no. of loaded relays, IN: load current corresponding to the N relay.

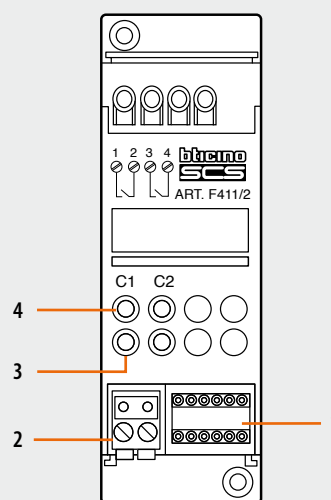
### Dimensional data

Size: 2 DIN modules

### MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the Web server. The Virtual configurator software must be installed on the PC.



### Legend

1. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
2. BUS
3. LED
4. Pushbutton

### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control. Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Timed stop for motors. The device deactivates after the time set has elapsed <sup>1)</sup> . This mode is only operative if LP1 = LP2 (same configurators), i.e. with the two relays interlocked	none – 9 <sup>1)</sup>
Master Actuator with OFF control delayed on the corresponding Slave actuator. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>2)</sup> . This mode is only operative if PL1 ≠ PL2.	none – 4 <sup>2)</sup>
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL

Configurator	Time (minutes)
No configurator	1
1	2
2	5
3	10
4	infinite or until the next control
5	20 sec.
6	10 sec.
7	5 sec.
8	15 sec.
9	30 sec.

2) The value of the configurator listed in the table defines the final time, after which the actuator disables its own slave

Configurator	Time (minutes)
No configurator	0
1	1
2	2
3	3
4	4

### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- light actuator
- rolling shutter actuator

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- light actuator

For more information on the functions see the glossary before the Technical sheets chapter.

F411/2

## Wiring diagrams

Diagram for the connection of lighting devices

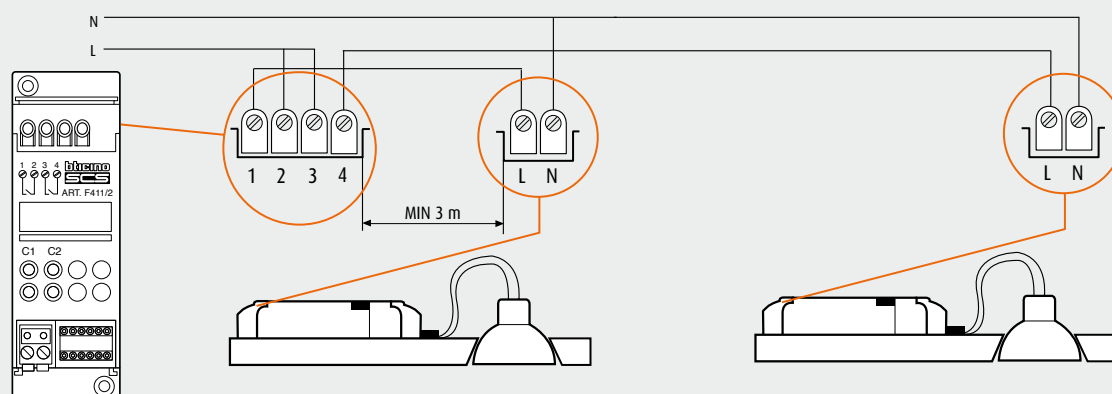
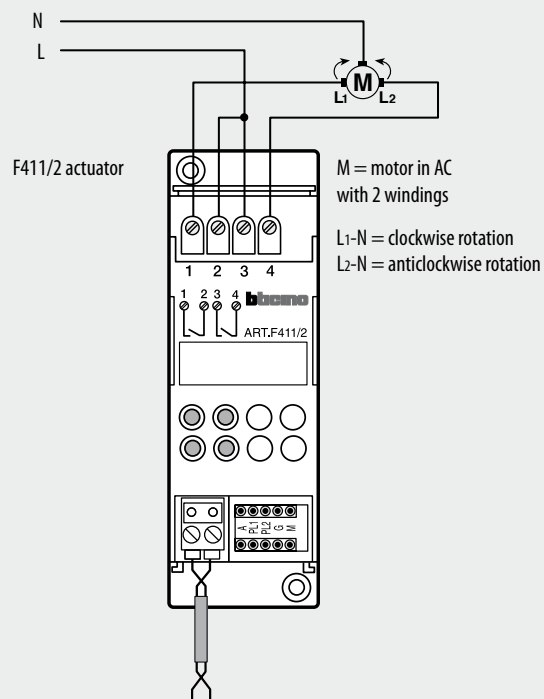


Diagram for the control of a 230 Vac motor with 2 windings





## 2 NC relay actuator in DIN module

F411/2NC


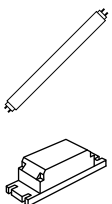
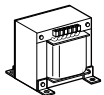
### Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates two independent relays for the activation of 2 loads, and includes local control pushbuttons for each individual load.

When compared with actuator F411/2, this device inverts the relay control logic: at switching ON the relay contacts are always closed (status ON – LED ON), and open following an OFF control (LED OFF). In this way, if there is no power input from the BUS, the device will remain in the ON status, keeping the loads ON.

### Technical data

Power supply from BUS: 27 Vdc  
Operating power supply with SCS BUS: 18 – 27 Vdc  
Absorption: 28 mA  
Power/Absorption of driven loads:

Incandescent lamps Halogen lamp			Linear fluorescent lamp Electronic transformer		Ferromagnetic transformers	
						
230 Vac	1380 W	6 A	150 W	0.65 A	1 A cosφ 0.5	230 VA

Operating temperature: 0 – 40 °C  
Size: 2 DIN modules

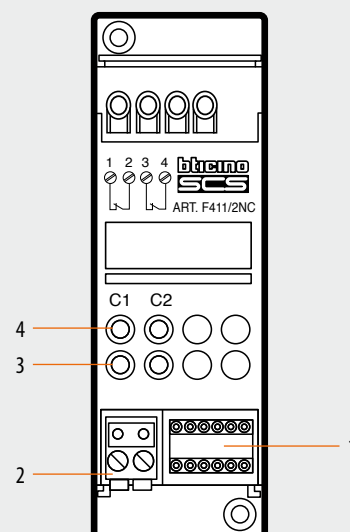
### Configuration

The actuator performs all the basic functions that can directly be configured on the control device, with the exception of those requiring the use of two interlocked relays.

Possible function	Configurator in M
Pushbutton (ON monostable) ignores Room and General controls	PUL
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup> .	1 – 4 <sup>1)</sup>

1) The value of the configurator listed in the table defines the final time, after which expiry the actuator deactivates its own SLAVE

Front view



### Legend

1. Configurator socket
2. BUS
3. LED
4. Pushbutton

The following table lists the operating modes possible with the configurator connected to position M of the same actuator.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4



## 4 relay actuator in DIN module

F411/4

### Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates four independent relays with a common clamp, for the activation of four loads, with local control pushbuttons for each individual load only active if the actuator has been configured.

The device can be installed as part of a MY HOME system, and configured physically or virtually. In this case if two adjoining positions (e.g. PL2 and PL3) are assigned the same configurator, the actuator may set two of the four relays in interlocking mode, for the control of loads such as rolling shutter motors, curtain motors, etc. If all the PL positions have the same configurator, the actuator sets the four relays for the control of motorised rolling shutters.

When installed as a component of the Lighting Management system, specific configuration procedures are used (Plug&go, Project&Download).

### Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	40 mA
Number of outputs:	4x2 A
Power/Absorption of driven loads:	

Incandescent lamps Halogen lamp	Motor reducers for rolling shutters	LED lamp Compact fluorescent lamp	Linear fluorescent lamp Electronic transformer	Ferromagnetic transformers
230 Vac   460 W   2 A	460 W   2 A	70 W   Max. 2 lamps	70 W   0.3 A	2 A cosφ 0.5   460 VA

Dissipated power with max. load:	3.2 W <sup>1)</sup>
Operating temperature:	(-5) – (+45) °C

NOTA: 1) the dissipated power indicated is that corresponding to the device with all the relays loaded at the maximum load.

With lower loads also the dissipated power is lower and may be calculated by means of the following formula:  $P[mW] = 140 + 400 \cdot N + 10 \cdot [I_{c1} + I_{c2} + \dots + I_{cN}]$

P: dissipated power in mW, N: no. of loaded relays,  $I_{cN}$ : load current corresponding to the N relay.

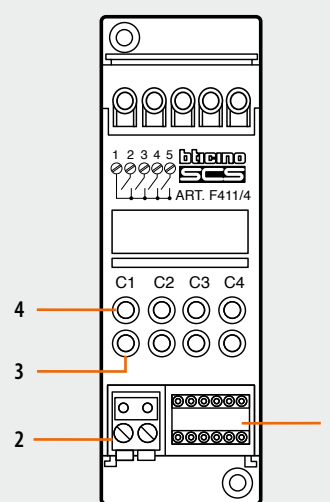
### Dimensional data

Size: 2 DIN modules

### MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the Web server. The Virtual configurator software must be installed on the PC.



### Legend

1. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
2. BUS
3. LED
4. Pushbutton

### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control. Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Delayed stop for rolling shutter motor operation. The actuator deactivates after the time set has elapsed <sup>1)</sup> . This mode is only operative if PL...=PL...+1 (same configurators), i.e. with the two relays interlocked	none – 9 <sup>1)</sup>
Delayed stop for shutter motor operation. The actuator deactivates after the time set has elapsed. This mode is only operative if PL1=PL2=PL3=PL4, with interlocking of relays in pairs <sup>2)</sup>	none – 1, 2 or 3
Actuator as Slave. Receives a control sent by a Master actuator with has the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL

1) The value of the configurator shown in the table determines the final time. At the end of this time, the actuator will deactivate.

#### Example 1:

A=1 PL1=3 PL2=5 PL3=5 PL4=2 M=none

In this case the relays (PL1) and (PL4) are activated on the basis of the mode defined by the controls configured A=1 PL=3 and A=1 PL=2. Relays (PL2) and (PL3) are interlocked and are activated by control A=1 and PL=5 with mode defined in M. Relays (PL2) and (PL3) deactivate after a minute.

#### Example 2:

A=1 PL1=3 PL2=2 PL3=4 PL4=6 M=none

In this case all the relays (PL...≠ PL...+1) and (PL4) activate on the basis of the mode defined by the controls configured A=1 PL=3, A=1 PL=2, A=1 PL=4 e A=1 PL=6. Whether there are configurators 1 to 4 in position M of the actuator or not makes no difference.

2) The value of the configurator shown in the table determines the final time. At the end of this time, the actuator will deactivate.

#### Example:

- if M=1, the total opening/closing operation time is 15 seconds.

- if M=3 the opening and closing operations are performed while the corresponding control is pressed.

Configurator	Time (minutes)
No configurator	1
1	2
2	5
3	10
4	infinite or until the next control
5	20 sec.
6	10 sec.
7	5 sec.
8	15 sec.
9	30 sec.

Configurator	Time (sec.)
No configurator	20
1	15
2	25
3	60

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- light actuator

For more information on the functions see the glossary before the Technical sheets chapter.

### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- light actuator
- rolling shutter actuator
- curtain actuator

### Wiring diagrams

Diagram for the connection of lighting devices

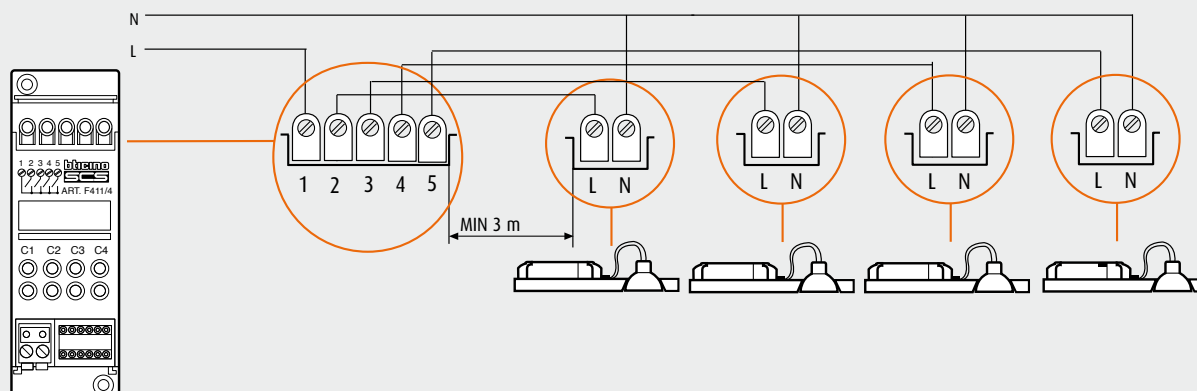
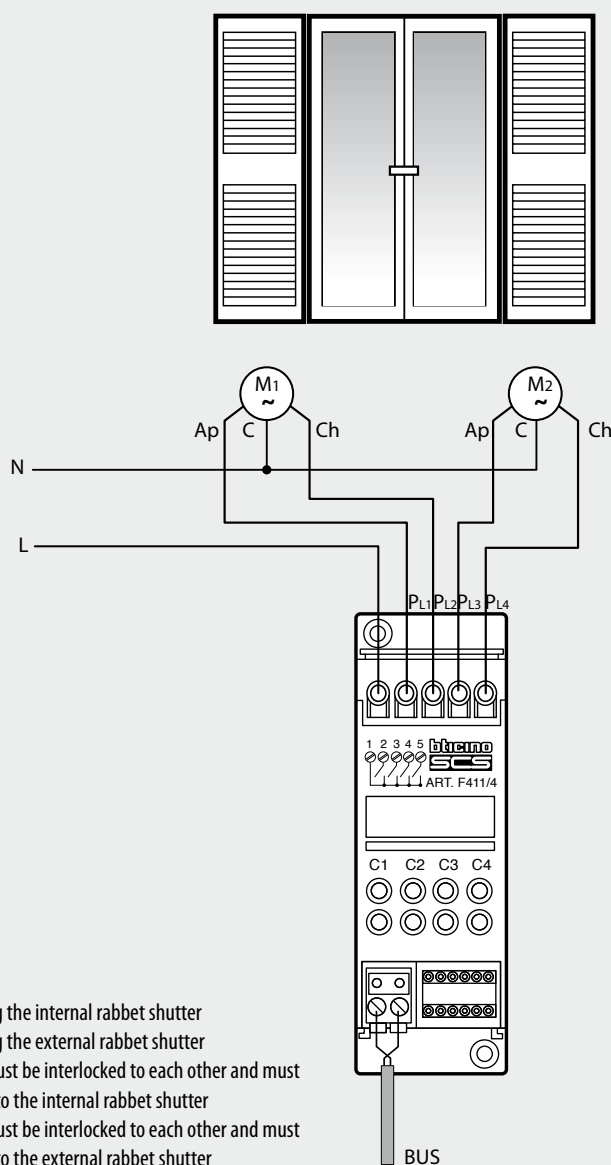


Diagram for shutter movement control



- M1 = motor controlling the internal rabbit shutter  
M2 = motor controlling the external rabbit shutter  
PL1 - PL2 = contacts: they must be interlocked to each other and must always be fitted to the internal rabbit shutter  
PL3 - PL4 = contacts: they must be interlocked to each other and must always be fitted to the external rabbit shutter

**WARNING:** configure PL1 = PL2 = PL3 = PL4

#### Operation:

- The opening of the shutter with external rabbit must start before the one with internal rabbit. The opening of PL1 will start 3 seconds after the start of PL3.
- The closing of the shutter with external rabbit must start after the one with internal rabbit. The closing of PL4 will start 3 seconds after the start of PL2.
- The total time for the full opening/closing of the shutters must be adjustable between 15 and 25 seconds. This adjustment is possible during installation, based on the size of the shutters, to allow for strong winds.



## Dimmer actuator in DIN module

F413N

### Description

Control device for electronic ballast or driver power supply with dimmer function; it can supply fluorescent lamps or LED lamps and adjust their brightness depending on the voltage, with values between 1 and 10V, with which they are driven.

From any specially configured control point and connected to the BUS system one can switch the lights connected ON and OFF or set their brightness. A short pressure of the control key will switch the load ON or OFF, while an extended pressure can be used to adjust the brightness level. The minimum brightness level and the type of load connected (Ballast for fluorescents or driver for LED) can be selected during the configuration.

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&go, Project&Download).

### Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	30 mA
Operating temperature:	(-5) – (+45) °C
Linear fluorescent lamp:	2 A / 460 W
	MAX. 10 ballast type T5, T8, compact or driver for LED
Dissipated power with max. load:	1 W

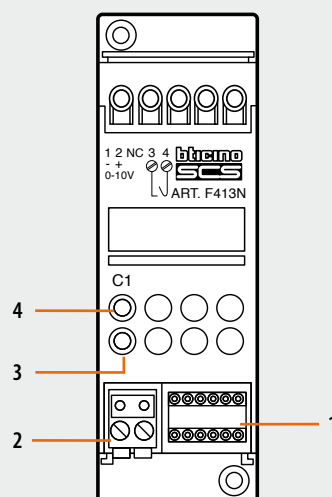
### Dimensional data

Size: 2 DIN modules

### MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the Web server. The Virtual configurator software must be installed on the PC.



### Legend

1. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration).
2. BUS
3. LED
4. Pushbutton

**Physical configuration**

The actuator performs all the Basic operating modes that can be configured directly on the control, apart from those which require the use of 2 interlocked relays.

**1) Operating mode with configurator in M**

Possible function	Configurator in M
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>
Normal operation	-

1) The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set with configurator 1 - 4 connected to M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4

**2) Operating mode with configurator in L “Selection of the minimum brightness level”:**

The configurator in the L position establishes the minimum output voltage between the 1 - 2 clamps when the load is on, thus allowing the minimum intensity level to be selected. 5 different voltage levels can be selected, so that the standard 0-10V is possible as well as the standard 1-10V.

Configurator L	Minimum output voltage (V)
none	1
1	1.5
2	2
3	0
4	0.5

**3) Configurator in TYPE “Selecting the type of load used”:**

In the TYPE position the configurator determines the type of load used on the basis of the following table.

If ballasts for fluorescent lamps with typical switching ON delay of 1.5s are used, the device will send the soft/start switching ON control taking account of the delay.

If power supplies for LED lamps must be controlled instead the device will send an immediate soft/start switching ON control.

Configurator type	Load driven
No configurator	Fluorescent ballast
1	LED driver

**Virtual configuration**

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- dimmer

### Lighting Management configuration

Add the section before the wiring diagrams:

Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

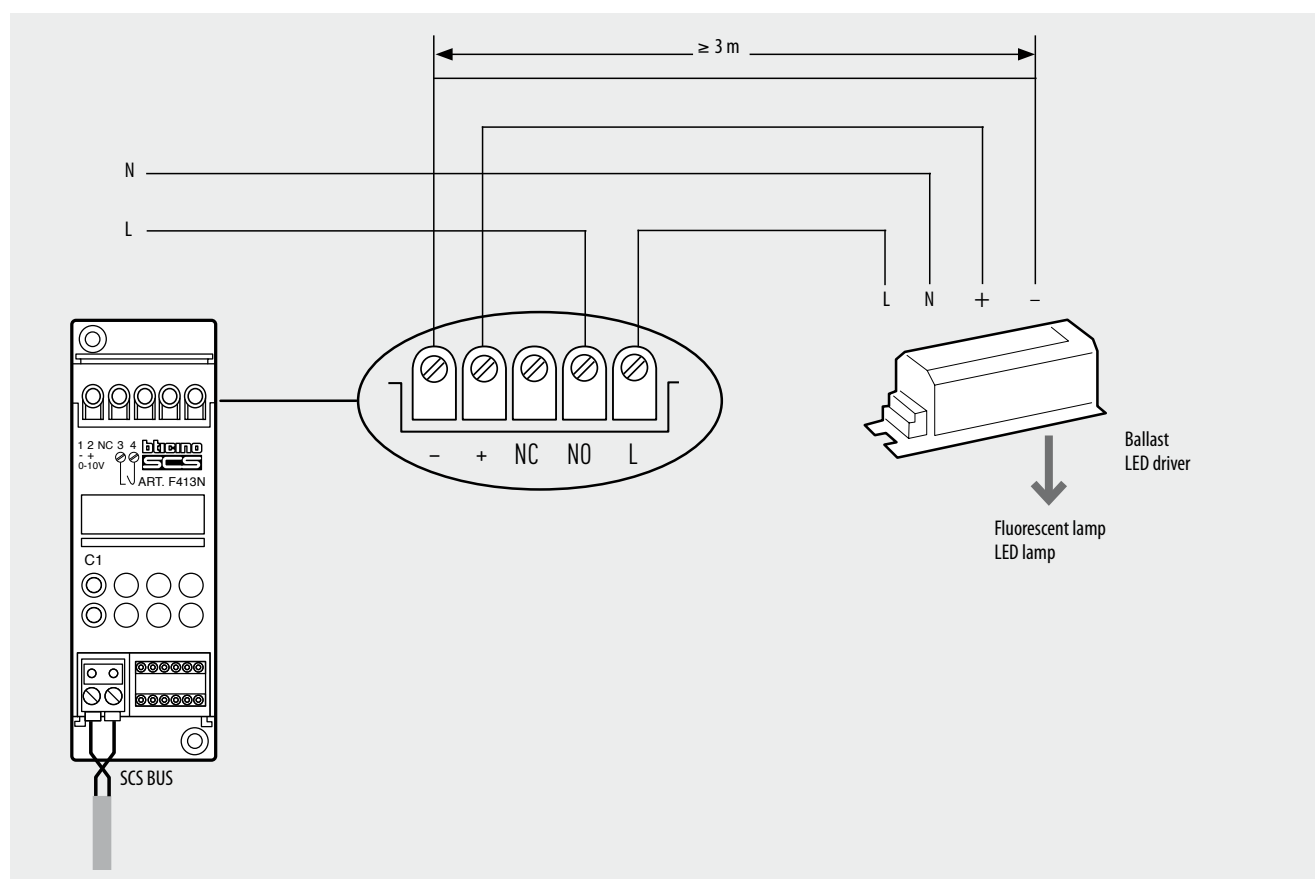
- Plug&Go
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- dimmer

For more information on the functions see the glossary before the Technical sheets chapter.

### Wiring diagram





## Dimmer actuator in DIN module

F414 - F415

### Description

Item F414 and item F414/127 controls resistive loads and ferromagnetic transformers while item F415 and item F415/127 controls electronic transformers.

After connecting the dimmer directly to the BUS and to the load, the light intensity can be adjusted from any correctly configured control point. Press the control pushbutton quickly to switch the load ON or OFF, while press it for longer to adjust the light intensity. The actuator can signal any load problems such as, for example, the breaking of the lamp. It is also protected by fuse, which can easily be replaced if it blows.

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&go, Project&Download).

### Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption F414:	9 mA
Absorption F415:	22 mA
Number of outputs F414:	1x4 A
Number of outputs F415:	1x1,7 A
Operating temperature:	(-5) – (+45) °C
Dissipated power with max. load - F414:	10 W
Dissipated power with max. load - F415:	11 W

### F414 Power/Absorption of driven loads:

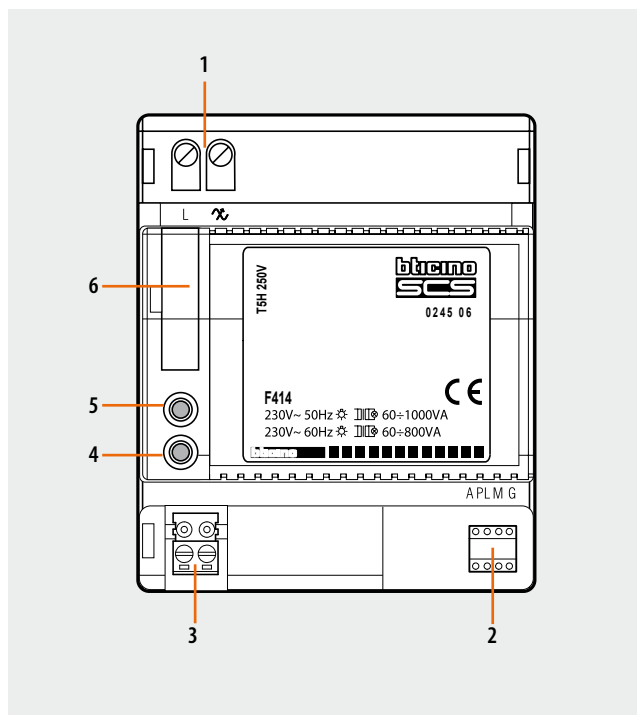
Incandescent lamps - Halogen lamp - Ferromagnetic transformers	
230 Vac	0.25 – 4.3 A / 60 – 1000 VA

### F415 Power/Absorption of driven loads:

Electronic transformer	
230 Vac	0.25 – 1.7 A / 60 – 400 VA

### Dimensional data

Size: 4 DIN modules



### Legend

1. Load
2. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
3. BUS
4. Key
5. LED
6. Fuse

### Configuration MY HOME

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the web server. The Virtual configurator software must be installed on the PC.

### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control. Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

1) The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set with configurator 1 – 4 connected to M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4

### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- dimmer

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go
- Project&Download,

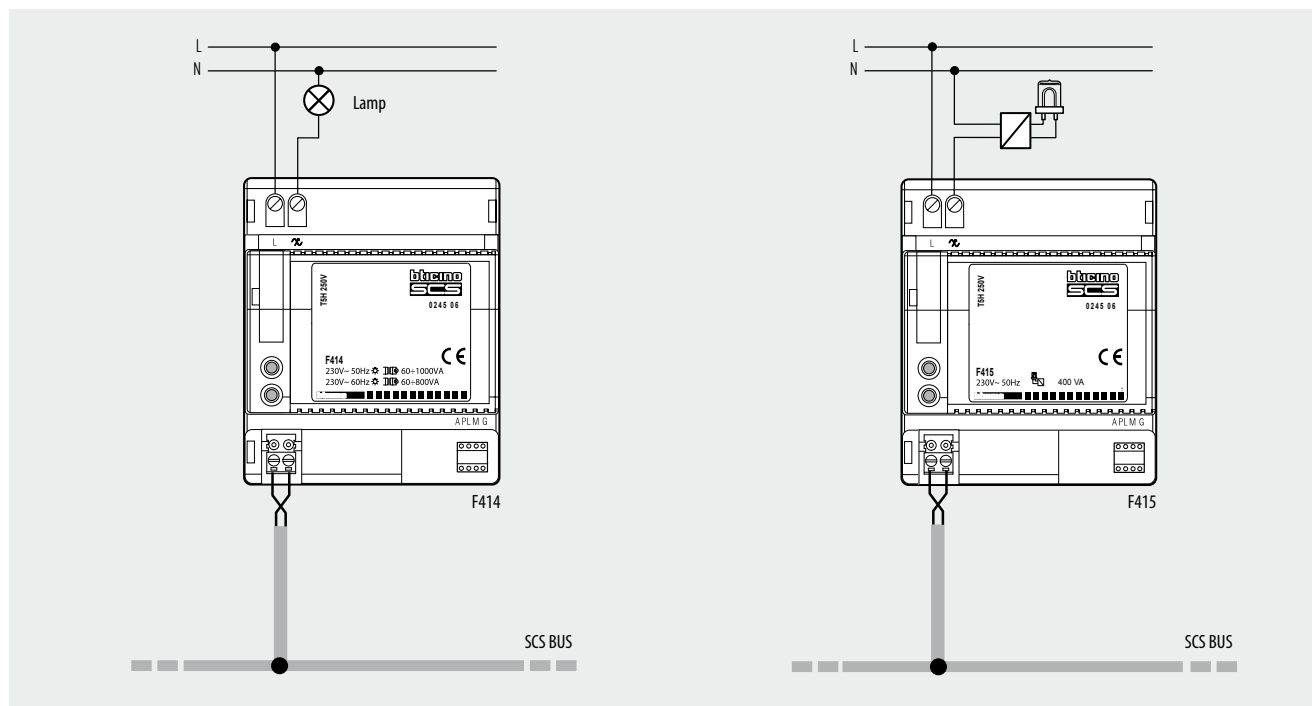
Using the Virtual Configurator software it is possible to perform all the functions listed below:

- Dimmer

For more information on the functions see the glossary before the Technical sheets chapter.

## F414 - F415

## Wiring diagram





# Multi-load 1000 W Dimmer Actuator

F416U1

## Description


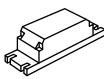
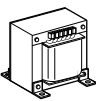
This item controls resistive loads, ferromagnetic transformers and electronic transformers. After connecting the dimmer directly to the BUS and the load, the brightness can be adjusted from any correctly configured control point. A short pressure of the control key will switch the load ON or OFF, while an extended pressure can be used to adjust the brightness level. The The actuator can signal any load faults such as a faulty lamp. The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download)

**WARNING:** it is not possible to connect devices with electronic transformer and devices with ferromagnetic transformer on the same line

## Technical data

Power supply:	100 - 240 Vac @ 50/60 Hz
Number of outputs:	1 x 4.3 A
Operation:	dimmer
Operating temperature:	(-5) – (+45) °C
Type of connection:	– RJ45 – clamp input 2 x 2.5 mm <sup>2</sup> – clamp output 2 x 1.5 mm <sup>2</sup> and 1 x 2.5 mm <sup>2</sup>
Protection index:	IP20
Cable section:	2.5 mm <sup>2</sup>

Power/Absorption of driven loads:

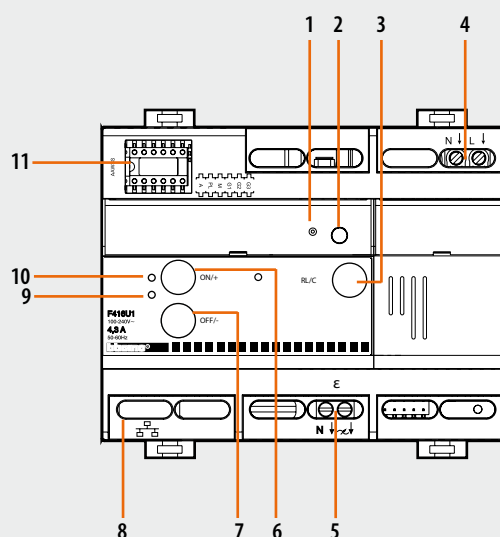
Incandescent and halogen lamps			Electronic transformer		Ferromagnetic transformers	
						
230 Vac	40 – 1000 W	4.3 A	40 – 1000 W	4.3 A	40 – 1000 VA	4.3 A

## Standards, Certifications, Marks

Standards: IEC60669 - 2 - 1

## Dimensional data

Size: 6 DIN modules



## Legend

- Learn Mode status indication LED:
  - Green flashing in forced inductive mode
  - Orange flashing in forced capacitive mode
  - Orange steady in automatic capacitive mode
  - Green steady in automatic inductive mode
- Learn Mode pushbutton
- Load manual forcing pushbutton
- Clamps for the connection to the 230 Vac power supply
- Load connection clamps
- ON pushbutton for the control/adjustment of the load
- OFF pushbutton for the control/adjustment of the load
- BUS RJ45 connector
- Load type indication:
  - Green: inductive
  - Orange: capacitive
- Orange LED ON: load fault  
Green LED ON: load active (from 1 % to 100 %)
- Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)

### MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the web server. The Virtual configurator software must be installed on the PC.

### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control. Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Actuator as Slave. Receives a control sent by a Master actuator with the same address	PUL
Pushbutton (ON monostable) ignores Room and General controls	PUL
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1</sup>	1 – 4 <sup>1)</sup>

1) The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set with configurator 1 - 4 connected to M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4

### Virtual configuration

Using the Virtual configurator software it is possible to perform all the functions listed below:

- dimmer

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go
- Push&Learn
- Project&Download,

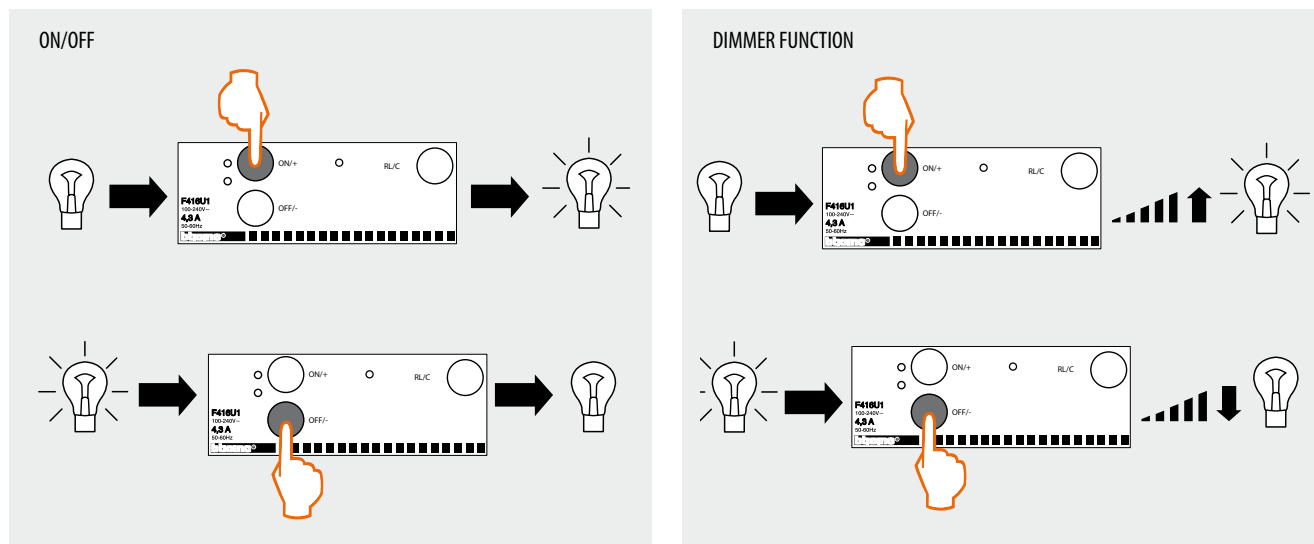
Using the Virtual Configurator software it is possible to perform all the functions listed below:

- dimmer

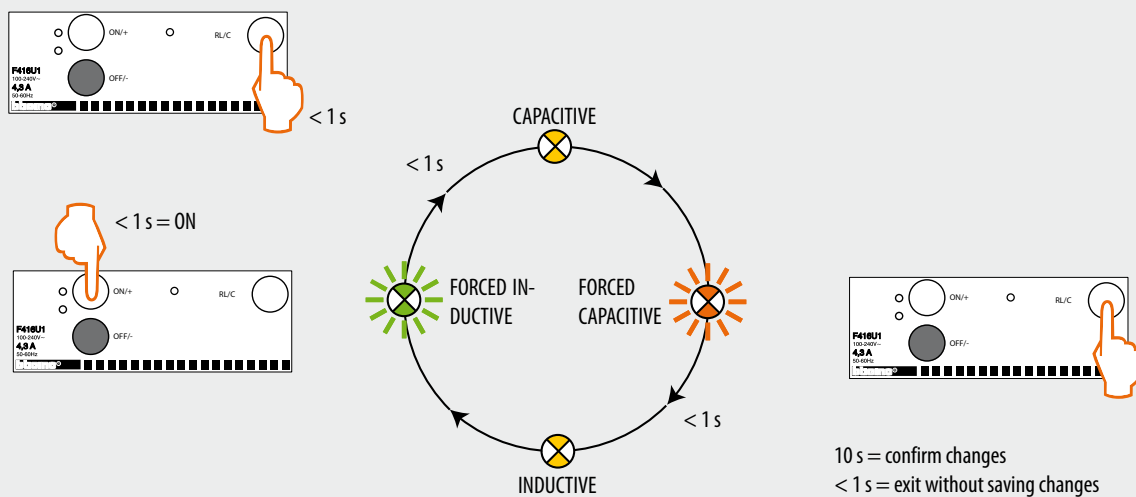
For more information on the functions see the glossary before the Technical sheets chapter.

### Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.

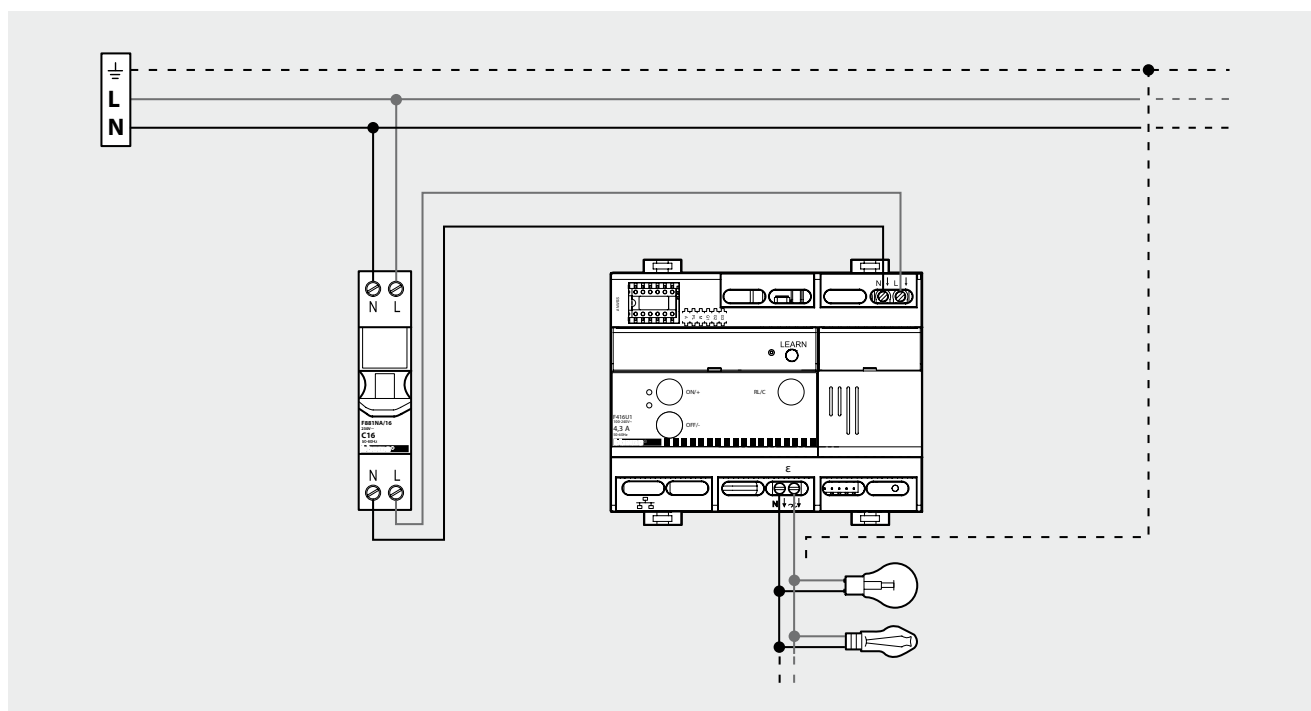


### Manual forcing of the type of load



F416U1

## Wiring diagram





# Multi-load 2x400 W Dimmer Actuator

F417U2

## Description

The item controls resistive loads, ferromagnetic transformers and electronic transformers. After connecting the dimmer directly to the BUS and the load, the brightness can be adjusted from any correctly configured control point.

A short pressure of the control key will switch the load ON or OFF, while an extended pressure can be used to adjust the brightness level. The The actuator can signal any load faults such as a faulty lamp.


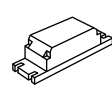
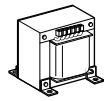
The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system using specific configuration procedures (Plug&Go, Push&Learn, Project&Download)

**WARNING:** it is not possible to connect devices with electronic transformer and devices with ferromagnetic transformer on the same line

## Technical data

Power supply:	100 -240 Vac @ 50/60 Hz
Number of outputs:	2 x 1.7 A
Operation:	dimmer
Operating temperature:	(-5) – (+45) °C
Type of connection:	– RJ45 – clamp input 2 x 2.5 mm <sup>2</sup> – clamp output 2 x 1.5 mm <sup>2</sup> and 1 x 2.5 mm <sup>2</sup>
Protection index:	IP20
Cable section:	2.5 mm <sup>2</sup>

Power/Absorption of driven loads:

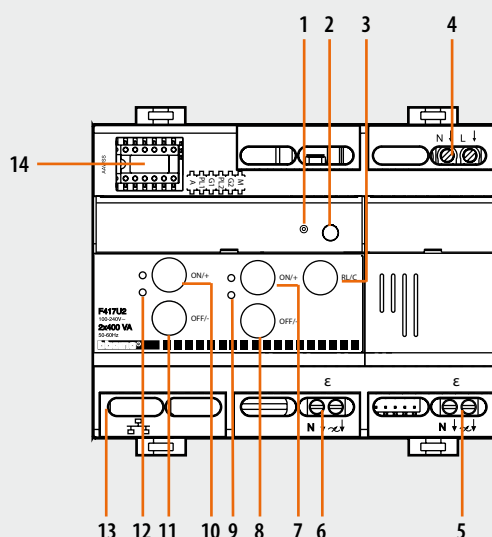
	Incandescent and halogen lamps	Electronic transformer	Ferromagnetic transformers
			
230 Vac	40 – 400 W 1.7 A	40 – 400 W 1.7 A	40 – 400 W 1.7 A

## Standards, Certifications, Marks

Standards: IEC60669 - 2 - 1

## Dimensional data

Size: 6 DIN modules



## Legend

- Learn Mode status indication LED:
  - Green flashing in forced inductive mode
  - Orange flashing in forced capacitive mode
  - Orange steady in automatic capacitive mode
  - Green steady in automatic inductive mode
- Learn Mode pushbutton
- Load manual forcing pushbutton
- Clamps for the connection to the 230 Vac power supply
- Load 2 connection clamps
- Load 1 connection clamps
- ON pushbutton for the control/adjustment of the load 2
- OFF pushbutton for the control/adjustment of the load 2
- Orange LED ON: load 2 fault
  - Green LED ON: load 2 active (from 1% to 100%)
- ON pushbutton for the control/adjustment of the load 1
- OFF pushbutton for the control/adjustment of the load 1
- Orange LED ON: load 1 fault
  - Green LED ON: load 1 active (from 1% to 100%)
- BUS RJ45 connector
- Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)

### MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the web server. The Virtual configurator software must be installed on the PC.

#### Physical configuration

The actuator performs all the basic operating modes that can be configured directly on the control. Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

1) The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set with configurator 1 - 4 connected to M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4

#### Virtual configuration

Using the Virtual configurator software it is possible to perform all the functions listed below:

- dimmer

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go
- Push&Learn
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

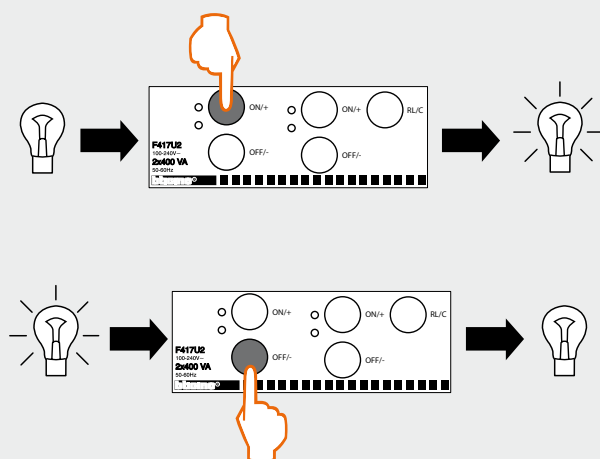
- dimmer

For more information on the functions see the glossary before the Technical sheets chapter.

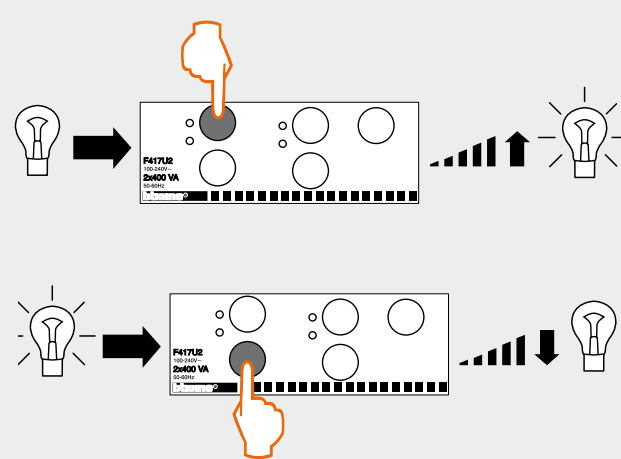
### Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.

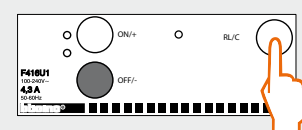
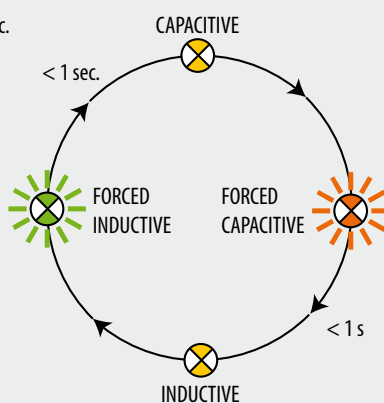
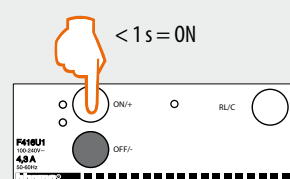
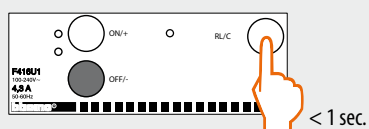
#### ON-OFF



#### DIMMER FUNCTION



#### Manual forcing of the type of load



10 sec. = confirm changes  
< 1 sec. = exit without saving changes



## Scenario module

F420

### Description

This device allows you to manage scenarios for Automation, Sound system and Temperature Control systems which have been created, modified and activated using different devices of the Automation system. Up to 16 scenarios may be saved in the scenario module, with up to 100 controls each. The scenarios can also give door entry and Video door entry controls for one-family systems to switch on the staircase lights and open the door lock. If installed in large systems with interface item F422 in logical expansion, the module can save automation controls for the system where it is installed. On the front cover of the item there are two keys and two LED. The first pushbutton (padlock) locks or unlocks the programming procedure avoiding involuntary operations such as cancelling the scenarios and the corresponding LED indicates the status: **green** programming possible, **red** programming blocked, **orange** temporary block. The second pushbutton (DEL) cancels all the scenarios, the LED underneath indicates that the cancellation has taken place or that the device is performing the learning procedure.

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	20 mA
Operating temperature:	0 – 40 °C
Size:	2 DIN modules

### Configuration

The combination of the scenario module with a control device is ensured by assigning to both items the same address. This is identified by the configurators with a numeric value for position **A = 0-9** and position **PL = 1-9**. When using a Touch Screen, the address of the scenario module must be specified during programming, using the Tidisplay software. Several scenario modules may be installed in one system, allocating a different address to each module.

### Scenario programmer

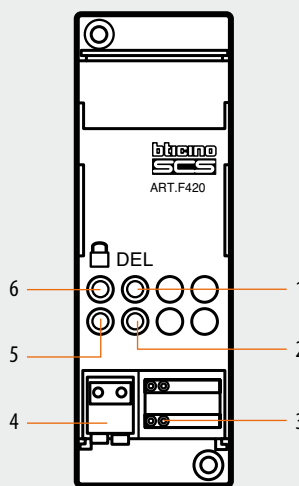
In order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

- 1) press one of the four control keys the scenario should be associated to for 3 seconds. The corresponding LED starts flashing;
- 2) set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;
- 3) confirm the scenario by quickly pressing the corresponding key on the control to exit programming mode;
- 4) to change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1.

To call a set scenario just press its pushbutton on the control quickly.

If the module does not receive any input for 30 minutes from the start of the learning procedure, programming will automatically be interrupted. To cancel a scenario completely, keep the corresponding pushbutton pressed for about ten seconds.

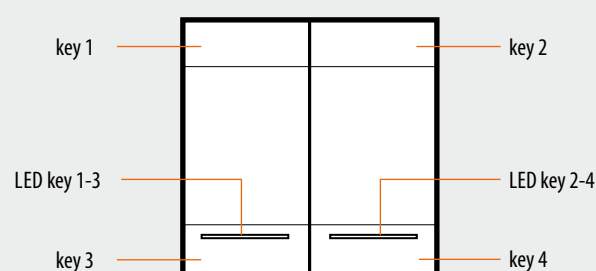
To erase the entire memory keep the DEL pushbutton on the Scenario module pressed for 10 seconds, the yellow “reset scenarios” LED flashes quickly. Once the operations have been performed lock the programming by pressing the lock/unlock pushbutton for at least 0.5 seconds, so that the corresponding LED becomes red.



Front view

### Legend

1. Scenario cancellation pushbutton
2. Scenarios/learning reset LED
3. Configurator socket
4. BUS
5. Programming status LED
6. Lock/unlock programming pushbutton



### NOTES:

Inside the system itself one Scenario module can be programmed at a time as the other devices are temporarily locked; during this phase the “programming status” LED becomes orange signalling the temporary Lock.

During the learning procedure and when there are timed controls or group controls, the Scenario module does not save events for 20 seconds. You must thus wait before continuing with creating the scenario.

During the scenario learning procedure only the changes of status are saved.

The Scenario module should be configured with a different A and PL address from that of an actuator. Use A=0 and PL=1 to 9, which cannot be used by actuators. If the configuration is wrong the Programming status LED flashes ORANGE.

In case of “virtual” configuration the LED flashes RED.



## SCS-SCS gateway

F422

### Description

The SCS/SCS gateway is an interface that provides communication among BUS systems with SCS technology, even if they perform different functions. The interface has two BUS clamps, IN and OUT.

On the front is a C key for virtual configuration and a LED for the notification of:

- correct power supply and configuration (ON steady),
- BUS not detected (OFF),
- configuration not detected or incorrect configuration (flashing).

The device may operate in six different modes:

- Physical expansion for MY HOME and Lighting Management: can increase the total BUS length or exceed the absorption limit of 1200 mA for the individual power supply.
- Logical expansion for MY HOME: can increase the number of devices of a system, which is 175 (max 11 in rooms defined with A = 0 to 10 and 16 light points with PL = 0 to 15). Address A = 0, PL = 0 is not permitted.
- Burglar alarm/automation interface for MY HOME: it allows communication between these two systems.
- Public riser: it provides alarm event supervision for the common parts of the video door entry system.
- Galvanic separation for MY HOME: can interface two different functions (ex.: Sound system with Automation).
- Separazione fisica: raggruppa le caratteristiche della modalità Espansione fisica e della modalità Separazione galvanica. Utilizzabile per impianti con dispositivi predisposti per la configurazione virtuale.

**NOTE:** regardless of the interface mode of use, it must be taken into account that the two Buses connected constitute at all effects two systems, and, as such, they must be subjected to all existing sizing and installation rules.

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
IN clamp absorption:	25 mA
OUT clamp absorption:	5 mA
Dissipated power with max. load:	1 W

### Dimensional data

Size: 2 DIN modules

### Configuration

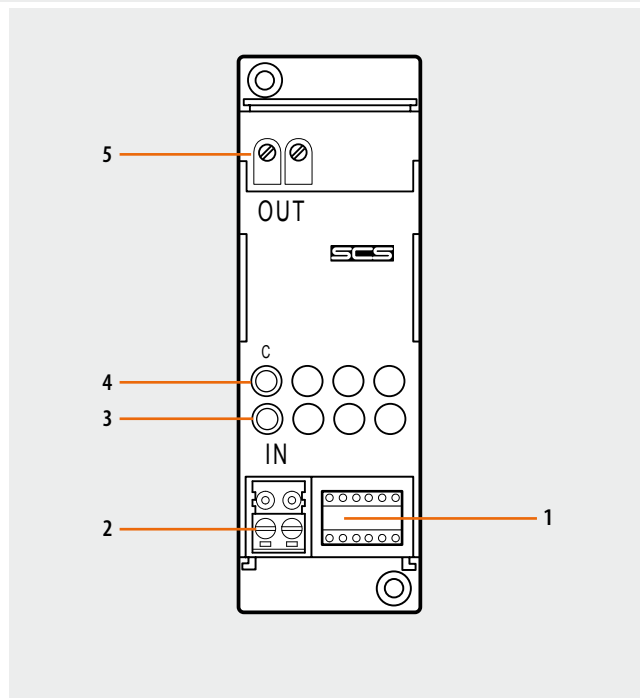
⊙	⊙	⊙	⊙	⊙
I1	I2	I3	I4	MOD
⊙	⊙	⊙	⊙	⊙

Sockets I1, I2, I3, and I4 are used to uniquely identify, using numerical configurators, the addresses of the interfaces inside the system. The interface may also be configured using the Virtual Configuration application as indicated in the software User Manual.

#### 1) Operating mode "Physical expansion" - configurare MOD = 1 -

With the interface configured in this mode, it will be possible to extend the physical limit of the maximum length of the BUS, or exceed the limit of 1200 mA delivered by the individual power supply, but not the maximum number of actuators (max. 175).

The positions identified with I1 and I2 must not be configured. The "separation address" between the two buses connected to the interface must instead be defined in positions I3 and I4. Supposing as in the example that I3=3, I4=2:

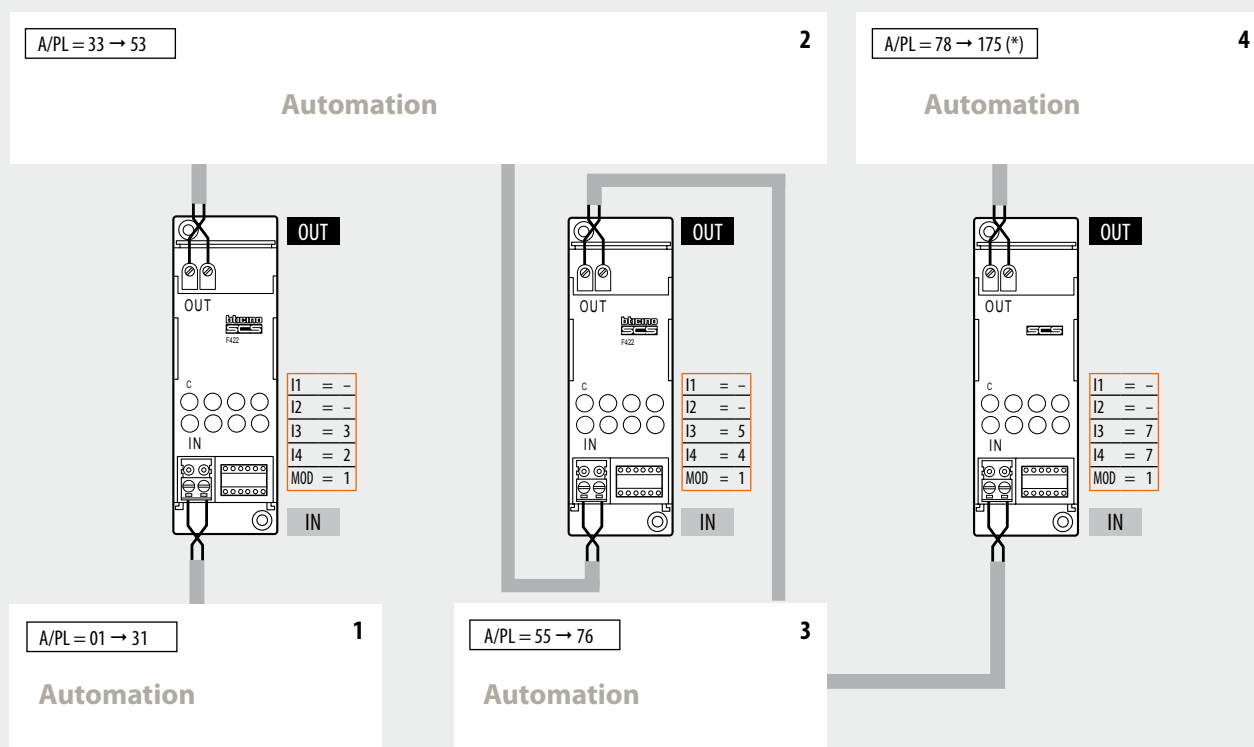


### Legend

1. Configurator socket
2. BUS
3. Signalling LED
4. Pushbutton for virtual configuration
5. OUT clamp

- On the input BUS (IN) the addresses must go from A=0 / PL=1 and A=3 / PL=1;
- On the output BUS (OUT) the addresses must be between A=3 / PL=3 and A=9 / PL=9 or the address of the next interface. As it can be seen from the example, all the automation BUS 1 addresses are lower than that of the interface, while all the automation BUS 2 addresses are higher; the interface address therefore separates all the addresses of which the complete system might be made up of into two or more blocks.

# Installation example



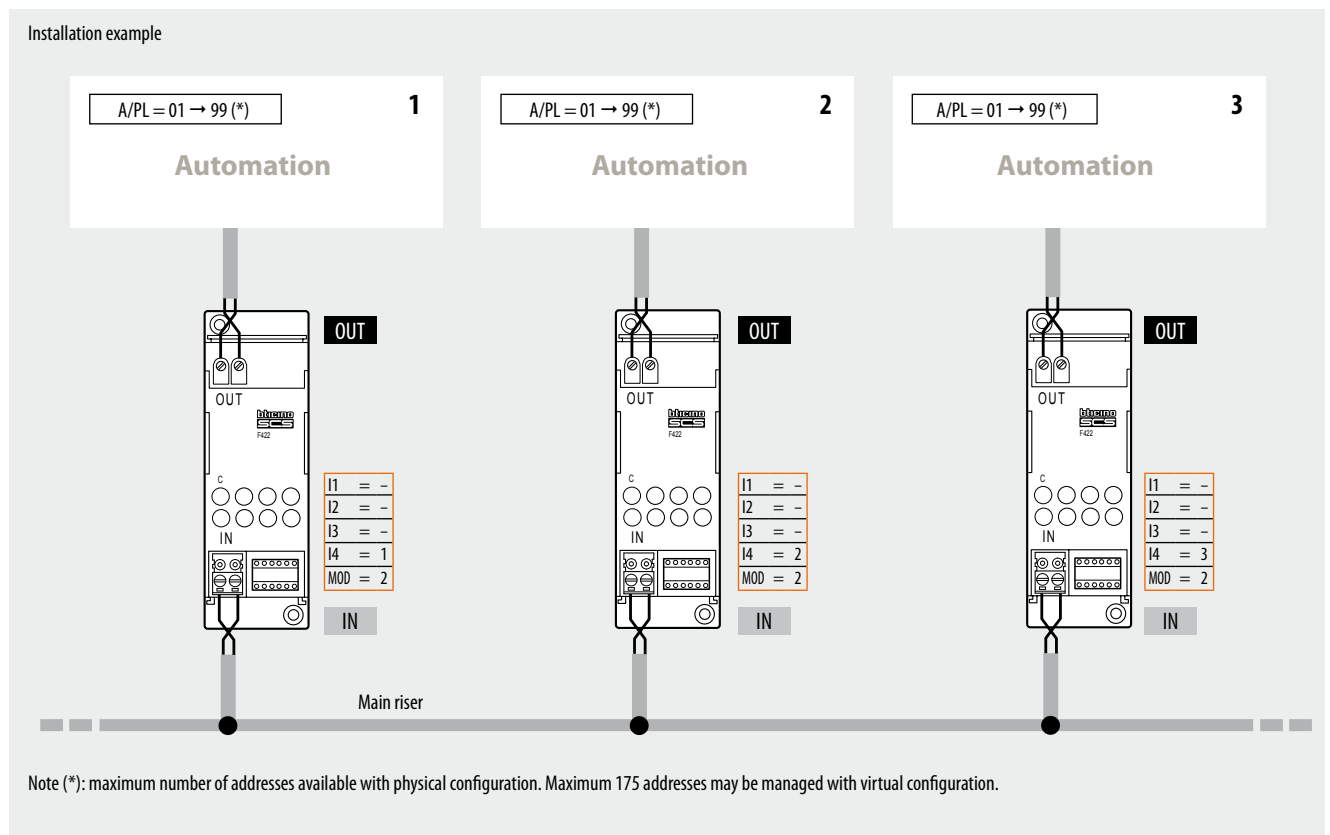
Note (\*): maximum number of addresses available with virtual configuration of the devices.

## Installation rules:

- Configure both I3 and I4 with configurators from 1 to 9, to set the separation between the two BUSES.
- I1 and I2 must not be configured.
- If several interfaces are installed in series, the addresses of the devices between one interface and the other must be within those of the two interfaces (see system example).
- In this mode, it is not possible to install two interfaces in parallel on the same BUS.
- It is possible to install up to four interfaces in series, which subdivide the system in 5 separate sections, individually powered.
- The scenario module, the memory module, the IR emitter for the control of air conditioning units, and the devices that can be configured in self-learning mode, must be installed on the BUS section corresponding to the own local address (e.g. if the scenario module is configured as A=0/PL=1, it will have to be placed on system no. 1 - see system example).
- The web server and the scenario programmer must be installed on the BUS line with the lowest addresses (system 1 in the drawing).
- All the control devices configured to send Point-point, Room, Group and General controls can be connected on either branch of the system (1 or 2) regardless of their addresses in A and PL positions.
- This is also true in the case of actuators configured in the "slave" operating mode.
- Interface item F422 allows the transit between the various systems of the Point-Point, Group, Room and General controls. As an example, install a control configured with A=1 and PL=5 in system 2 to control actuator A=1 and PL=5 installed in system 1.
- Within the system, no device must be configured with the same address as the interface.

This mode enables separation of control systems, with each of them therefore capable of using all the addresses available. It is therefore possible to connect several systems to an automation BUS, with each system having all the 175 addresses available. The BUS to which all others are connected therefore operates as main riser. This BUS must necessarily belong to an automation system. It is recommended that this mode is used for systems installed in large villas or in the service/industrial sector.

A typical example may be a large villa on several floors: A system may be installed for each floor, all connected to each other through another system operating as a riser. The positions identified with I1, I2 and I3 must not be configured, while in the I4 position, the address of the interface (I4 from 1 to 9) connected to the riser must be configured.



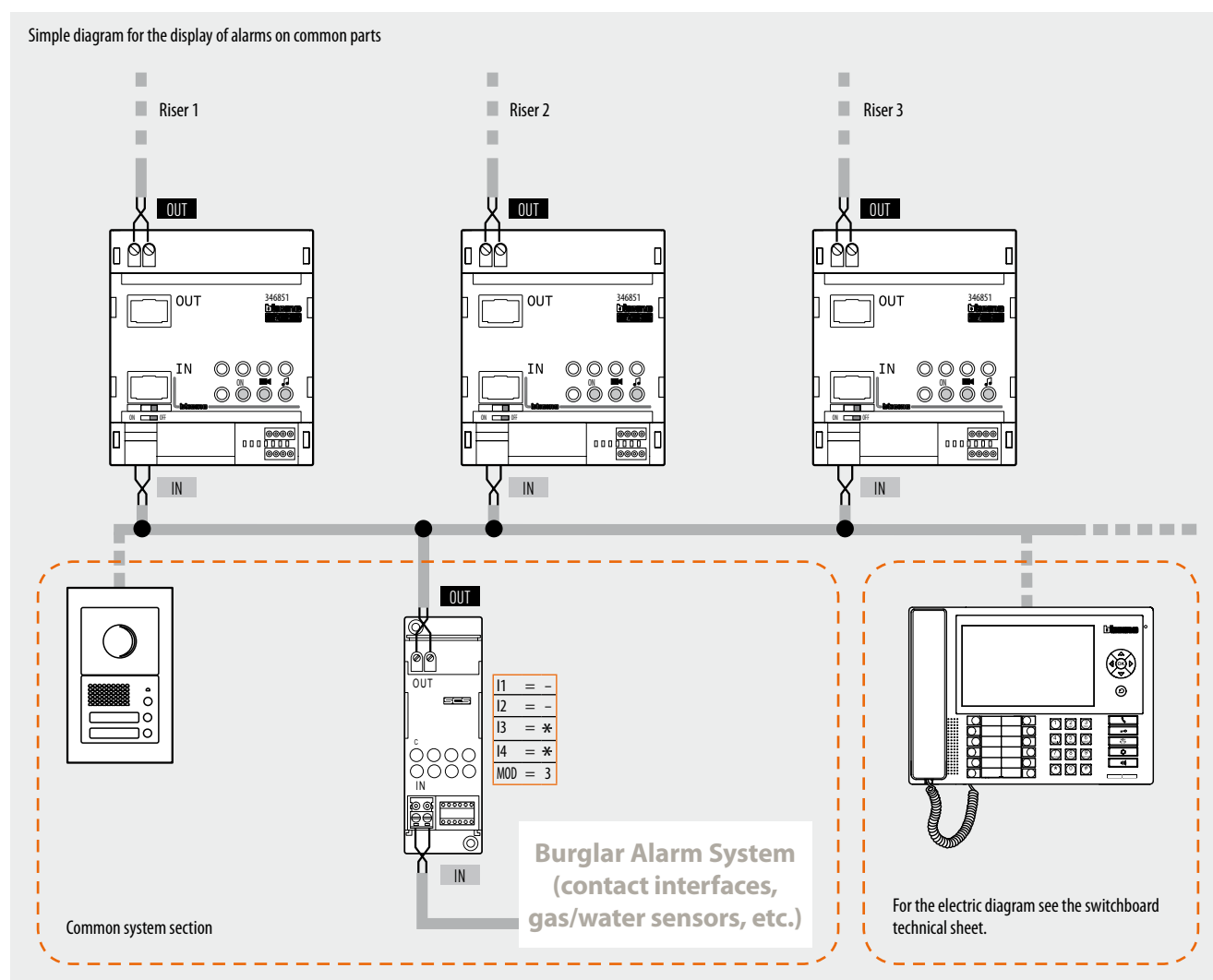
- Configure I4 to give a number from 1 to 9 to the Buses connected to the riser.

- From the main riser (IN clamp), arrive the general controls (rolling shutters and lights), group controls (this allows a minimum centralisation of the controls, using standard devices of the control system), and power management controls (to allow positioning of the power management central unit on the riser). On the other hand, point-point controls are stopped by the interface, and therefore remain inside the individual system, including the riser. The controls of all systems other than automation, including AUXILIARY controls, travel in the two directions without any processing. In order to send controls from one system to the other, the special controls H4651M2, L4651M2 and AM5831M2 may be used in extended control mode.
- The interface address cannot be the same as that of other devices (e.g. configure the interface I1= -, I2= -, I3= -, I4=1 and MOD = 2, if a scenario module is configured with A = - and PL = 1).

### 3) "Burglar alarm/automation interface" mode- MOD = 3 configurator -

This mode is indicated when display of burglar alarms and technical alarms are required, generated within the common sections, using a switchboard, item 346310, installed on the backbone or the riser of the video door entry system.

Simple diagram for the display of alarms on common parts



Installation rules:

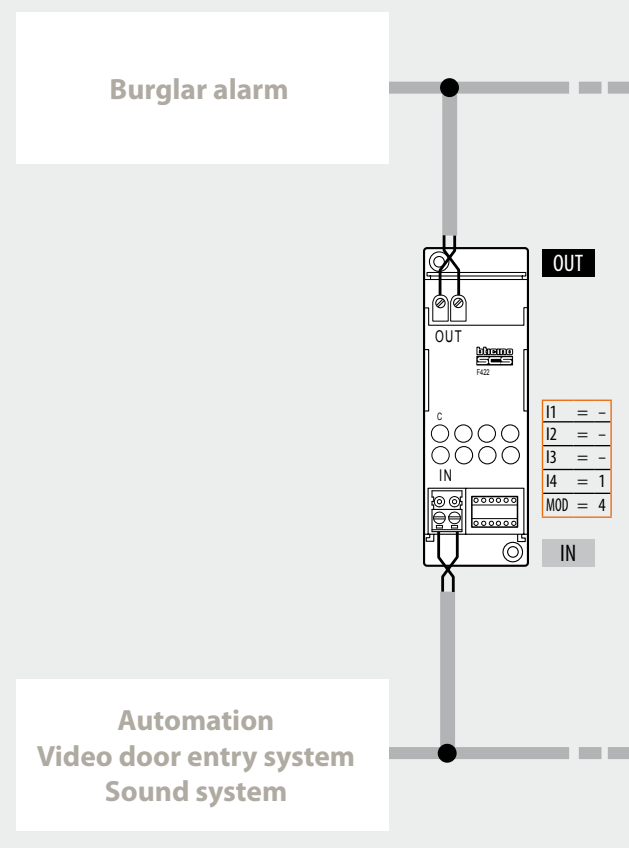
- On the common sections it is possible to connect contact interfaces, or technical alarms (gas/water leak), up to a total of 9 auxiliary channels; these must be connected to the IN clamp of interface item F422.

(\*) Use a free address of the video handset.

#### 4) "Interface between burglar alarm and automation/video door entry system/sound system" mode - MOD = 4 configurator -

This mode can be used to interface the Automation system to the burglar alarm system, to facilitate interaction and exchange of information between the two BUS. Thanks to this function, it is possible to remotely control the automation system using the telephone communicator. The positions identified with I1, I2 and I3 must not be configured, while in the I4 position, the address of the interface (I4 from 1 to 9) must be configured.

Installation example



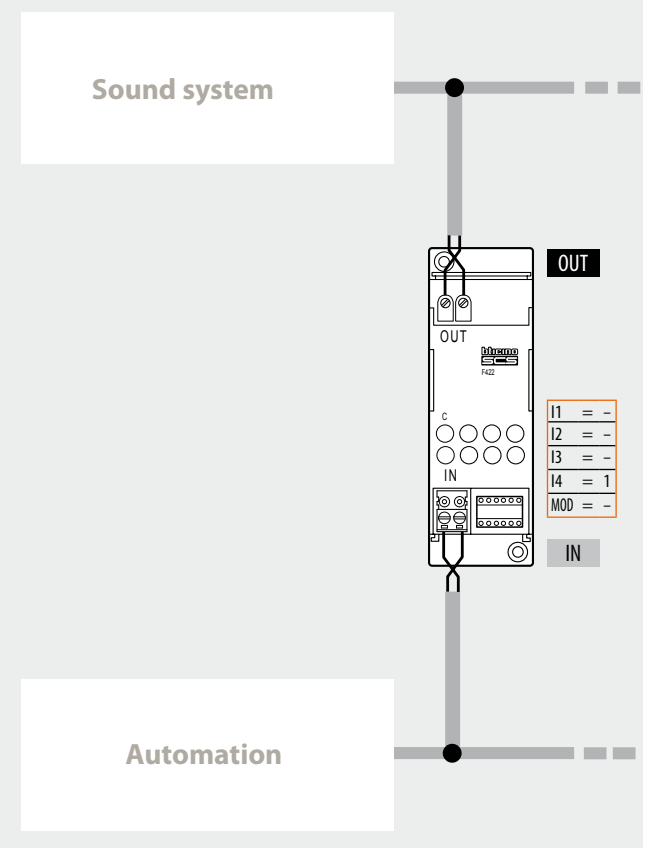
#### Installation rules:

- Configure I4 with configurators from 1 to 9.
- I1, I2 and I3 must not be configured.
- The BUS of the Burglar Alarm system must be connected to the OUT clamp of the interface.
- It is not possible to connect other interfaces to the Burglar Alarm system, to physically extend the BUS, or to increase the maximum number of devices.
- Only one interface may be connected to the Burglar Alarm system. It is therefore not possible to connect together two Automation systems through the Burglar Alarm system.
- Installation of the Automation system actuators within the Burglar Alarm system is not allowed.
- The interface does not use any addresses of the Automation system.

#### 5) Operating mode "Galvanic separation" - configurator MOD = no configuration

This configuration enables keeping the power supplies of the two buses separate, allowing interfacing of different MY HOME functions (e.g. sound system and automation). In some cases, the use of this interface is necessary (for example when the sound system is installed). In other cases installation alternatives are possible; for example, it will be possible (but not compulsory) to install Temperature Control on a separate BUS, and interface it with Automation using an interface in Galvanic Separation mode. The positions identified with I1, I2 and I3 must not be configured, while in the I4 position, the address of the interface (I4 from 1 to 9) must be configured.

Installation example



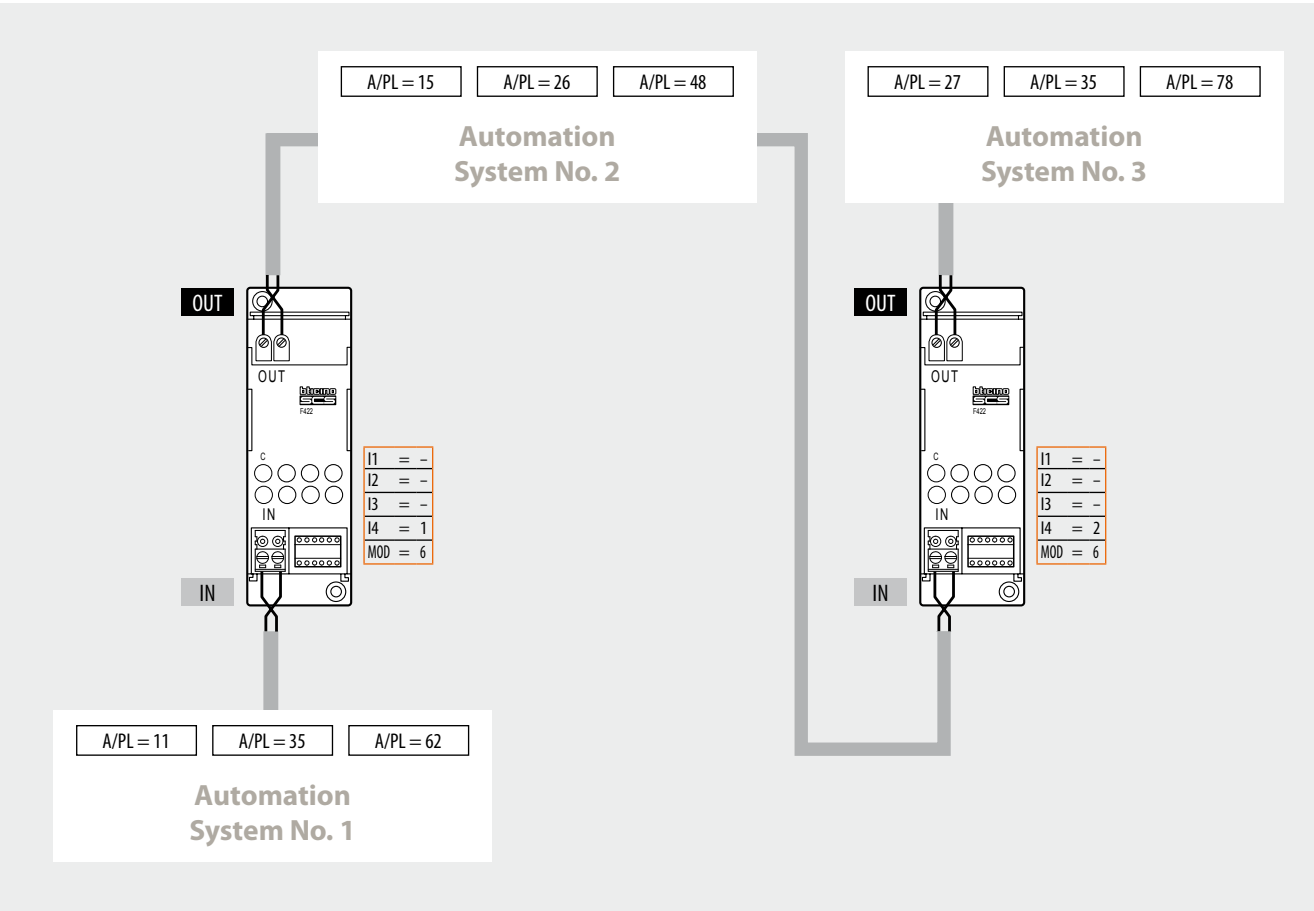
#### Installation rules:

- Configure I4 with configurators from 1 to 9.
- I1, I2 and I3 must not be configured.
- The Automation BUS must be connected to the IN clamp. The other systems must be connected to the OUT clamp (e.g. Sound System).
- It is not possible to connect several Automation systems to the same Sound System.
- Thanks to this mode, using the Web Server A/V it is possible to control a one-family system (a video door entry system and an Automation system, at the most subdivided into lines, following the physical and/or logic expansion mode procedure).
- The interface does not use any addresses of the Automation system.

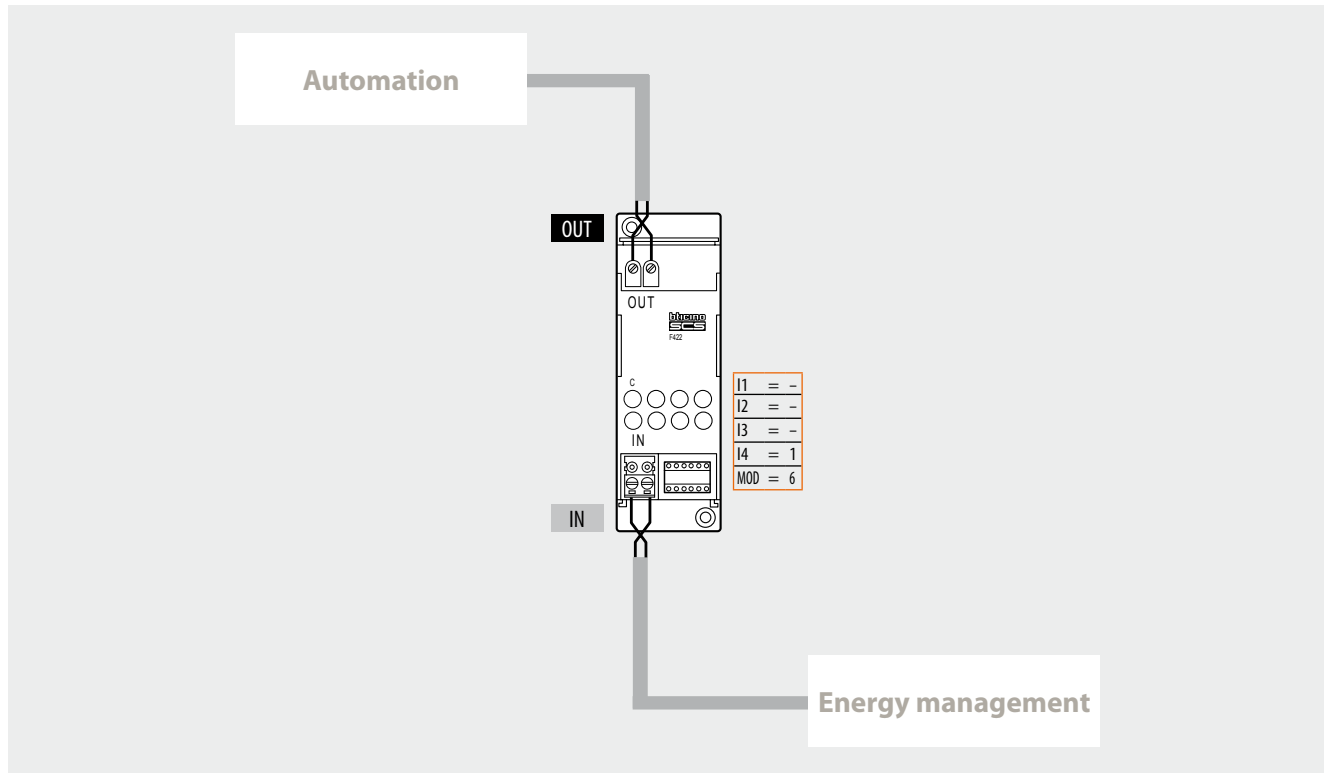
6) "Physical separation" mode - MOD=6 configurator

This mode brings together the features of the "physical expansion" mode and the "galvanic separation" mode.  
Each system may be connected to both the OUT and the IN clamps of the interface and, differently from what is required for "physical expansion" MOD=1, the addresses of the devices of the two systems may be selected freely.

In view of the above, it will no longer be necessary to indicate the system separation address in positions I3 and I4; therefore, the interface will have to be configured by assigning any address from 01 to 99, including any address already used by actuator devices installed in the connected systems. If several interfaces are used, these must have different addresses.



The use of the interface with this mode may be useful to keep the Automation system and the Temperature control system separate (for example when using independent power supplies).



#### Installation rules:

- Each individual system connected to the IN or OUT clamps of the interface must be powered by its own power supply.
- It is possible to use up to 4 interfaces in MOD=6 for the connection of the Automation and/or Energy Management, and Temperature Control systems to each other.
- In case of cascade connection of several Automation and/or Energy management, and Temperature Control systems, each individual system must be connected to the OUT clamp of one interface and the IN clamp of the other. Therefore, do not connect the system to the two interfaces only using the OUT clamps.
- Do not configure positions I1 and I2.
- In positions I3 and I4, address I3=0 to 9 and I4=1 to 9 of the interface must be specified. This address may also correspond to that of other actuator devices installed in the connected systems. If several interfaces are installed, these must have different addresses.
- The interface does not use any addresses of the Automation system.
- The scenario module and the devices that can be configured in self-learning mode can be connected to any branch of the system (no. 1 or no.2). The memory module must be connected to the system connected to the OUT clamp of the last interface.
- All control devices configure for sending Point-point, Room, Group, and General controls may be connected to any branch of the system (no.1 or no. 2), without limitation, irrespective of their respective addresses in the A and PL positions.
- The above also applies to actuators configured in "slave" operating mode.
- Interface f422 allows Point-point, Group, Room, and General controls to travel through the various systems. It is therefore possible to install, for example, in system no. 2 a control configured as A=1 and PL=5 that will control actuator A=1 and PL=5 installed in system no. 1.

#### Configuration:

For correct operation, the interface must be configured to:

- define its address within the system;
- acquire the address of the devices of the systems connected to the IN and OUT clamps.

Configuration of the interface address:

The device may be configured in 3 different modes:

- using numerical configurators, 0 to 9, in positions I3 and I4;
- using the Virtual Configurator application as indicated in the software User Manual;
- using the "self-configuration" procedure as indicated below:
  1. press the interface pushbutton for a few instants; the LED flashes slowly.
  2. press the pushbutton again; the LED flashes quickly and the device starts the self-configuration procedure.
  3. Once the configuration procedure has been completed correctly, the LED comes on steady. Repeat this operation for all the interfaces in MOD-6 of the system.

#### Acquisition of the addresses of the connected devices:

This procedure must only be carried out after the configuration of the interface address (or several interfaces, as applicable). It is possible to select one of two modes:

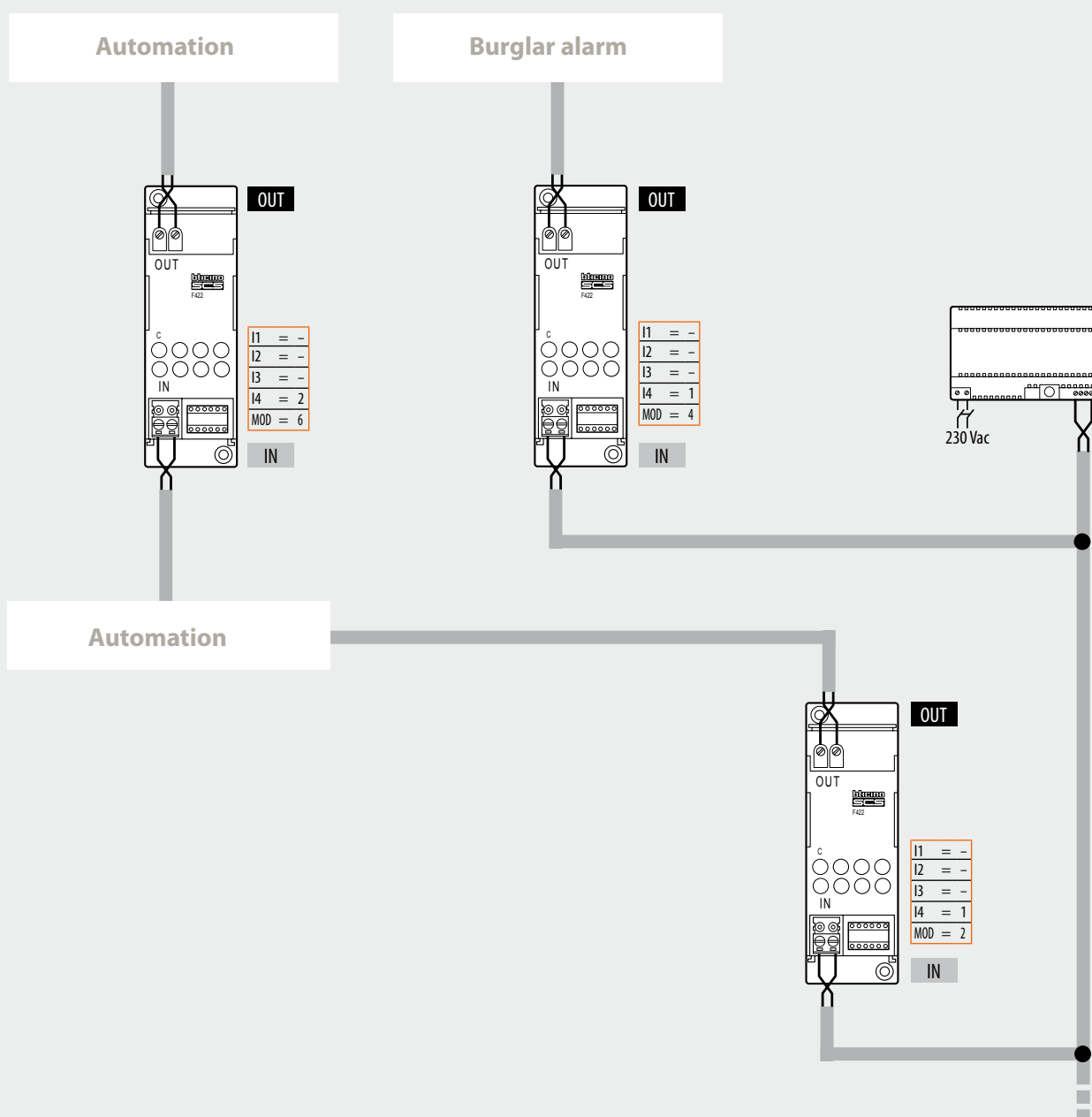
- using the Virtual Configurator application as indicated in the software User Manual;
  - pressing the interface pushbutton for at least 2 seconds. Any other interfaces in MOD=6 installed in the system will automatically acquire the configuration of the devices.
- Before performing this operation check that all system interfaces and actuators have their addresses configured.

# 7) Use of interfaces with different modes

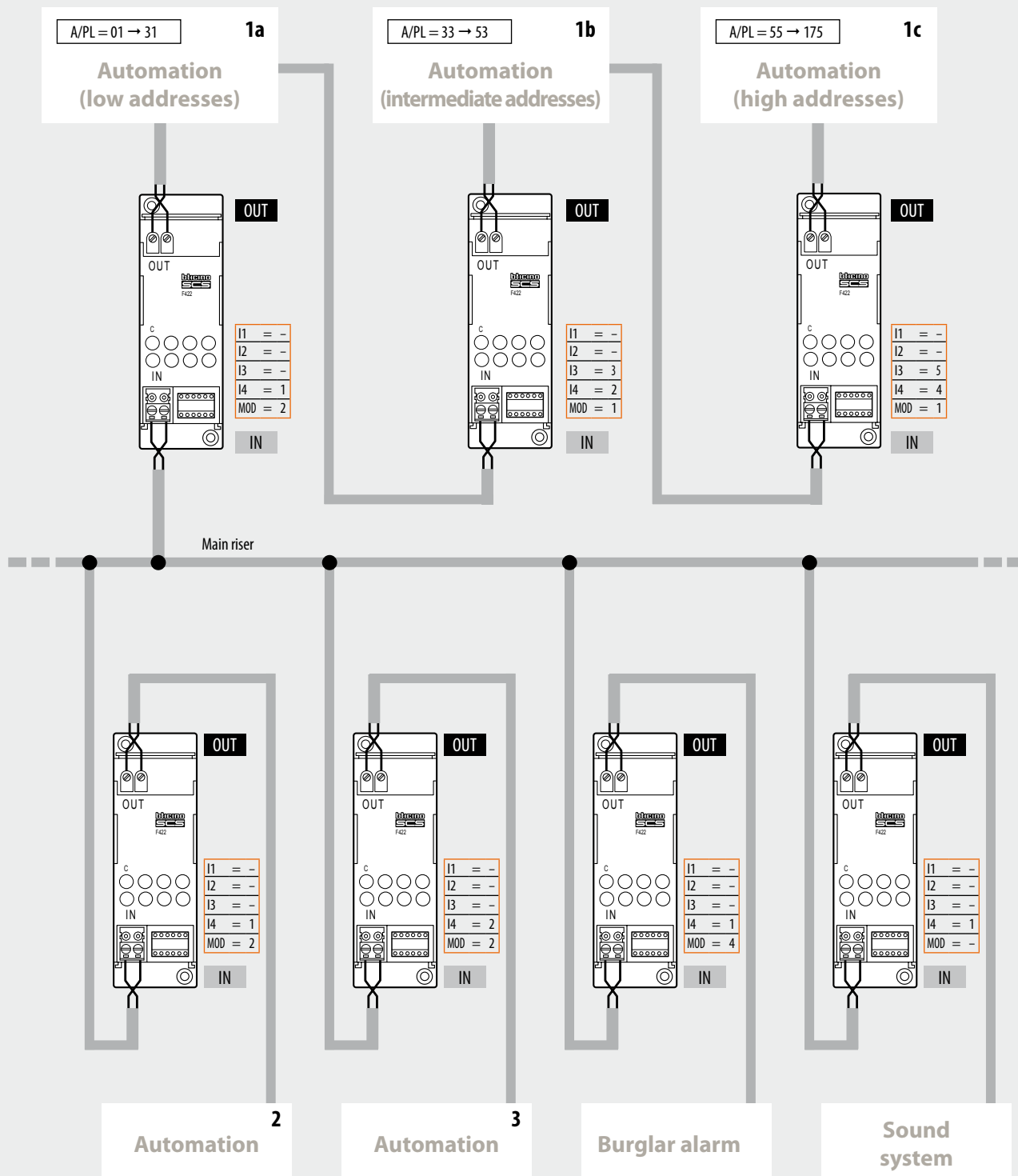
For home automation systems of a certain complexity, several systems may be integrated with interfaces configured in different modes. For example, it is possible to create a system with three interfaces for the connection of two Automation systems and one Burglar alarm system to one single riser.

If necessary, each of these can be expanded (physical expansion mode) or interfaced with the Video Door Entry System or the Sound System using other interfaces. For example, in case of a villa consisting of several large floors.

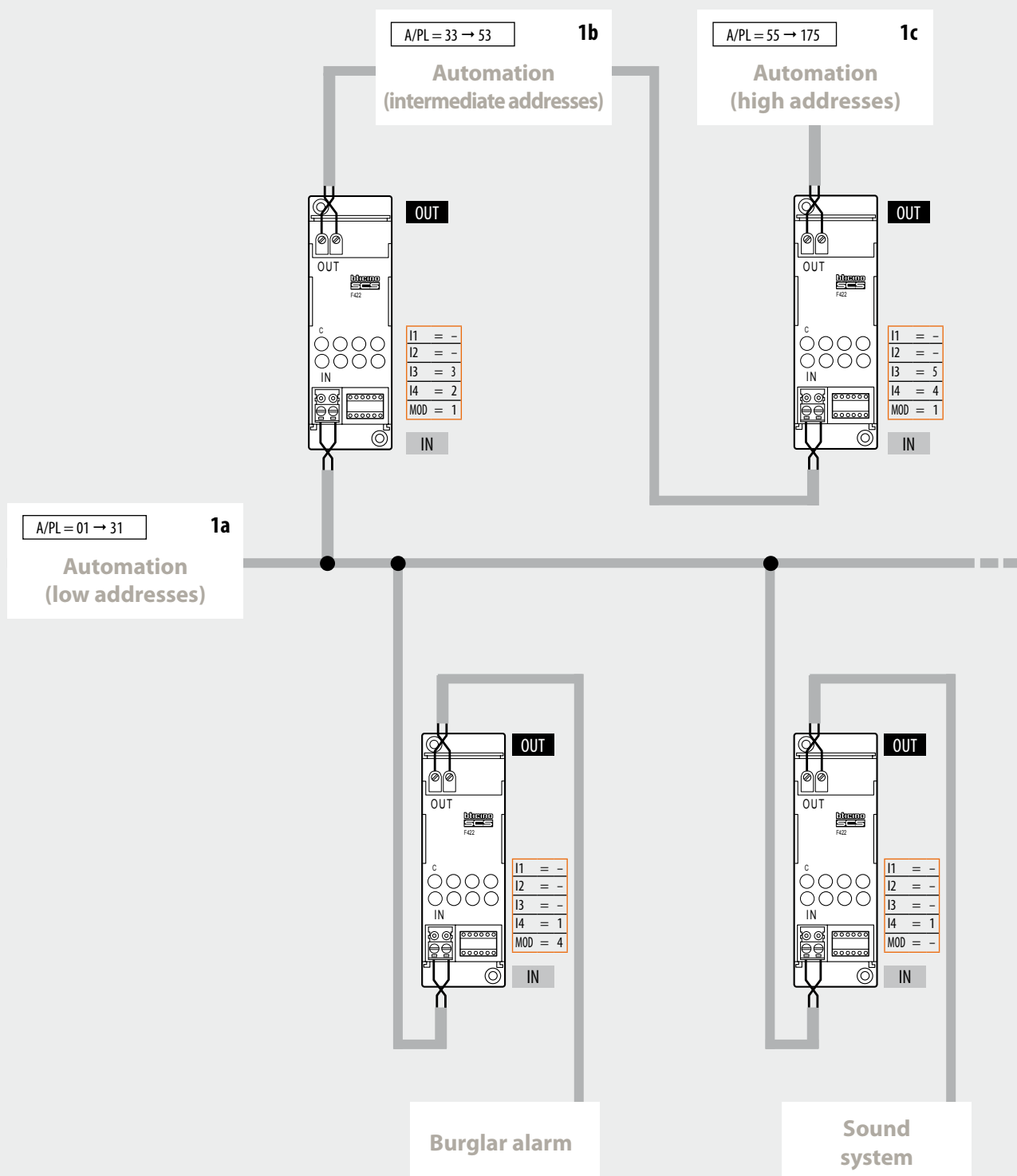
Example N. 1



Example no. 2: system with logic expansion



Example no. 3: system without logic expansion





# Memory module

F425

## Description

The memory module is connected to a system and permanently saves the status of all the actuators configured to manage the lights, after each control sent.

This device is very useful in case of a black-out or short power cuts (minimum 400 mS), because it can reset the status of all the lamps controlled by the system once the power returns. The reset operations take about 10 seconds. Just one memory module can be connected to the BUS for each system installed (i.e. each power supply), unless two or more systems are being connected using the SCS/SCS gateway (item F422) configured in physical expansion mode. In this case just one is needed for all the systems connected together.

The device must be put into operation once the system is already installed and powered.

The multicolour LED indicates the status of the device:

- OFF: device too far from the power supply
- fixed green: normal operation
- fixed orange: system not yet acquired
- fixed red: device exclusion being performed
- flashing red: acquisition being performed
- flashing orange: wrong or missing configuration

## Technical data

- Power supply from SCS BUS: 27 Vdc from BUS
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Absorption: 5 mA
- Operating temperature: 0 - 40 °C
- Dissipated power with max. load: 0.1 W

## Dimensional data

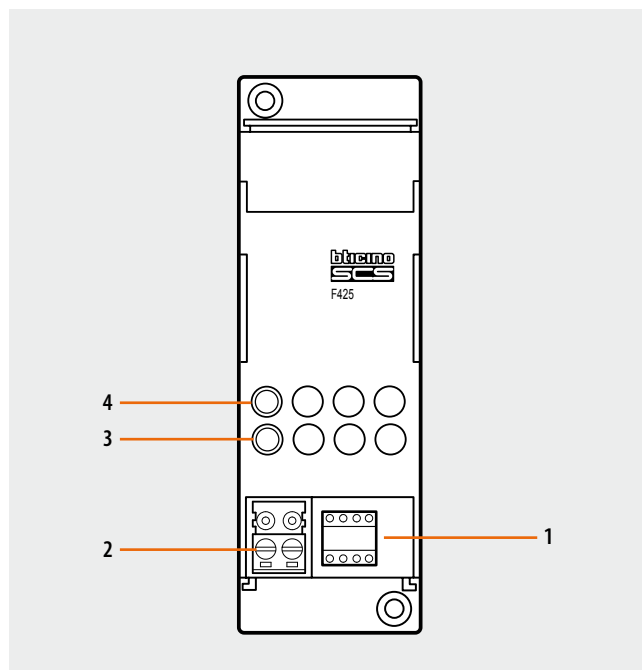
Size: 2 DIN modules

## Configuration

- Connect the memory module, switch the BUS ON and make sure that the loads of the dimmers are connected and powered (all the loads must be OFF).
- Press the key on the front for at least five seconds, when the red LED turns on steadily release the key.
- Switch the loads which are not to be managed ON one by one (all the loads left OFF will be managed).
- Press the device key within 30 minutes, the red LED will start to flash quickly to show that the device is performing the learning procedure.
- After about 30 seconds the LED turns green steady to signal that the learning procedure has ended and the memory module is operative.
- If the programming procedure has not been completed within 30 minutes, the LED shines orange to signal that the system status has not been saved.

At the end of the programming procedure a test should be performed to check that the device is set correctly:

- Switch on some of the controlled loads (i.e. those not explicitly excluded during the programming procedure).
- Switch OFF, simulating a black-out, for at least 15 seconds.
- Switch back on again; after a few seconds the status of the controlled loads must be reset (i.e. those which were ON before the black-out must switch back ON), while the unmanaged loads must however remain OFF.



## Legend

1. Configurator socket
2. BUS
3. Multi-colour LED
4. Key

## NOTES:

- Rolling shutter actuators are not managed.
- The memory module is configured using the Project&download procedure.
- The timed switchings ON will be activated as simple switchings ON.
- It is important to configure the Memory module with an address A and PL different from that of an actuator. We thus recommend using A=0 and PL=1 - 9, which cannot be used by actuators.
- For modifications to the system, repeat the save procedure..

## WARNING:

The memory module is installed near the power supply (possibly in the same electrical panel); the distance must not however be greater than 10 metres.



## DIN contacts interface

F428

### Description

This device lets you integrate traditional control devices (switches, pushbuttons, etc.) in advanced systems with BUS operating logic.

Therefore, it is possible to extend the use of the Lighting Management system in rooms where traditional systems are already present or in historic and prestigious rooms whereby the complete or partial remaking of the electric system would entail heavy masonry work.

The old but valuable switch with its no longer compliant wiring can therefore continue to be used with it, as the connection to the load to be controlled is carried out safely by connecting it with its SCS interface with no-voltage contact.

Contact N1 controls light point PL1, contact N2 controls light point PL2.

The device is fitted with 2 LEDs for the notifications of contact closure, programming/deletion, and the status of the control devices.

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&go, Project&Download).

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	9 mA
Dissipated power with max. load:	0.2 W

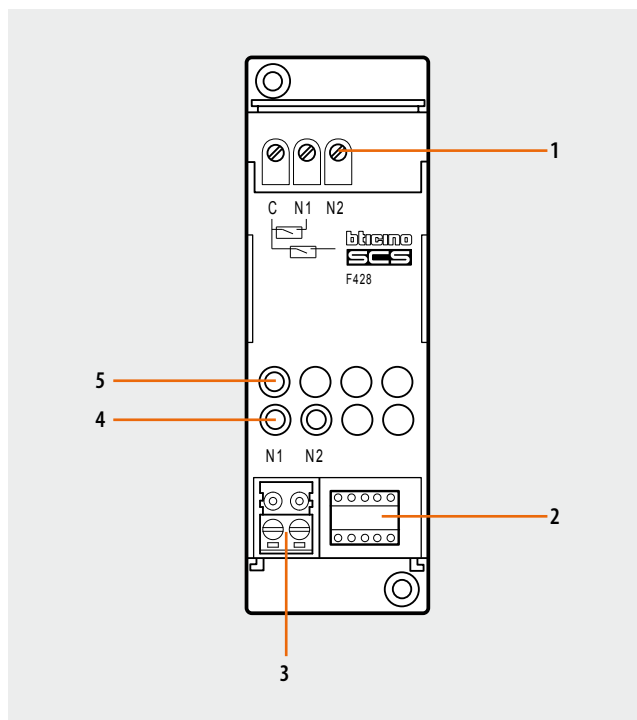
### Dimensional data

Size: 2 DIN modules

### MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

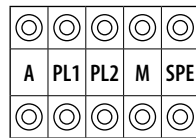
- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.



### Legend

1. Clamps for connection to traditional devices
2. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration).
3. BUS
4. LED
5. Key

## Physical configuration



The interface includes two independent central units, identified with positions N1 and N2. The two units can send:

- Controls to two actuators for two independent loads (ON, OFF or adjustment) identified with the address PL1 and PL2 and mode specified in M

or;

- A control to the scenario module item F420;

- A double control intended for a single load (motor for rolling shutter UP/DOWN, OPEN-CLOSE curtains) identified with the address PL1 = PL2 and mode specified M. The interface has two LEDs to signal correct operation and three clamps to connect to traditional devices such as:

- Two traditional NO (normally open) and NC (normally closed) switches or pushbuttons;

- A two-way switch.

The interface also has a pushbutton to enable virtual configuration

## 1) SPE=0 mode - Standard functions - Automation

Possible function	Value configurator in M	
	single function	double function
Cyclical ON/OFF with short pressure and adjustment with long pressure	No configurator	—
ON	ON	—
ON timed <sup>1)</sup>	1 - 8	—
OFF	OFF	—
OFF pressing the key connected to N2 - ON pressing the key connected to N1 and adjustment with long pressure (dimmer) <sup>2)</sup>	—	0/1
UP/DOWN rolling shutter to end of stroke	—	↑ ↓
UP/DOWN rolling shutter monostable	—	↑ ↓ M
Pushbutton	PUL	—

(1) The device sends an OFF control after a time set by the configurators used as indicated in the table below.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4
5	5
6	15
7	30 sec.
8	0.5 sec.

(2) As a function of the receiver actuator operating mode.

**NOTE:** If circuits are connected to the interface clamps, the operating mode to select is PUL.

If normally open (NO) pushbuttons are connected all the other operating modes indicated in the table are performed.

## 2) Operating mode with Configurator in M and SPE

Possible function	Value configurator in SPE	Value configurator in M	
		single function	double function
Locks the status of the devices to which the control is addressed	1	1	–
Unlocks the status of the devices to which the control is addressed	1	2	–
Unlocks with key connected to N1 and locks with key connected to N2	1	–	3
On with flash <sup>(1)</sup>	2	none – 9	–
ON (key in N1) - OFF (jkey in N2) without adjustment	1	–	0/1
Cyclical ON/OFF without adjustment (only NO contact)	1	7	–
Selection adjustment level fixed at 10 to 90 % of the dimmer <sup>(2)</sup>	3	1 – 9	–
Call the scenarios of module F420	4	See table <sup>(3)</sup>	
Management of scenario module item F420 <sup>(3)</sup>	6	See table <sup>(3)</sup>	
Timed ON (2 sec.)	8	1	–
Timed ON (10 min.)	8	2	–

(1) Device to be combined with an OFF control for switching OFF. The flash time is indicated in the table:

Configurator	Time (sec.)
none	0.5
1	1
2	1.5
3	2
4	2.5
5	3
6	3.5
7	4
8	4.5
9	5

(2) Device to be combined with the dimmer actuator and an OFF control for switching OFF. The configurator defines the adjustment in % of the load power.

Configurator N	% P of load
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90

(3) With SPE=4 it is only possible to recall the scenario saved in the F420 module; 3) With SPE=6 it is possible to recall and program the scenarios saved in the F420 module. M=1-8: group of scenarios to be controlled:

M	First contact (N1)	Second contact (N1)
1	1	2
2	3	4
3	5	6
4	7	8
5	9	10
6	11	12
7	13	14
8	15	16

A=0 to 9 and PL1=1 to 9 are the room and the light point of the scenario module to be controlled. PL2 must be the same as PL1, or not configured (in this case the second contact is disabled).

**Scenario programmer:** in order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

- 1) press one of the four control keys the scenario should be associated to for 3 seconds. The corresponding LED starts flashing;
- 2) set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;
- 3) confirm the scenario by quickly pressing the corresponding key on the control to exit programming mode;

4) To change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1.

To call a set scenario just press its pushbutton on the control quickly.

To completely delete a scenario, press the corresponding key for 10 seconds.

### 3) Mode with SPE = 7 - Automation standard functions - normally closed contact

This mode can perform the controls envisaged by the Basic operating mode with SPE = 0 when NC pushbuttons or switches are connected to the interface clamps.

### 4) Mode with SPE = 5 - Sound system

When the interface is correctly configured, the following functions are performed:

- **M=0: ON/OFF mode**
- **N1 contact:**

With short pressure the following sequence is sent:

- ON of the sources. PL2 indicates the source to activate before switching the amplifier on. If PL2=0, source 1 is turned on (follow-me mode).
- ON of the A/PL1 amplifier.

With extended pressure the following happens:

- For point-point controls, if the amplifier is already on, only the volume is adjusted (VOL+); if the amplifier is OFF, the switch on sequence is sent first;
- For AMB or GEN controls, only the volume is adjusted.
- **N2 contact:**
- With a short pressure, the OFF control for the A/PL1 amplifier is sent.
- With an extended pressure the volume is adjusted (VOL -).

**In this operating mode:**

- **Point-point control:**  
A = 1-9 amplifier room ;  
PL1=0-9 amplifier speaker.
- **Room control:**  
A = AMB  
PL1 = 1-9 amplifier room the control is intended for
- **General control:**  
A = GEN  
PL1 = 0  
PL2 = 1-4 indicates the source to activate before switching the amplifier on. If PL2=0 the follow-me mode is activated.

- **M=1 Source cycling/track cycling mode**
- **N1 contact:** cycle source
- **N2 contact:** cycle track

**In this operating mode:**

- **Room control:**

A = 1-9 is the amplifier room

**General type controls:**

A = GEN for PL1=PL2=0 general controls

### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- contact;
- single light control;
- single disable control;
- single scenario control;
- single CEN control;
- single scenario PLUS control;
- single CEN PLUS control;
- single AUX control.

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

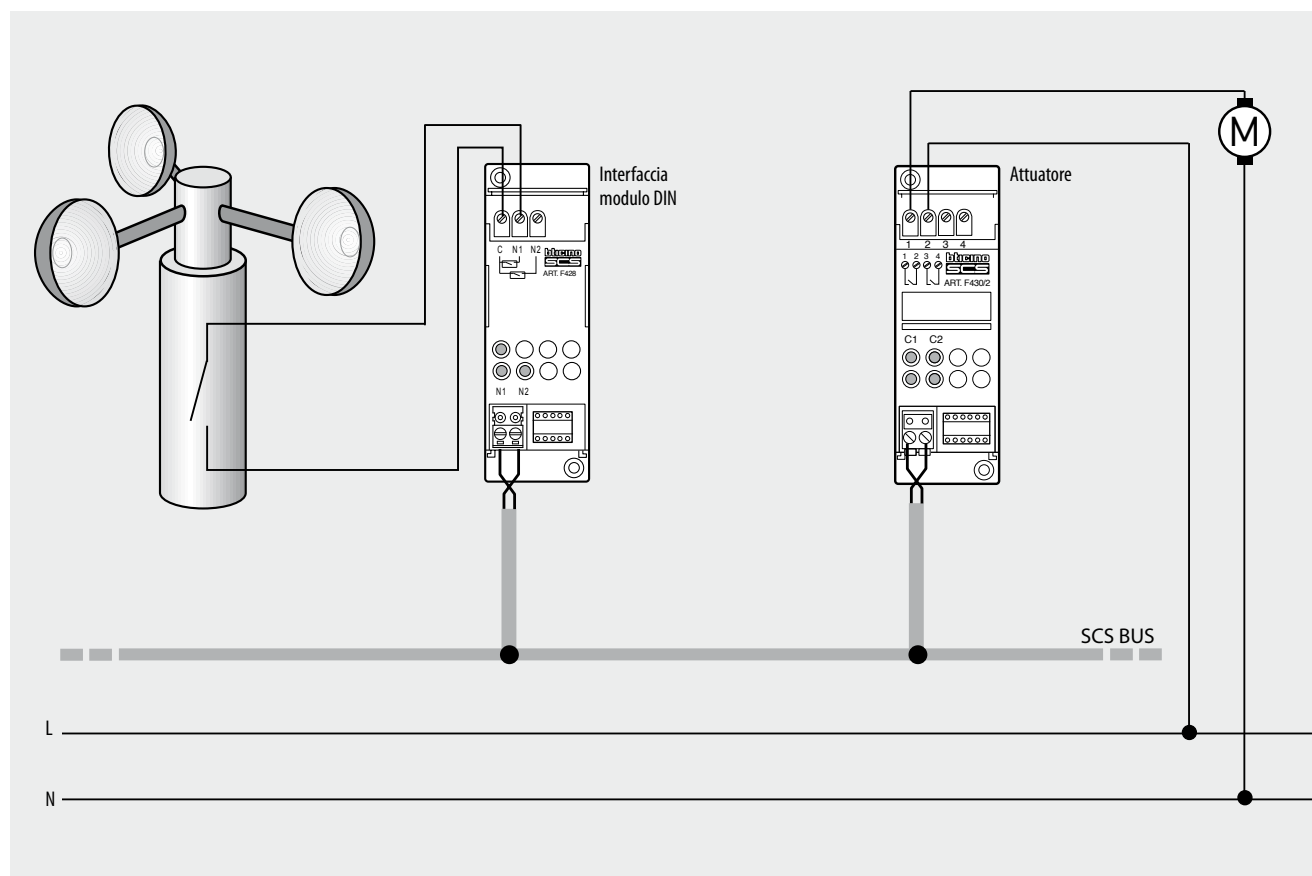
- Plug&Go (see the dedicated technical guide)
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- contact;
- single light control;
- single disable control;
- single scenario control;
- single CEN control;
- single scenario PLUS control;
- single CEN PLUS control;
- single AUX control.

For more information on the functions see the glossary before the Technical sheets chapter.

### Wiring diagram





## SCS/DALI gateway

F429

### Description

The device is an interface between MY HOME/Lighting Management systems and devices driven using the DALI (Digital Addressable Lighting Interface) protocol. It has eight independent outputs to which up to 16 DALI devices can be connected for each output. Three pushbuttons with notification LED set the operating mode. Key P1 sets up the device for the virtual configuration, key P2 is used to select one of the eight outputs which connect with the DALI devices and key P3 is used to switch the output which has been selected with key P2 ON, OFF and to dim it. On pressing key P3 quickly one can switch the load ON or switch it OFF cyclically, while pressing it for a long time adjusts the brightness.

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&go, Project&Download).

### Technical data

Power supply:	110 – 240 Vac @ 50/60 Hz; 110 – 240 Vdc
Absorption:	5 mA
Operating temperature:	(-5) – (+45) °C
Dissipated power:	4 W
No. of DALI outputs:	8 x 16 ballast

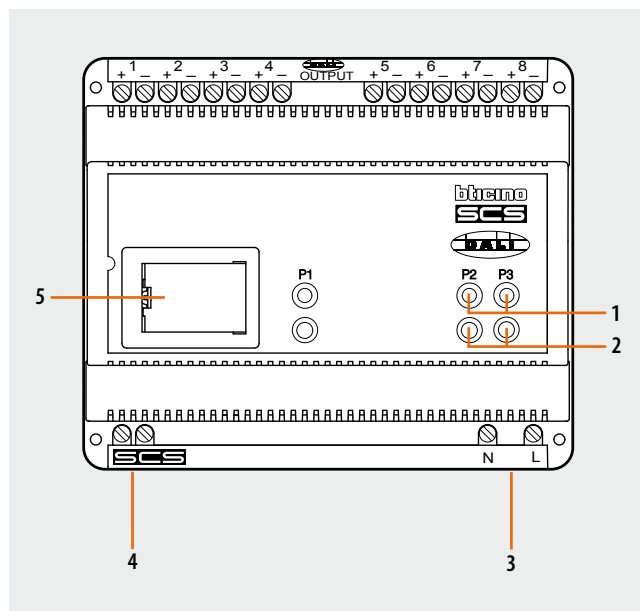
### Dimensional data

Size: 6 DIN modules

### MY HOME Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.



### Legend

1. Pushbuttons
2. LED
3. Power supply
4. BUS
5. Configurator socket (attention, it must only be used in MY HOME systems with physical configuration)

### Physical configuration

For the configuration there are 3 sockets identified A, G and M as specified below:

- A = 1 - 9 light point room address. The number of light points PL is defined with key P2.  
If pressed, the LED will flash a number of times equal to the number of the port selected. If pressed again, the next output is selected.
- G= 1 - 9 group address
- M= Operating mode

The following table lists the operating modes possible with the configurator connected to position M of the same actuator.

Possible function	Configurator in M
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Pushbutton (ON monostable) ignores Room and General controls	PUL
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time has elapsed	1 = 1 min 2 = 2 min 3 = 3 min 4 = 4 min

Depending on the configurator connected to A, the outputs will take the following address:

OUTPUT									
		1	2	3	4	5	6	7	8
A=	1	A=1 PL=1	A=1 PL=2	A=1 PL=3	A=1 PL=4	A=1 PL=5	A=1 PL=6	A=1 PL=7	A=1 PL=8
	2	A=2 PL=1	A=2 PL=2	A=2 PL=3	A=2 PL=4	A=2 PL=5	A=2 PL=6	A=2 PL=7	A=2 PL=8
	3	A=3 PL=1	A=3 PL=2	A=3 PL=3	A=3 PL=4	A=3 PL=5	A=3 PL=6	A=3 PL=7	A=3 PL=8
	4	A=4 PL=1	A=4 PL=2	A=4 PL=3	A=4 PL=4	A=4 PL=5	A=4 PL=6	A=4 PL=7	A=4 PL=8
	5	A=5 PL=1	A=5 PL=2	A=5 PL=3	A=5 PL=4	A=5 PL=5	A=5 PL=6	A=5 PL=7	A=5 PL=8
	6	A=6 PL=1	A=6 PL=2	A=6 PL=3	A=6 PL=4	A=6 PL=5	A=6 PL=6	A=6 PL=7	A=6 PL=8
	7	A=7 PL=1	A=7 PL=2	A=7 PL=3	A=7 PL=4	A=7 PL=5	A=7 PL=6	A=7 PL=7	A=7 PL=8
	8	A=8 PL=1	A=8 PL=2	A=8 PL=3	A=8 PL=4	A=8 PL=5	A=8 PL=6	A=8 PL=7	A=8 PL=8
	9	A=9 PL=1	A=9 PL=2	A=9 PL=3	A=9 PL=4	A=9 PL=5	A=9 PL=6	A=9 PL=7	A=9 PL=8

Note: The PL configurator is not required, as the value is set by the output to which the DALI device is connected. All the outputs belong to the same group connected to G.

### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- dimmer

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

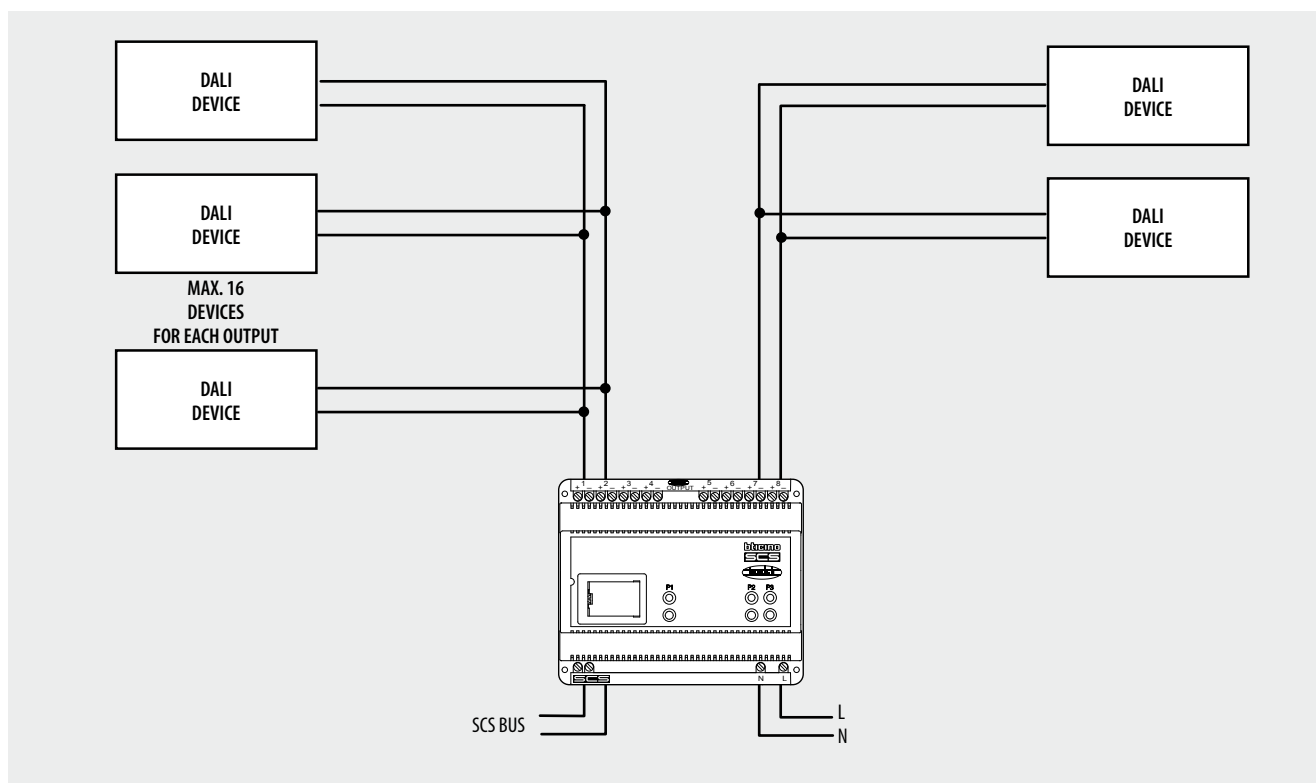
- Plug&Go (see the dedicated technical guide)
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- dimmer

For more information on the functions see the glossary before the Technical sheets chapter.

## Wiring diagram





## 2 relay radio actuator in DIN module

F470/2

### Description

This device can be used to exploit the benefits of radio technology in a combined radio-wire BUS system. In addition to being driven by the local micro-pushbutton, the radio actuator can also be driven by wire controls (using the transmitting interface L/N/NT4576N and HC/HS4576).

The actuator consists of two interlocked relays for double loads (e.g. motor reducer), and can also be used with only one relay, for single loads.

### Technical data

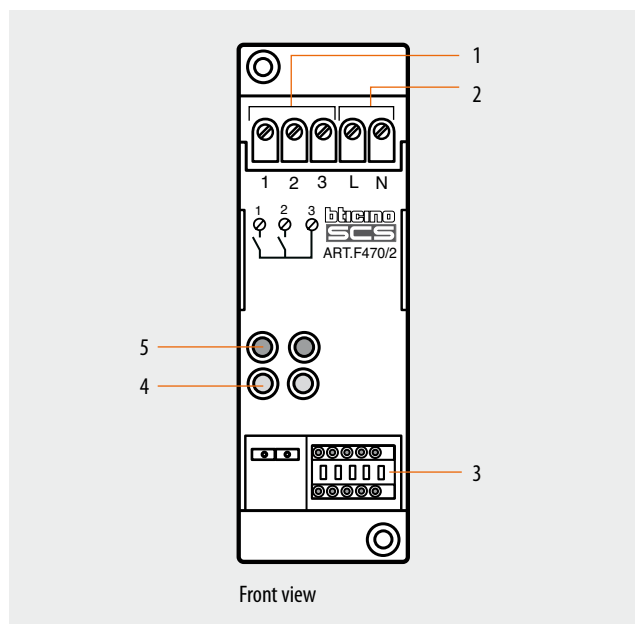
Power supply:	230 Vac 50 Hz
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads:	<ul style="list-style-type: none"> <li>- incandescent lamps 500W / 2 A</li> <li>- resistive loads 1400 W / 6 A</li> <li>- fluorescent lamps 70 W / 0.3 A</li> <li>- electronic transformers 70 W / 0.3 A</li> <li>- ferromagnetic transformers 500 VA / 2 A cosφ 0.5</li> <li>- motor reducers for rolling shutters 2 A / 500 W</li> </ul>
Radio frequency:	868 MHz
Size:	2 DIN modules

### Configuration

Actuator F470/2 has two independent relays to operate two loads. If positions PL1 and PL2 have the same address (same configurator) the device activates the interlock of the two relays to which rolling shutter, curtain, etc. motors can be connected. If positions PL1 and PL2 have different addresses (different configurators), the device works with two independent relays with addresses A, PL1 and A, PL2. If the actuator is configured to use just one relay (position A and PL1), position PL2 must not be configured. Actuator F470/2 performs all the basic operating modes, that can be configured directly on the control. Moreover operating modes with the configurator in position M of the same actuator are listed in the table below.

Possible function	Configurator in M
The actuator ignores the Room and General controls	PUL
Timed stop. The actuator deactivates after the time set has elapsed <sup>1)</sup>	none – 4 <sup>1)</sup>
Normal operation	-

1) The value of the configurator indicated in the table defines the final time, after which the actuator switches OFF. Only if the relays are interlocked (PL1 = PL2)



### Legend

1. Relay contact
2. Power supply 230 Vac @ 50 Hz
3. Configurator socket
4. LED
5. Micropushbutton

Configurator	Time (minutes)
No configurator	1
1	2
2	5
3	10
4	Infinite or until the next control

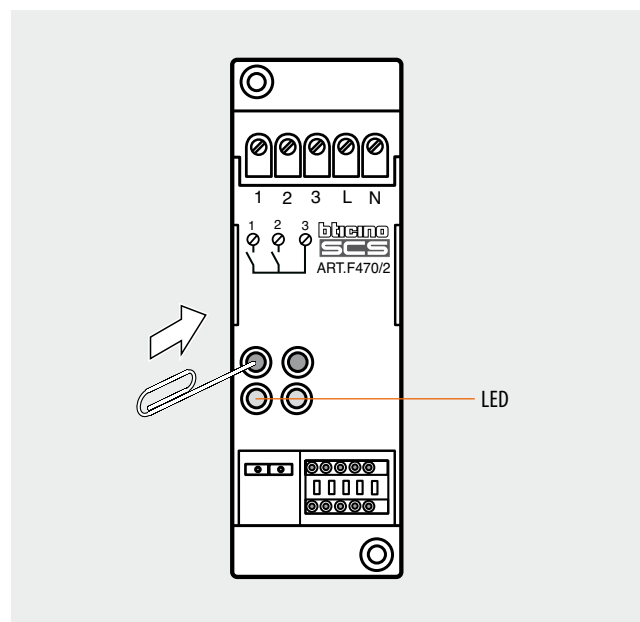
### Programming

This operation is necessary to create a link between the radio control devices and the actuator. Follow the procedure below:

- 1) Power up the device.
- 2) Hold down the Micropushbutton until the LED lights up (about 4 seconds).
- 3) Release the key.
- 4) Within 20 seconds press the programming radio interface pushbutton or press the wire control device key.
- 5) Programming will be completed when the LED flashes and then turns OFF.
- 6) Repeat the operating sequence from 2 through 5 for all the radio control devices to be programmed.

To cancel all programming in the actuator proceed as follows:

- 1) Power up the device.
- 2) Press the micropushbutton for 11 seconds (after 4 seconds the LED will turn on, after another 7 seconds it will turn OFF).
- 3) Release the key.
- 4) When the LED flashes and then turns OFF, all programming will be cancelled.





# DIN radio actuator for single loads

F470/1

## Description

This device can be used to exploit the benefits of radio technology in a combined radio-wire BUS system.

In addition to being driven by the local micro-pushbutton, the radio actuator can also be driven by wire controls (using the transmitting interface L/N/NT4576N and HC/HS4576).

## Technical data

Power supply:	230 Vac 50 Hz
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads:	<ul style="list-style-type: none"> <li>- incandescent lamps 1400W / 6 A</li> <li>- resistive loads 2300 W / 10 A</li> <li>- fluorescent lamps 230 W / 1 A</li> <li>- electronic transformers 230 W / 1 A</li> <li>- ferromagnetic transformers 500 VA / 2 A <math>\cos\phi</math> 0.5</li> </ul>
Radio frequency:	868 MHz
Size:	2 DIN modules

## Configuration

The actuator performs all the basic operating modes that can be directly configured on the control, apart from those which involve the use of two interlocking relays.

In traditional systems or systems only consisting of radio devices no configuration is required. When integrating the device in a MY HOME system, or for advanced functions, at least the A and PL positions must be configured. The configuration as belonging to the G group is only possible if also A and PL are configured. If a PUL configurator is connected to the M position, the actuator will ignore Room and General controls. Also, The following table lists the operating modes possible with the configurator connected to position M of the same actuator. To cancel all programming in the actuator proceed as follows:

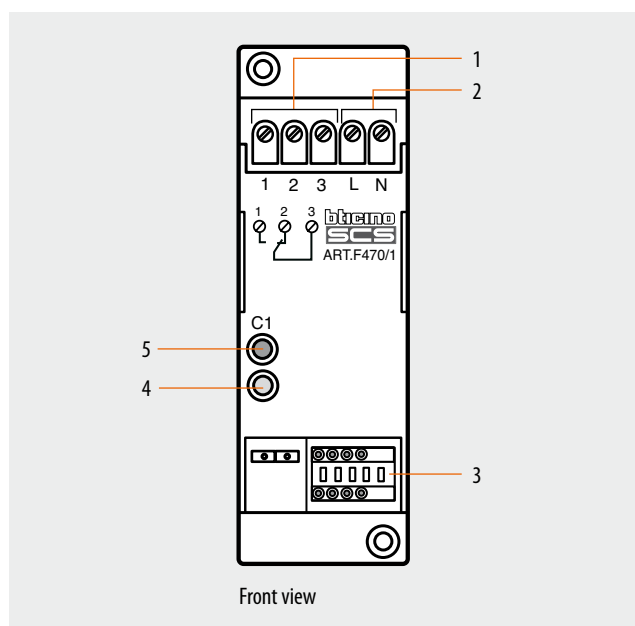
- 1) Power up the device.
- 2) Press the Micropushbutton for 11 seconds (after 4 seconds the LED will turn on, after another 7 seconds it will turn OFF).
- 3) Release the key.
- 4) When the LED flashes and then turns OFF, all programming will be cancelled.

Possible function	Configurator in M
The actuator ignores the Room and General controls	PUL
Normal operation	-

## Programming

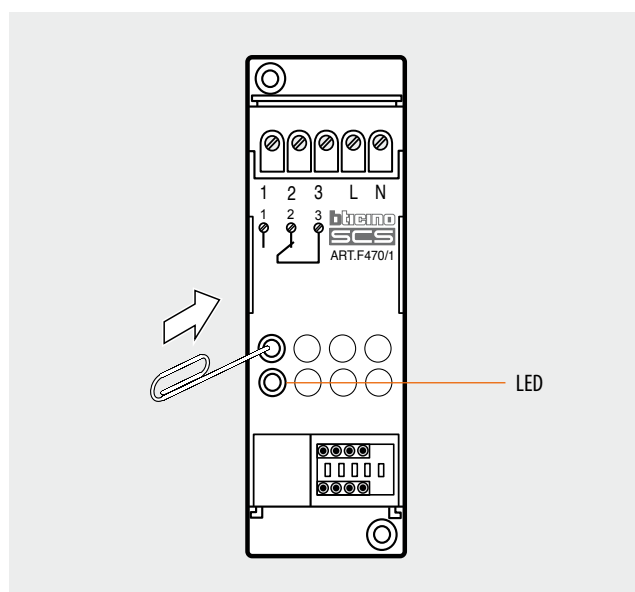
This operation is necessary to create a link between the radio control devices and the actuator. Follow the procedure below:

- 1) Power up the device.
- 2) Hold down the Micropushbutton until the LED lights up (about 4 seconds).
- 3) Release the key.
- 4) Within 20 seconds press the programming radio interface pushbutton or press the wire control device key.
- 5) Programming will be completed when the LED flashes and then turns OFF.
- 6) Repeat the operating sequence from 2 through 5 for all the radio control devices to be programmed.



## Legend

1. Relay contact
2. Power supply 230 Vac @ 50 Hz
3. Configurator socket
4. LED
5. Micropushbutton





## Actuator 16 A

F523

### Description

The device is an actuator with 1 bistable relay sensor with zero crossing functionality, intended for the Load control and/or Automation functions.

The actuator is capable of assessing frequency (50 Hz) and voltage (230 Vac) in an isolated way.

#### In load control mode:

The actuator will be given a priority indicating the tripping order that will be followed by the F521 central unit for load management (e.g. Priority 1 will be the first load disabled if the threshold is exceeded). This priority coincides with the address that will be used in all configuration software programs. Using the forcing pushbutton it will be possible to re-enable the load for 4 hours after DISABLING by the central unit, or remove the load forcing previously set.

#### In automation mode, the actuator can perform the following functions:

- all operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays;
- possibility of group configuration (G);
- additional modes using the M configuration socket.

#### In mixed load control and automation mode, the following rules are followed:

The local key performs the load control management function (forcing/end of forcing)  
 - if the load is ENABLED or FORCED, the status of the relay follows the commands of the Automation system.

- if the load is DISABLED by the central unit for load management, the status of the relay does not follow the commands of the Automation system, but can only be re-enabled by a control, ENABLING or FORCING, from the load control management.

During disabling, the actuator keeps the statuses requested by the Automation commands in the memory. After RE-ENABLING the relay is placed in the status required by the last automation command.

This function has been conceived for applications where the load control management function is implemented, with the need of performing hourly load scheduling.

If during DISABLING stage the relay is switched off due to the scheduling settings, when re-enabling takes place it will stay switched off.

The bistable relay enables preserving the status of the load also in case of lack of voltage from the SCS bus (e.g. device reset).

The space requirement for the device is equal to 1 DIN module. The device is provided with socket for 6 configurators: A, PL, G, M, P1, P2.

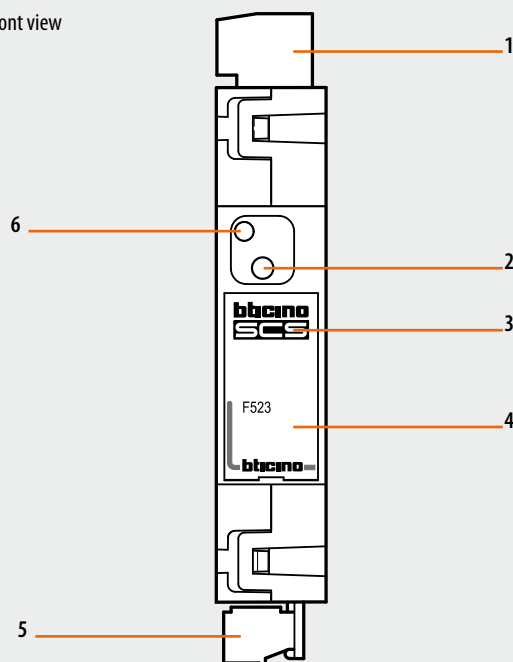
### Technical data

Operation power supply with BUS SCS:	18 – 27 Vdc
Absorption:	10 mA max
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads:	Incandescent and halogen lamps 10 A / 2300 W LED lamps and compact fluorescent lamps 500 W / Max. 10 lamps Linear fluorescent lamp and electronic transformers 4 A / 920 W Ferromagnetic transformers 4 A cosφ 0.5 / 920 VA

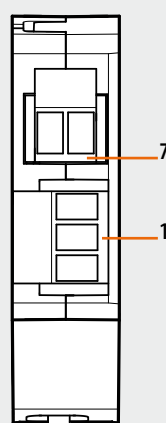
### Dimensional data

1 DIN module

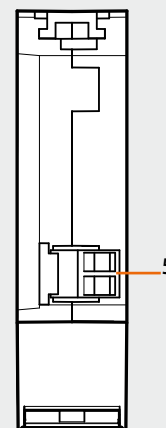
Front view



Top view



Bottom view



### Legend

1. 230 Vac connection
2. Load forcing pushbutton
3. Virtual configuration pushbutton (future application)
4. Configurator sockets
5. BUS connection
6. User interface LED, SEE TABLE
7. Load connection

## Configuration

The device can be configured by connecting the physical configurators to the correct sockets (Physical configuration)

The device is provided with socket for six configurators, which define:

- A/PL/G/M local address (room, light point), group, and mode in the automation system.
- P1/P2 priority in the load control management system, (P1 = tens, P2 = units)

### 1) Automation Mode:

The actuator performs all the operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays; it can also accept extended switch on, switch off, and time delay controls.

In addition, the following table lists the operating modes required for the configurator

connected to the M position of the actuator itself.

In the A and PL positions it will be necessary to indicate the device address, while the P1 and P2 positions must be configured equal to zero.

The pushbutton operates in ON/OFF cyclical mode.

Possible function	Configurator in M
Actuator as slave. It receives a command sent by a Master actuator with the same address	SLA
Pushbutton (On monostable) ignores Room and General controls	PUL
Master actuator with delayed Off control on the corresponding Slave actuator. Only for point-point type control. With the Off control, the Master actuator is disabled; the Slave actuator is disabled after the time set using the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

<sup>1)</sup> In the Off delayed mode, the master sends the Off command after a period of time set using the 1 - 4 configurator connected to M as shown in the table:

Configurator in M	Time (minutes)
1	1
2	2
3	3
4	4

LED notifications based on the status of the actuator in automation mode:

Device status	Green LED	Red LED	Result
Load OFF	Fixed ON	OFF	GREEN
Load ON	Fixed ON	Fixed ON	ORANGE

### 2) Load control management mode:

In the P1 and P2 positions it will be necessary to indicate the priorities from 01 to 63, the A, PL, G and M positions must be configured equal to zero.

LED notifications based on the status of the actuator in load control management mode:

Device status	Green LED	Red LED	Result
Enabled	Fixed ON	Fixed ON	ORANGE
Forced	Fixed ON	Flashing 1 s/1 s	ORANGE flashing 1s/1s on GREEN
Disabled	OFF	Fixed ON	RED

## 2) Load control management and automation:

In the P1 and P2 positions it will be necessary to indicate the priorities from 01 to 63.

In A and PL it will be necessary to indicate the device address.

LED notifications based on the status of the actuator in load control management and automation mode:

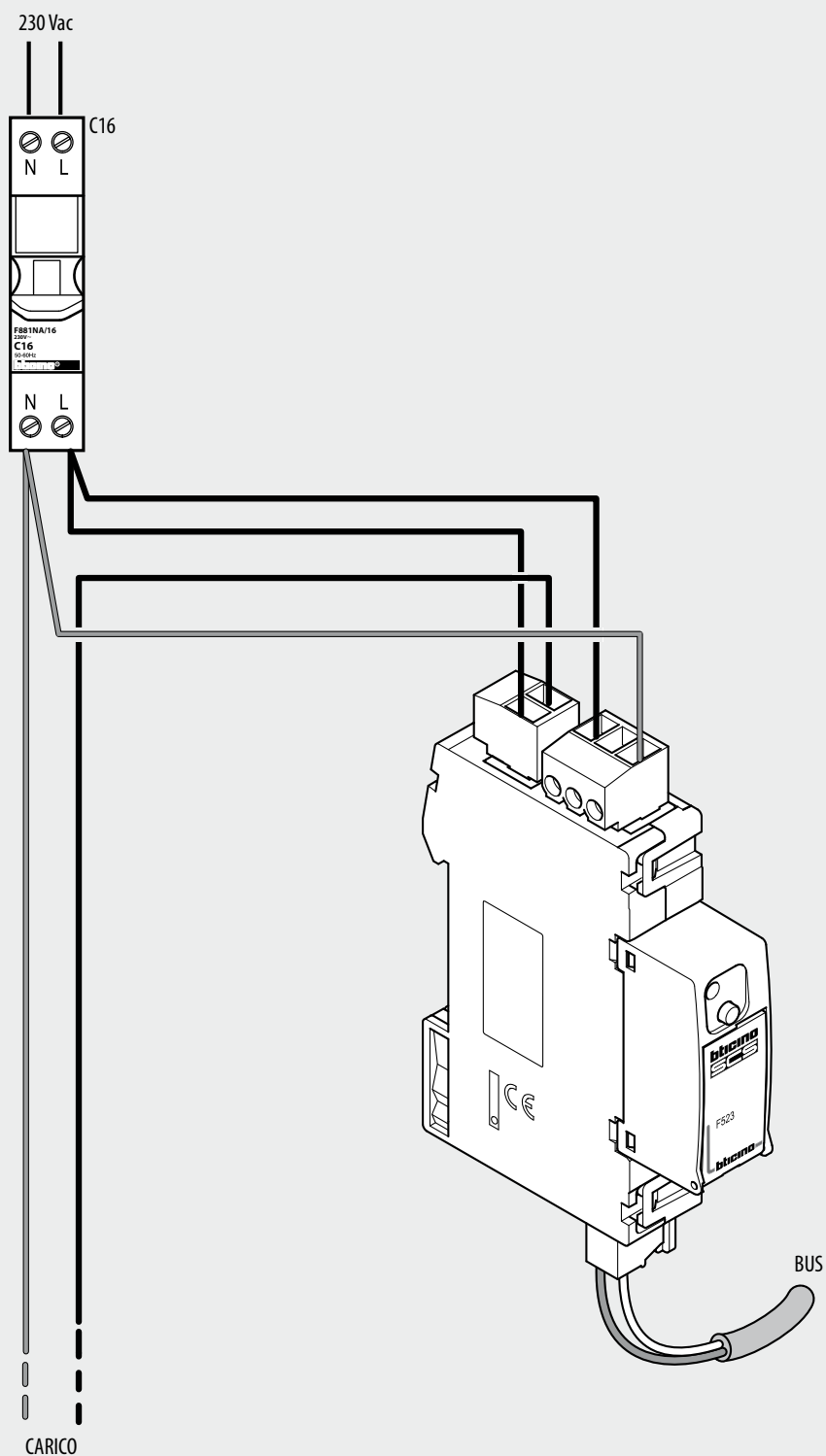
Device status	Green LED	Red LED	Result
Enabled + ON	Fixed ON	Fixed ON	ORANGE
Enabled + OFF	Fixed ON	OFF	GREEN
Disabled	OFF	Fixed ON	RED
Forced + ON	Fixed ON	Flashing 1 s/1 s	ORANGE flashing 1s/1s on GREEN
Forced + OFF	Flashing 1 s/1 s	Flashing 1 s/1 s	ORANGE flashing 1s/1s

Common LEDs signalling:

Device status	Green LED	Red LED	Result
Installation error (230 Vac not detected)	OFF	Flashing 100 ms/900 ms	RED flashing 100 ms/900 ms
Configuration error	Fixed ON	Flashing irregularly	ORANGE irregularly on GREEN
No configuration	Fixed ON	Flashing 128 ms/128 ms	ORANGE flashing 128 ms/128 ms on GREEN

# Wiring diagrams

Actuator connection:





## Flush mounted 2 relay radio actuator

H4573/2 - L4573/2

### Description

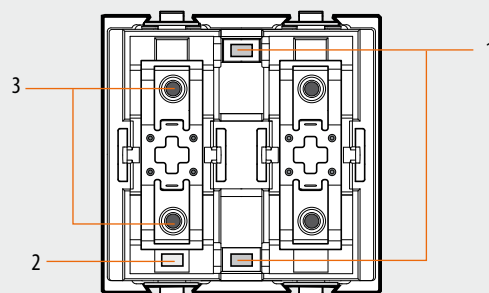
This device can be used to exploit the benefits of radio technology in a combined radio-wire BUS system. The 2 relay radio actuator can be driven by the controls of the automation system, using the transmitting interface L/N/NT4576N or HC/HS4576.

When used in a traditional system, the device can be driven directly by radio controls, or using the local controls on the device.

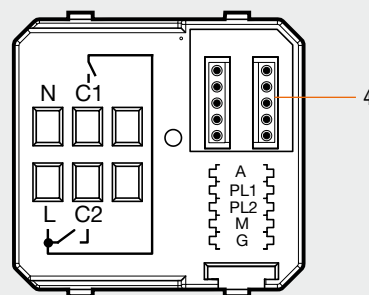
The actuator consists of two interlocked relays for double loads (e.g. motor reducer), and can also be used with only one relay, for single loads.

### Technical data

Power supply:	230 Vac 50 Hz
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads:	<ul style="list-style-type: none"> <li>- incandescent lamps 500 W / 2 A</li> <li>- resistive loads 500 W / 2 A</li> <li>- ferromagnetic transformers 500 VA / 2 A cosφ 0.5</li> </ul>
Radio frequency:	868 MHz
Type of modulation:	FSK
Size:	2 flush mounted modules



Front view H4573/2\*



Rear view

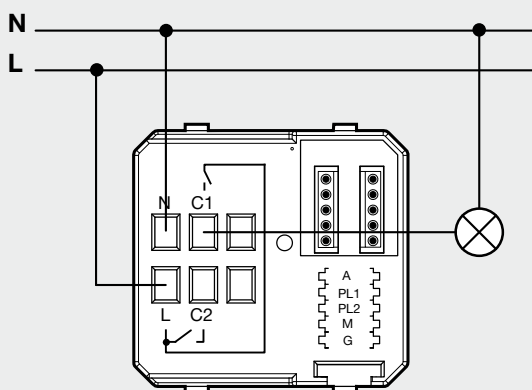
\* **NOTE:** in the L4573/2 version, the position of the programming pushbutton and the bottom LED are inverted.

### Legend

1. LED
2. Programming pushbutton
3. Local pushbuttons
4. Configurator socket

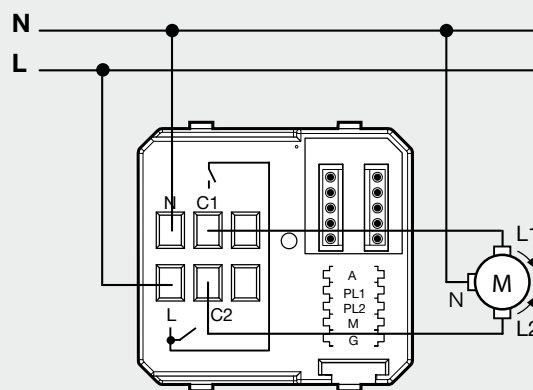
### Wiring diagram

Light connection wiring diagram



### Wiring diagram

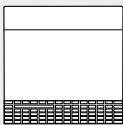
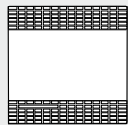
Rolling shutter wiring diagram



## Configuration

The device can also be used for operating rolling shutters and curtains as well as for controlling a single load. The actuator must also be configured by placing the appropriate configurators in the sockets of configurators A, PL1, PL2, M and G. If you want to use the device for operating rolling shutters or curtains, configure A, PL1 and PL2 leaving **PL1=PL2**. If you want to use the device for operating a single load, configure A and PL1 with **PL1=1-9** and leave PL2 unconfigured. In this case, only one relay is used.

**EXAMPLE:** The actuator with address A = 5 and PL1 = PL2 = 3 is managed by the wire control configured with A = 5 and PL = 3. The radio interface must have address 52 or less (A = 5 and PL = 2).

Possible function	Combination of key cover used and configurator in M	Combination of key cover used and configurator in M
		
Cyclical ON/OFF	No configurator	-
ON by pressing upper key - OFF pressing lower key	-	0/1
Cyclical ON/OFF (only in Automation system)	PUL	-
The actuator ignores the Room and General controls	-	↑ ↓ M
Control UP (upper key) and DOWN (lower key) as long as the key is pressed. For radio controls, it deactivates after 1 minute	-	PUL
Control UP (upper key) and DOWN (lower key) to end of travel. The actuator ignores the Room and General controls and it deactivates after 1 minute	-	none - 4 <sup>1)</sup>
Control UP (upper key) and DOWN (lower key) to end of travel. The actuator deactivates after the time set has elapsed <sup>1)</sup>	-	

- 1) The value of the configurator shown in the table determines the final time.  
At the end of this time, the actuator will deactivate.



**The configuration and/or customisation operations must be performed when the actuator is NOT powered.**

Configurator	Time (minutes)
No configurator	1
1	2
2	5
3	10
4	Infinite or until the next control

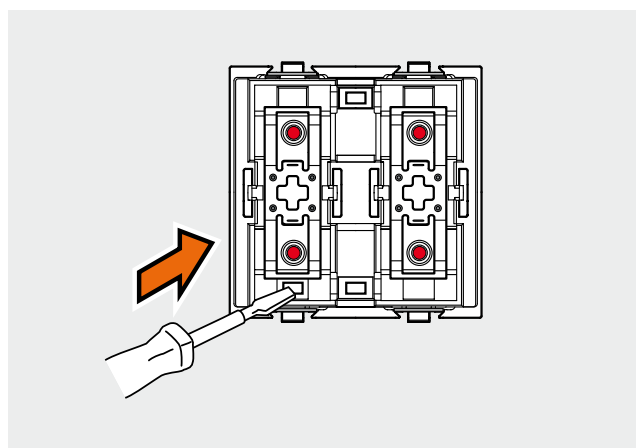
## Programming

This operation is necessary to create a link between the radio control devices and the actuator. Follow the procedure below:

- 1) Power up the actuator.
- 2) Hold down the programming pushbutton until the LED lights up (about 4 seconds).
- 3) Release the key.
- 4) Within 20 seconds press the transmitting radio interface programming pushbutton or press the wire control device key.
- 5) Programming will be completed when the LED flashes and then turns OFF.
- 6) Repeat the operating sequence from 2 through 5 for all the radio control devices to be programmed.

To cancel all programming in the actuator proceed as follows:

- 1) Power up the device.
- 2) Hold down the programming pushbutton; after 4 seconds, the LED will turn on; hold down the pushbutton until the LED turns OFF.
- 3) Release the key.
- 4) When the LED flashes and then turns OFF, all previously programming will be cancelled.



## WARNING! RISK OF ELECTRIC SHOCK.

Press the programming pushbutton using a phase-tester or electrically-insulated screwdriver only. This operation must be carried out by qualified personnel only.



# 1 relay radio actuator

H4574 - L4574

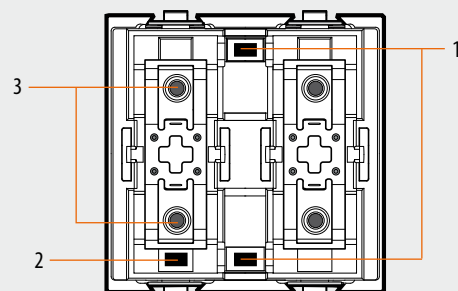
## Description

This device can be used to exploit the benefits of radio technology in a combined radio-wire BUS system. The two-way radio actuator can be driven by the Automation system controls, by means of transmitting interface item L/N/NT4576N or HC/HS4576.

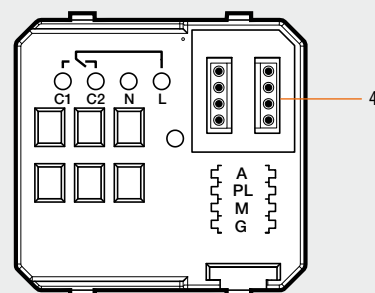
When used in a traditional system, the two-way radio actuator can be driven directly by a radio control, or using the local control on the device.

## Technical data

Power supply:	230 Vac 50 Hz
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads:	<ul style="list-style-type: none"> <li>- incandescent lamps 50 – 500 W / 0.2 – 2 A</li> <li>- resistive loads 50 – 500 W / 0.2 – 2 A</li> <li>- fluorescent lamps 12 a– 70 W / 0.05 – 0.3 A</li> <li>- electronic transformers 12 – 70 W / 0.05 – 0.3 A</li> <li>- ferromagnetic transformers 50 – 500 VA / 0.2 – 2 A cosφ 0.5</li> </ul>
Radio frequency:	868 MHz
Type of modulation:	FSK
Size:	2 flush mounted modules



Front view H4574\*



Rear view

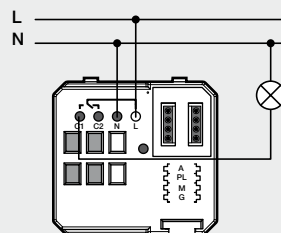
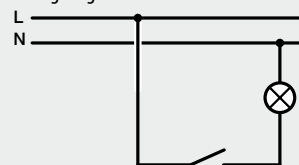
**\*NOTE:** in the L4574 version, the positions of the programming pushbutton and the bottom LED are inverted.

## Legend

1. LED
2. Programming pushbutton
3. Local pushbuttons
4. configurator socket

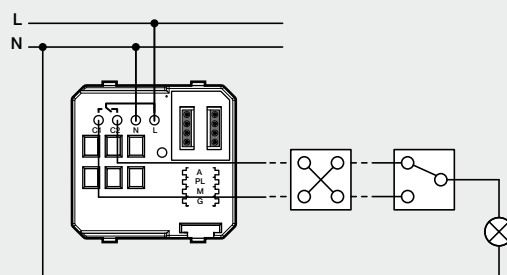
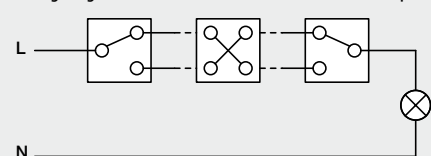
## Wiring diagram

Wiring diagram for load controlled from one point only



## Wiring diagram

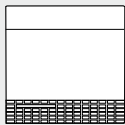
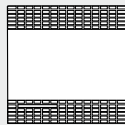
Wiring diagram for load controlled from two or more points



## Configuration

The actuator must be configured by connecting the configurators which define the actuator address and operating mode in sockets A, PL, M and G. The actuator performs all the basic operating modes that can be configured directly on the radio control devices, apart from those which use two interlocked relays. For the configuration details refer to the table below.

**EXAMPLE:** The actuator with address  $A = 5$  and  $PL = 3$  is managed by the wire control configured with  $A = 5$  and  $PL = 3$ . The radio interface must have address 52 or less ( $A = 5$  and  $PL = 2$ ).

Possible function	Combination of key cover used and configurator in M	Combination of key cover used and configurator in M
		
Cyclical ON/OFF	No configurator	-
ON pressing upper key - OFF pressing lower key	-	0/1
Cyclical ON/OFF (only in Automation system) The actuator ignores the Room and General controls	PUL	-



**The configuration and/or customisation operations must be performed when the actuator is NOT powered.**

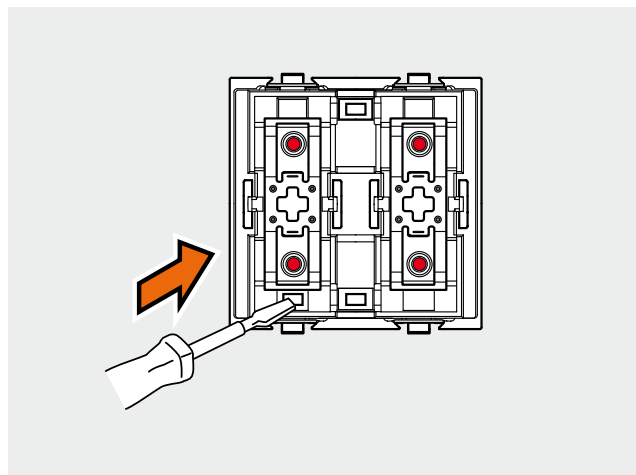
## Programming

This operation is necessary to create a link between the radio control devices and the actuator. Follow the procedure below:

- 1) Power up the actuator.
- 2) Hold down the programming pushbutton until the LED lights up (about 4 seconds).
- 3) Release the key.
- 4) Within 20 seconds press the transmitting radio interface programming pushbutton or press the wire control device key.
- 5) Programming will be completed when the LED flashes and then turns OFF.
- 6) Repeat the operating sequence from 2 through 5 for all the radio control devices to be programmed.

To cancel all programming in the actuator proceed as follows:

- 1) Power up the device.
- 2) Hold down the programming pushbutton; after 4 seconds, the LED will turn on; hold down the pushbutton until the LED turns OFF.
- 3) Release the key.
- 4) When the LED flashes and then turns OFF, all previously programming will be cancelled.



## WARNING! RISK OF ELECTRIC SHOCK.

Press the programming pushbutton using a phase-tester or electrically-insulated screwdriver only. This operation must be carried out by qualified personnel only.



# My Home system key card switches

H4648 - H4649 - LN4648 - LN4649

## Description

Hotel room power supply key card switch, available in the basic or in the RFID version (13.56 MHz frequency key card recognition). Thanks to the LED backlit slot, the device can be found in the dark. An automatic switch off delay can also be set.

It can be used with key cards with sizes between 45 mm and 54 mm (ISO).

The configuration can be performed in two ways:

- physical configuration, by inserting the configurators in their sockets
- virtual configuration, using the virtual configurator software.

On completion of the installation procedure, the device must be fitted with a front cover in the desired look (note: to be purchased separately; the item number will depend on the look selected).

## Technical data

Power supply from BUS:	18-27 Vdc
Max. absorption:	6 mA
Stand-by Absorption:	5 mA
Operating temperature:	(-10) – (+45) °C
RFID key card frequency:	13.56 MHz

## Dimensional data

2 flush mounted modules

## Physical configuration

Two modes:

- CENTRALIZED, to recall scenarios managed by the scenario programmer. When the key card is inserted and removed, the device forwards a signal to the scenario programmer, which depending on the scenarios set will activate the corresponding functions programmed.

A = 1-9 (CEN command address)

PL = 1-9 (CEN command address)

M1 = CEN

M2 = no configurator

DEL1 = no configurator

DEL2 = no configurator

Note: the insertion of the key card corresponds to "Pushbutton 1" of the control, while the removal of the key card corresponds to "Pushbutton 2" of the control

- SCENARIO, where by inserting the key card a group of actuators is enabled, and an entrance scenario is activated (through the scenario module), and by removing the key card an exit scenario is activated (through the scenario module), thanks to which all the group actuators will switch off and then disable after a set time delay.

A = 1-9 (as scenario module)

PL = 1-9 (as scenario module)

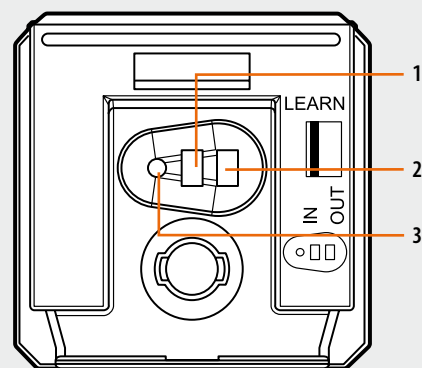
M1 = 1-8 (activation of the corresponding scenario: see table B)

M2 = no configurator

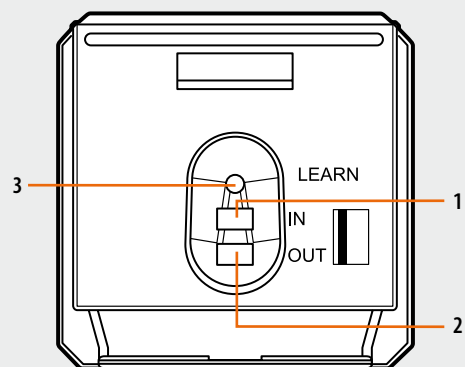
DEL1 = 0 - 9 (switching on time delay at the insertion of the key card: see table A)

DEL2 = 0 - 9 (switching off time delay after the removal of the key card: see table A)

Front view

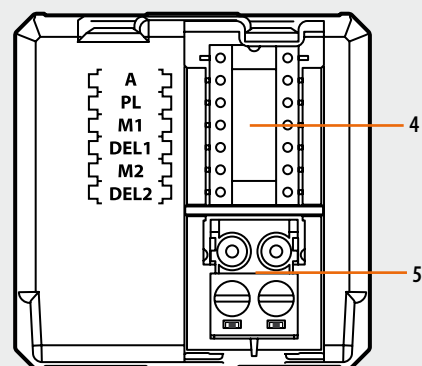


H4649 - LN4649



H4648 - LN4648

Rear view



## Legend

1. Programming key: Learn IN
2. Programming key: Learn OUT
3. LED
4. Configurator socket
5. BUS connector

## H4648 - H4649 - LN4648 - LN4649

Table A	
Configurator value	Time
0	0
1	1 min.
2	2 min.
3	3 min.
4	4 min.
5	5 min.
6	10 min.
7	15 min.
8	15 sec.
9	30 sec.

Table B	
Configurator value	Scenario - Group
1	Scenario-group (Sce1=1, Sce2=9, Gr=1)
2	Scenario-group (Sce1=2, Sce2=10, Gr=2)
3	Scenario-group (Sce1=3, Sce2=11, Gr=3)
4	Scenario-group (Sce1=4, Sce2=12, Gr=4)
5	Scenario-group (Sce1=5, Sce2=13, Gr=5)
6	Scenario-group (Sce1=6, Sce2=14, Gr=6)
7	Scenario-group (Sce1=7, Sce2=15, Gr=7)
8	Scenario-group (Sce1=8, Sce2=16, Gr=8)

Note: Sce 1 = scenario activated on insertion  
Sce 2 = scenario activated on removal  
Gr = group of actuators

## SCENARIO mode programming

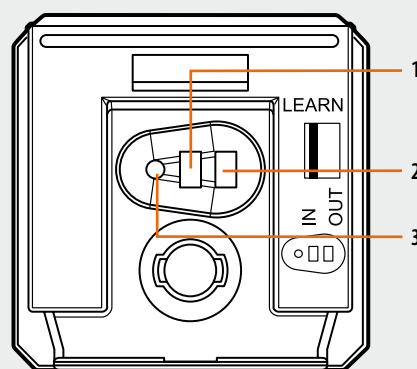
### SCENARIO mode programming

This operation is performed to create a link between the key card switch and the scenario module. The procedure is as follows:

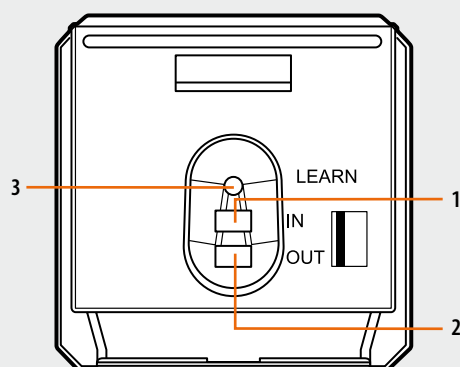
- 1) Power the key card switch. Check that the scenario module is in programming mode, with the green LED on;
- 2) Press and hold down programming key 1 (Learn IN) or 2 (Learn OUT) until the LED starts flashing (approximately 3 seconds);
- 3) Create the scenario using the system controls and actuators;
- 4) Once the scenario has been saved, briefly press programming key 1 (Learn IN) or 2 (Learn 2) to exit the programming status;
- 5) The scenario module will also have to exit programming status (see the scenario module technical information).

### Cancelling the programming in SCENARIO mode:

- 1) Power the key card switch. Check that the scenario module is in programming mode, with the green LED on;
- 2) Press and hold down programming key 1 (Learn IN) or 2 (Learn 2) for 8 seconds. after 3 seconds the LED will turn on, after a further 5 seconds it will turn off again;
- 3) Release the key;
- 4) The LED flashing, followed by the LED switching off, indicates that the programming has been cancelled;
- 5) The scenario module will also have to exit programming status (see the scenario module technical information).



H4649 - LN4649



H4648 - LN4648

1. Programming key: Learn IN
2. Programming key: Learn OUT
3. LED



## Special control

H4651M2 - L4651M2 - AM581M2

### Description

The two-module flush mounted and lowered special control has 4 pushbuttons and 2 green/red two-colour LEDs (LIVING and MÄTIX versions), or 4 blue/red two-colour LEDs (Axolute version). The LEDs may be adjusted or excluded using the pushbutton on the control. The control can be used for performing both standard and special functions (timed ON, scenario control, timer control, dimmer, functions for video door entry system and sound system).

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&go, Push&Learn, Project&Download).

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption with maximum LED intensity:	6 mA for H4651M2 8.5 mA for L4651M2 and AM581M2
Operating temperature:	5 – 35°C

### Dimensional data

Size: 2 flush mounted modules

### MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

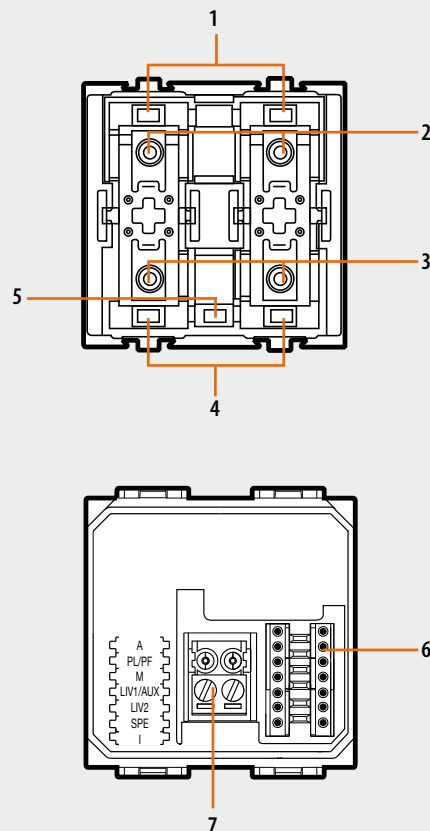
- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

### Physical configuration

The special control may also be used in systems with SCS/SCS gateways (item F422). If the control is installed on the BUS of an interface, it will be possible to directly control the actuator on the BUS of another interface, without the need for intermediate auxiliary controls. For this, the I configurator, representing the interface address on which BUS is the actuator to control, must be used. The logic expansion interfaces on the system must be numbered from 1 to 9. When I=0, the device on the local line is controlled, while if I=CEN, the line controls a device installed on the riser. With the new control, it is therefore possible to set addresses for 81x9 devices connected to the buses for the 9 interfaces + 81 devices in the riser, for a total of 810 addresses. The M, LIV1 and LIV2 sockets are also used for timer control functions.

Depending on the configuration of SPE, the device performs functions for several systems:

SPE = 0, 1, 2, 3, 4, 5, 6, 9, ON for Automation system  
SPE = 7 for Video door entry system  
SPE = 8 for Sound system



### Legend

1. LED
2. Upper pushbutton
3. Lower pushbutton
4. LED
5. Pushbutton for LED adjustment/exclusion
6. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
7. BUS

## H4651M2 - L4651M2 - AM581M2

**1) Mode with SPE=0 - Standard functions - Automation**

Possible function	Value configurator in M
Cyclic control. For point-point controls, the ON/OFF functions are performed by a short pressure, while a longer pressure will be used for the adjustments; for the other controls only the ON/OFF functions are performed	No configurator
ON control only	ON
OFF control only	OFF
On control using the upper key, OFF control using the lower key. For point-point controls, the ON/OFF functions are performed by a short pressure, while a longer pressure will be used for the adjustments	0/1
Control of rolling shutter UP/DOWN to end of stroke	
Control of monostable rolling shutter UP/DOWN (duration of the control for the whole time the key is pressed)	0/1
Pushbutton mode	PUL
Timed ON control	1 – 8
The control, which address is indicated in A and PL, sends a control for the scenario programmer, item MH200N	CEN

1) The controlled actuator switches OFF after an amount of time set by the configurators used, as shown in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4
5	5
6	15
7	30 sec.
8	0.5 sec.

2) Enabling the T1 (upper) and T2 (lower) keys to manage scenarios of the programmer MH200.

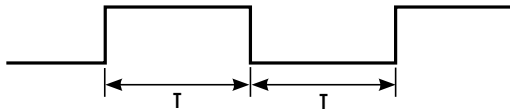
**2) Mode with SPE=1 - advanced functions - Automation**

Possible function	Value configurator in M
Locks the status of the devices to which the control is addressed	1
Unlocks the status of the devices to which the control is addressed	2
Unlocks with upper key and locks with lower key	3
ON short timed 2 seconds	7
Timed ON 10 min.	8

**3) Mode with SPE=2 - Flashing - Automation**

Possible function	Value configurator in M
On with flash <sup>1)</sup>	0 – 9

1) When an actuator receives a flashing control, this is performed by closing and opening the relay for a time equal to T.  
The T time depends on the configurators used in M, as shown in the table:



Configurator	Time (sec.)
0	0.5
1	1
2	1.5
3	2
4	2.5
5	3
6	3.5
7	4
8	4.5
9	5

**4) Mode with SPE=3 - Dimmer level - Automation**

Possible function	Value configurator in M
Selection of the adjustment level of Dimmer <sup>1</sup>	1 – 9

1) The configurator in M determines the adjustment in % of the load power.  
as indicated in the table

Configurator	% P of load
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90

**5) Mode with SPE=4 - scenario repetition - Automation**

Possible function	Value configurator in M
Repetition of scenario 1 - 9 of the scenario module which address is specified in A and PL	1 – 9

## H4651M2 - L4651M2 - AM581M2

## 6) Mode with SPE=5 - enhanced dimmer functions - Automation

## Possible function

## Value configurator in M

Selection of the 0 – 9 SOFT-START and SOFT-STOP speeds (see table below) and selection of the fixed adjustment level from 1% to 99% through the LIV1=0-9 and LIV2=0-9 sockets. Control is cyclic, with ON at the selected level, and OFF. If LIV1=LIV2=0, the control enables to switch between ON (at the last saved level) and OFF, with a short pressure. When using point-point controls, the adjustment occurs with a long pressure. The function is only active if the device address corresponds to a dimmer actuator.

0 – 9

Configurator	Soft-start and soft-stop time (sec.)
0	1
1	2
2	3
3	5
4	10
5	20
6	40
7	1 min.
8	2 min.
9	4 min. 15 sec.

## 7) Mode with SPE=6 - Scenario control - Automation

The special control does not manage the scenarios by saving them in its own memory, but has the function of recalling, creating or changing 4 scenarios in the scenario Module F420.

The A and PL positions of the special control must correspond to those of the scenario module, while the association of each key of the control with one of the scenarios saved, is performed by configuring the M socket.

Value configurator in M	Key 1 (T1)	Key 2 (T2)	Key 3 (T3)	Key 4 (T4)
1	scenario 1	scenario 2	scenario 3	scenario 4
2	scenario 5	scenario 6	scenario 7	scenario 8
3	scenario 9	scenario 10	scenario 11	scenario 12
4	scenario 13	scenario 14	scenario 15	scenario 16

NOTE: M=1 – 4 identifies the group of the scenarios to control with the four keys, T1, T2, T3 and T4.

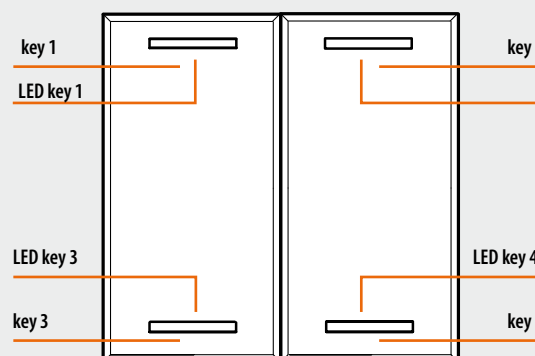
## Scenario programmer:

Scenarios: in order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

- 1) Press one of the four keys on the special control to which the scenario is to be associated for 3 seconds, the corresponding LED will begin to flash.
- 2) Set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions.
- 3) Confirm the scenario by quickly pressing the corresponding key on the special control to exit programming mode.
- 4) To change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1.

To call a set scenario just press its pushbutton on the control quickly. To completely delete a scenario, press the corresponding key for 10 seconds.

## Scenario management keys



NOTE: The image is shown as reference. The position of the keys is the same for all the Legrand automation ranges.

**8) Mode with SPE=7 - Video door entry system**

Possible function	Possible function
Door lock control; A and PL are the address (two digits) of the entrance panel for which to control the door lock using the T3 key (bottom left); the T4 key (bottom right) controls the door lock of entrance panel EP (A/PL)+2, the T1 key (top left) controls the door lock of entrance panel EP (A/PL)+1 and the T2 key (top right) the one of entrance panel EP (A/PL)+3.	1
Control for call to the floor; A and PL are the address (two digits) of the handset to call.	2
Control to switch on the staircase lights; A and PL are the address (two digits) of the handset from where the staircase lights are controlled.	3

**9) Mode with SPE=8 - Sound system**

This function is used to control the amplifiers and the sound system sources.

When A, PL/PF and M are correctly configured, the following functions are performed:

- 1) A = 1-9 address of the amplifier room to control  
PL/PF = 0-9 amplifier address to control  
M = 0 (Follow-me mode)\*
- 2) A = AMB - Room configuration  
PL/PF = 0-9 configuration of the room to control ( in this case all the amplifiers of the same room will be controlled)  
M = 1 (activation of sound source S=1)\*
- 3) A = GEN this control enables switching ON all the amplifiers in the home  
PL/PF = -  
M = 4 (activation of sound source S=4)\*

**NOTE (\*)**: M = 1-4 indicates the source to activate before switching the amplifier on.  
If M=0, source 1 is switched on without first switching OFF the sources (follow-me mode).

In all SPE=8 modes, the sockets of LIV1, LIV2 and I must not be configured.

Example:

- if A=1, PL/PF=1 and M=3, the radio control will manage the amplifier with address A=1 and PF=1, and will activate source no. 3.

In sound system mode the keys on the special control perform the following functions:

- 1) With a short pressure of T1, the following sequence is sent:
  - ON of the sources, source 1 is switched on only if M=0;
  - ON of the amplifier.
- 2) With an extended pressure of T1:
  - for point-point controls, if the amplifier is already on, only the volume is adjusted (VOL+); if the amplifier is OFF, the switch on sequence is sent first;
  - for Room, Group and General controls, only the volume is adjusted.
- 3) With an extended pressure of T3, the volume is adjusted (VOL-). A short pressure sends the OFF control to the amplifier.
- 4) When T2 is pressed the source is changed.
- 5) T4 is the control for the active source.

**10) Mode with SPE=9 - enhanced dimmer functions version 0/I - Automation**

Possible function	Value configurator in M
Selection of the SOFT-START and SOFT-STOP speed (see table below) and selection of the fixed adjustment level from 1% to 99% through the LIV1=0-9 and LIV2=0-9 sockets, according to the table for SPE=5. Control is ON at the level selected with the upper key and OFF at the one selected with the lower key. If LIV1=LIV2=0, a short pressure of the upper key will be enough for the ON control (at the last level saved), and of the lower key, for the OFF control; only in case of point-point controls, an extended pressure will give the possibility to perform adjustments (upwards with the upper key and downward with the lower key), on 100 levels at variable speed.	0 - 9

## H4651M2 - L4651M2 - AM581M2

### 11) Mode with SPE=ON - timer control

In this mode the control only works as a timer. In order to use this special control as a timer control, the meaning of the configurators is as follows:

M becomes M1

LIV1 becomes M2

LIV2 becomes S

Configure the M1 and M2 sockets for setting the timer minutes, and S for the timer seconds, in 5 sec. steps; see table.

If M1=M2=S=9, a control is sent with a 0.5 sec. time value. If M1=M2=S=0, the control is not timed and works in cyclic ON-OFF on the bottom left pushbutton. By correctly selecting the sub keys, it is possible to only send timer controls or, using the two right keys, the usual ON, OFF or dimmer adjustment controls.

S value (LIV2)	Time (sec.)
0	0
1	5
2	10
3	15
4	20
5	25
6	30
7	35
8	40
9	45

### 12) Management of input auxiliaries (AUX)

The configurator in AUX indicates the auxiliary channel number which activates the control. On receiving a message sent on the AUX channel indicated, the device sends the control for which it is configured, as if its own control pushbutton had been pressed.

#### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- double light control
- double disable control
- double scenario control
- double CEN control
- double scenario PLUS control
- double CEN PLUS control
- double AUX control
- double video door entry system control
- double sound system control

#### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

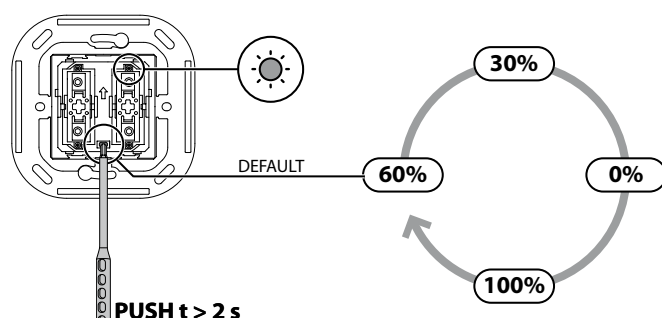
- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- double light control
- double disable control
- double scenario control
- double CEN control
- double scenario PLUS control
- double CEN PLUS control
- double AUX control
- double video door entry system control
- double sound system control

For more information on the functions see the glossary before the Technical sheets chapter.

#### LED adjustment





## Basic control for 2 independent loads

H4652/2 - L4652/2 - AM5832/2

### Description

Two-module, flush mounted and lowered special control with 4 pushbuttons and 2 green/red two-colour LEDs (LIVING and MÄTIX versions), or 4 blue/red two-colour LEDs (AXOLUTE version). The LEDs may be adjusted or excluded using the pushbutton on the control.

The device can control one single actuator for single or double loads, or two actuators for single or double loads, independent from each other.

The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Plug&go, Push&Learn, Project&Download).

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption with maximum LED intensity:	6 mA for H4652/2
	8.5 mA for L4652/2 and AM5832/2

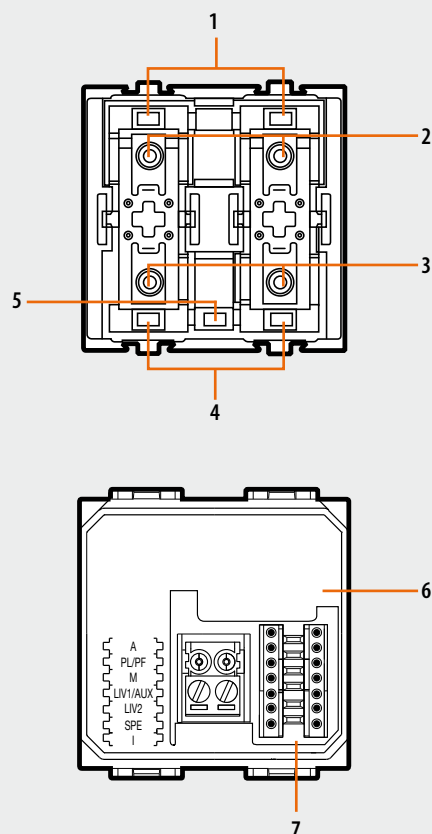
### Dimensional data

Size: 2 flush mounted modules

### MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

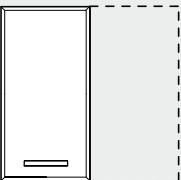
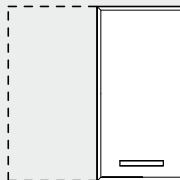
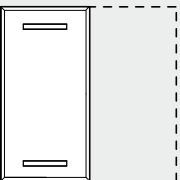
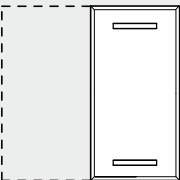
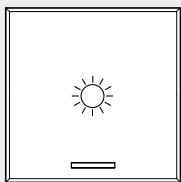
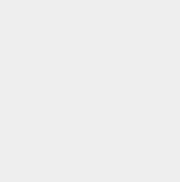
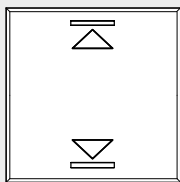
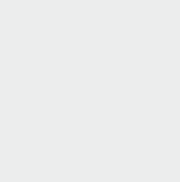


### Legend

1. LED
2. Upper pushbutton
3. Lower pushbutton
4. LED
5. Pushbutton for LED adjustment/exclusion
6. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
7. BUS

H4652/2 - L4652/2 - AM5832/2

# Physical configuration

Possible function	Combination of key covers used/Configurator in M1 and M2	
	1 function	2 functions
	       	
ON control	ON	–
OFF control	OFF	–
Timed ON control <sup>2)</sup>	1 – 8	–
Dimmer - ON control (upper key) OFF (lower key) + adjustment <sup>1)</sup>	–	0/1
Cyclical ON-OFF control + adjustment <sup>1)</sup>	no configurator	–
UP/DOWN rolling shutter to end of stroke	–	↑ ↓
Monostable rolling shutter UP/DOWN	–	↑ ↓ M
Bistable rolling shutter up-down movement. Blades adjustment if the pressure time is less than 1.5 s. Up-down to the end of travel if the control is pressed for more than 1.5 s.	–	6
Pushbutton (ON monostable)	PUL	–
Activation of scenarios managed by the programmer MH200N <sup>3)</sup>	–	CEN
1. If the control is sent to a dimmer actuator; 2. The controlled actuator switches OFF after an amount of time set by the configurators used, as shown in the table. 3. Enabling of keys T1 (upper) and T3 (lower) with 2 module key cover; Enabling of keys T1 – T2 (upper) and T3 – T4 (lower) with 1 module key cover; For MH200N programmer scenario management. If the device is used only to manage the scenario programmer MH200, do not configure positions A2, PL2.	Configurator	Time (minutes)
	1	1
	2	2
	3	3
	4	4
	5	5
	6	15
	7	30 sec.
	8	0.5 sec.

# Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- double scenario control
- double CEN control
- double scenario PLUS control
- double CEN PLUS control

### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

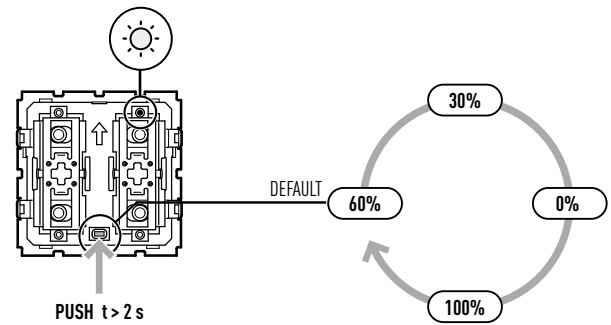
- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- double light control
- double CEN control
- double CEN PLUS control
- double AUX control

For more information on the functions see the glossary before the Technical sheets chapter.

### LED adjustment





## Basic control for 3 independent loads

H4652/3 - L4652/3 - AM5832/3

### Description

Three module flush mounted control, with six pushbuttons and three LED (in the LIVING and MÀTIX version) or 6 LEDs (in the AXOLUTE version), which signal the status of the control. The device can drive 1 relay single load actuators.

The device can be installed in a MY HOME system and configured physically or virtually. In this mode the control can drive actuators with 2 interlocked relays and send controls for the management of advanced devices, if configured using the CEN configurator. When installed as a component of the Lighting Management system, specific configuration procedures are used (Plug&go, Push&Learn, Project&Download).

### Technical data

Power supply from SCS BUS: 27 Vdc  
Operating power supply with SCS BUS: 18 – 27 Vdc  
Absorption: 9 mA

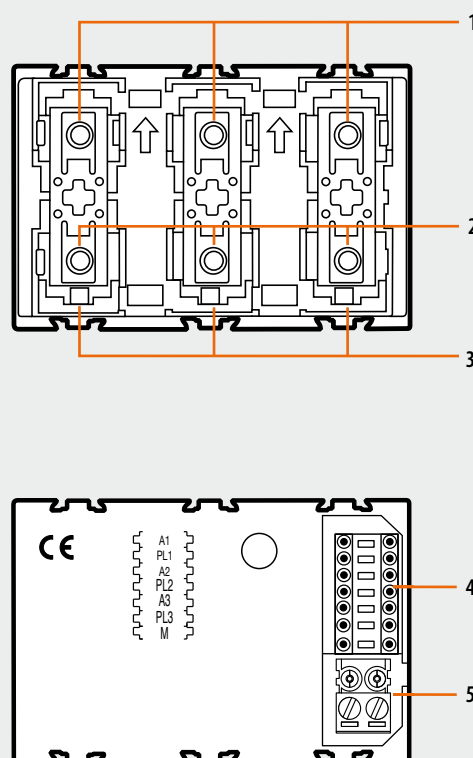
### Dimensional data

Size: 3 flush mounted modules

### MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

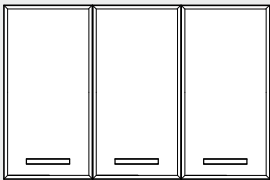


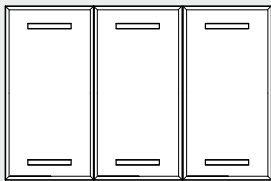
### Legend

1. Upper pushbutton
2. Lower pushbutton
3. LED
4. Configurator socket  
(attention, it must only be used in MY HOME systems with physical configuration)
5. BUS

**Physical configuration**

The device consists of three independent controls, and found on the back of the devices are three separate A and PL positions, which relate to the keys on the front of the control. From left to right, the three front buttons correspond to control 1 (A1, PL1), control 2 (A2, PL2), and control 3 (A3, PL3).

Configurator value in position M	Key covers used/function
	
No configurator	Cyclical ON/OFF
NOTE: if the control is associated to a dimmer actuator item H/L4678 item H/L4674 with operating modes cyclical ON-OFF, ON (upper key) and OFF (lower key) the brightness can also be adjusted.	

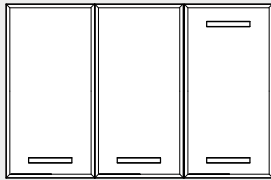
Configurator value in position M	Key covers used/function
	
3	UP/DOWN
6	monostable UP/DOWN
9	ON (upper key) OFF (lower key)
CEN	enabling the T1-T2-T3 (upper) and T4-T5-T6 (lower) keys to manage scenarios of the programmer MH200N*

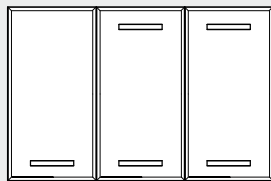
Note (\*): Do not configure positions A2, PL2 and A3, PL3.

**Virtual configuration**

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- double light control
- double rolling shutter control
- double CEN control
- double CEN PLUS control
- double AUX control

Configurator value in position M	Key covers used/function	
		
1	Cyclical ON/OFF	UP/DOWN
4	Cyclical ON/OFF	monostable UP/DOWN
7	Cyclical ON/OFF	ON (upper key) OFF (lower key)

Configurator value in position M	Key covers used/function	
		
2	Cyclical ON/OFF	UP/DOWN
5	Cyclical ON/OFF	monostable UP/DOWN
8	Cyclical ON/OFF	ON (upper key) OFF (lower key)

**Lighting Management configuration**

When installed in a Lighting Management system, the device can be configured in the following ways:

- Plug&Go (see the dedicated technical guide)
- Push&Learn
- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- double light control
- double CEN control
- double CEN PLUS control
- double AUX control

For more information on the functions see the glossary before the Technical sheets chapter.



## Flush mounted 1 relay actuator

H4671/1 - L4671/1 - AM5851/1

### Description

This device incorporates an electromechanical relay to control a single load. it therefore offers the advantage of being suitable for use as a control device, thanks to the front pushbuttons.



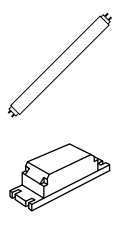
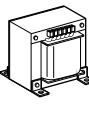
### Technical data

Power supply from BUS: 27 Vdc from BUS

Operation power supply with BUS: 18 – 27 Vdc

Absorption: 16.5 mA

Power/Absorption of driven loads:

Incandescent lamps			LED lamp		Linear fluorescent lamp		Ferromagnetic transformers	
Halogen lamp			Compact fluorescent lamp		Electronic transformer			
								
230 Vac	1380 W	6 A	150 W	Max. 3 lamps	150 W	0.65 A	2 A cosφ 0.5	460 VA

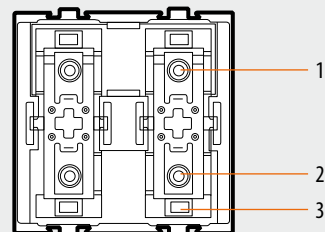
Dissipated power with max. load:

0.9 W

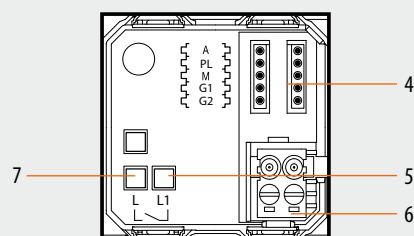
Size:

2 flush mounted modules

Front view



Rear view

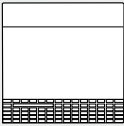
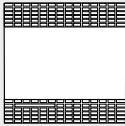


### Legend

1. Upper pushbutton
2. Lower pushbutton
3. LED
4. Configurator socket
5. Power line
6. BUS
7. 2x2.5 mm<sup>2</sup>

Configuration

The actuator performs all the basic operating modes that can be directly configured on the control, apart from those which involve the use of two interlocking relays. Also, the following table lists further operating modes possible with the configurator in the M position of the same actuator. The configurators connected to the G1 and G2 positions make it possible for the device to be associated to two separate belonging groups.

Possible function	Combination key cover used and configurator in M	
		
Cyclical ON/OFF	No configurator	—
ON pressing upper key - OFF pressing lower key	—	0/1
Cyclical ON/OFF The actuator ignores the Room and General controls	PUL	—
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA	—
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator is disabled after the time set in the Master actuator <sup>1)</sup> The control is configured in the M = 0/1 socket.	1-4	—

1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light OFF immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4



## Control/actuator

H4671M2 - LN4671M2 - AM5851M2

### Description

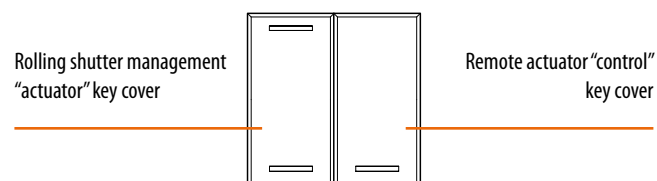
This device, with 4 pushbuttons and 4 two-colour LEDs at the front (green/red in the LIVING and MÀTIX versions, and blue/red in the AXOLUTE version), is fitted with two independent relays for the management of:

- 2 loads or 2 groups of loads, independent;
- 1 single load (rolling shutter motor).

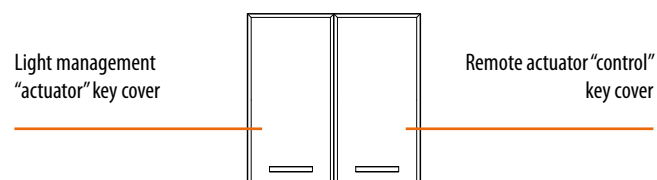
The actuator may also be configured for the management of the connected load, whilst at the same time operating as a "control device" for the management of one or more remote actuators, with operating modes typical of control device item art. H/L4652/2.

Below are the possible operating modes of the device and the combination with the key covers.

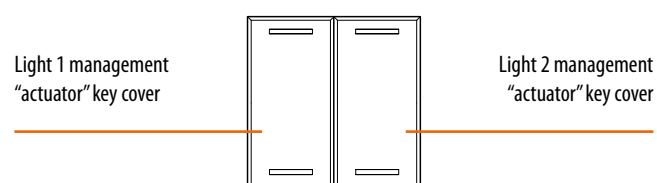
#### 1. Actuator for rolling shutter automation and remote "control" function



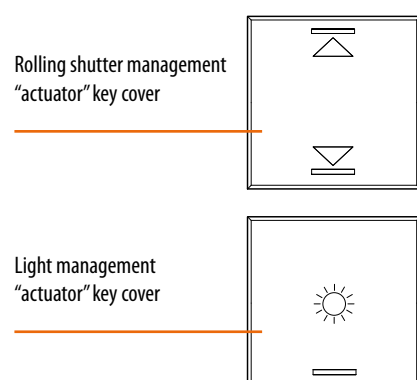
#### 2. Lighting and remote "control" function actuator



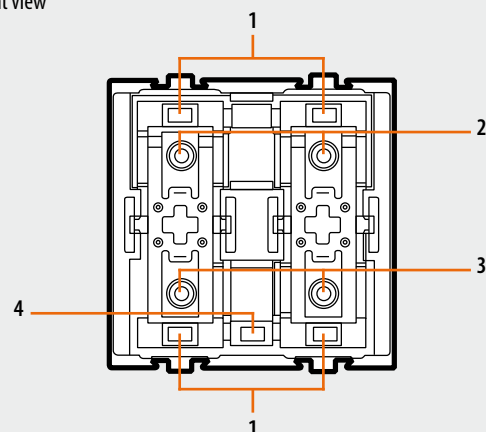
#### 3. Lighting actuator (2 independent loads)



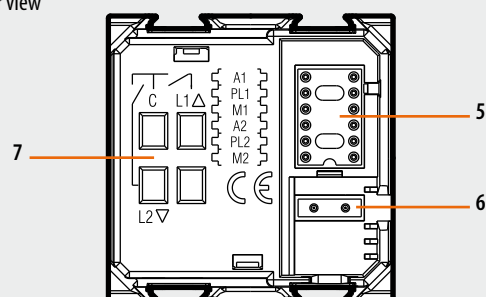
#### 4. Lighting and rolling shutter automation actuator



Front view



Rear view


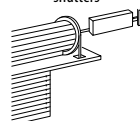
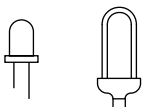


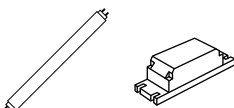

### Legend

- LED:
  - LIVING LIGHT: green with motor stopped, or orange (green + red) with motor in operation  
green with light OFF, and orange with light ON
  - AXOLUTE: blue with motor stopped, or blue + red with motor in operation  
blue with light OFF, or blue + red with light ON
- Upper pushbuttons
- Lower pushbuttons
- LED adjustment/disable pushbutton
- Configurator socket (attention, it must only be used in MY HOME systems with physical configuration)
- BUS
- Clamps (3x2.5 mm<sup>2</sup>) for connection to the load

Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Stand-by Absorption:	14 mA max
Operating temperature:	0 – 40 °C
Operating temperature:	(-5) – (+45) °C
Power/Absorption of driven loads:	

Incandescent lamps - Halogen lamp			Motor reducers for rolling shutters			LED lamp Compact fluorescent lamp		
								
230 Vac	460 W	2 A	460 W	2 A		70 W	Max. 2 lamps	

Linear fluorescent lamp - Electronic transformer			Ferromagnetic transformers		
					
70 W	0.3 A		2 A cosφ 0.5		460 VA

Standards, Certifications, Marks

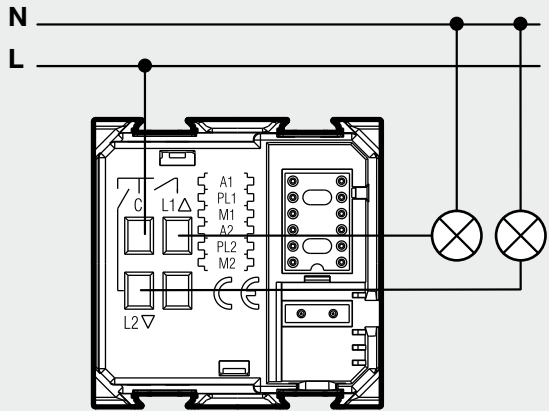
EN50090-2-2	Home and building electronic systems (HBES)
EN50090-2-3	General functional safety requirements for products intended to be integrated in HBES
EN50428	Switches and related accessories for use in home and building electronic systems (HBES)

Dimensional data

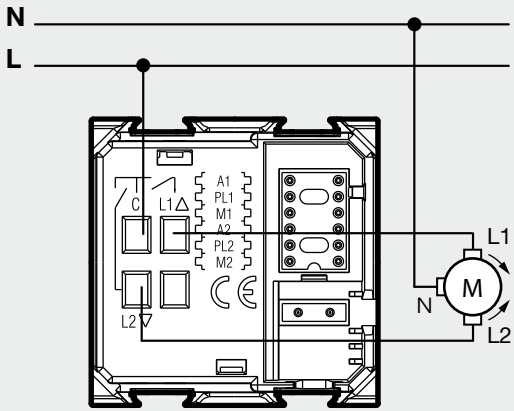
Size: 2 flush mounted modules

Wiring diagram

Light connection wiring diagram



Rolling shutter wiring diagram



## H4671M2 - LN4671M2 - AM5851M2

### Configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the Kit or the web server. The Virtual configurator software must be installed on the PC.

The PHYSICAL CONFIGURATION is performed by connecting the relevant configurators to the 6 corresponding sockets:


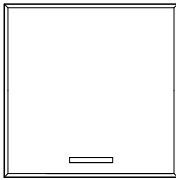
A1, PL1 and M1= definition of address and actuator operating mode

A2, PL2 and M2= definition of address and remote actuator "Control", or "Actuator 2 mode" operating mode.

### Actuator" operating mode – left pushbutton.

The A1 and PL1 positions define the address of the actuator.

The configurator in position M1 sets the function performed by the load connected to the device, as per the following table:

Possible function	Combination of key covers used/Configurator in M1	
	1 function	2 functions
		
<b>Lighting function</b>		
Cyclical ON/OFF	no configurator	–
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator is disabled after the time set in the Master actuator (see note 1)	1 – 4	–
ON pressing upper key - OFF pressing lower key	–	0/1
Cyclical ON/OFF	PUL	–
The actuator ignores the Room and General controls		
<b>Automation Function</b>		
Rolling shutter up-down movement with stop 2 minutes after the key has been pressed; the actuator ignores Room and General controls	–	OFF
Rolling shutter up-down movement with stop after the time set by the configurator (see table 1)	–	5 – 8
UP/DOWN rolling shutter monostable	–	↑ ↓ M
Bistable rolling shutter up-down movement. Blades adjustment if the pressure time is less than 1.5 s. Up-down movement to the end of travel if the control is pressed for more than 1.5 s.	–	↑ ↓

Note: for the lighting functions connect the load to clamps L1-C

Table 1: START/STOP time

Configurator M1	Time (minutes)
5	1
6, ↑ ↓ M, ↑ ↓	2
7	5
8	infinite until the next control

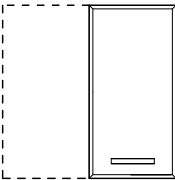
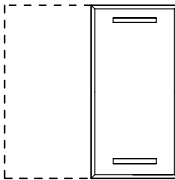
1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light OFF immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Configurator M1	Time (minutes)
1	1
2	2
3	3
4	4

**“Remote control actuator” operating mode – right pushbutton.**

The A2 and PL2 positions define the A and PL address of the remote actuator to manage.

The configurator in position M2 sets the function as per the following table:

Possible function	Combination key covers used and configurator in M2	
	1 function	2 functions
		
<b>Lighting function</b>		
ON control	ON	–
OFF control	OFF	–
Timed ON control <sup>2)</sup>	1 – 8	–
Dimmer - ON control (upper key)	–	0/I
OFF (lower key) + adjustment <sup>1)</sup>	–	–
Cyclical ON-OFF control + adjustment <sup>1)</sup>	no configurator	–
<b>Automation function</b>		
UP/DOWN rolling shutter to end of stroke	–	↑ ↓
UP/DOWN rolling shutter monostable	–	↑ ↓ M
Pushbutton (ON monostable)	PUL	–
Activation of scenarios managed by the programmer MH200N <sup>3)</sup>	–	CEN
	Configurator	Time (minutes)
	1	1
	2	2
	3	3
	4	4
	5	5
	6	15
	7	30 seconds
	8	0.5 seconds

1) If the control is sent to a dimmer actuator;

2) The controlled actuator switches off after an amount of time set by the configurators used, as shown in the table;

3) Enabling of keys T1 (upper) and T3 (lower) with 2 module key cover; enabling of keys T1 – T2 (upper) and T3 – T4 (lower) with 1 module key cover. For MH200N programmer scenario management. If the device is used only to manage the scenario programmer MH200, do not configure positions A2, PL2.

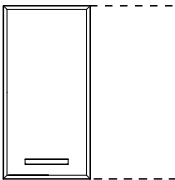
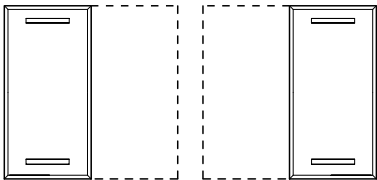
## H4671M2 - LN4671M2 - AM5851M2

### “Actuator” operating mode for two separate loads – left and right pushbuttons – M1=CEN

When the CEN configurator is connected to the M1 position, the actuator is preset for the management of two separate loads, connected to contacts C-L1 and C-L2 of the two relays, controlled locally using both front pushbuttons, right (load connected in C-L2) and left (load connected in C-L1). In practice, the “lighting” functions for the left pushbutton (see page 3) are also applied to the right pushbutton.

In the positions A1, PL1 and A2, PL2 it will be necessary to define the Room and Light Point addresses of the two loads.

When the M2 position is configured, the possible functions are:

Possible function	Combination key covers used and configurator in M2	
	1 function	2 functions
		
Cyclical ON/OFF	no configurator	–
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator is disabled after the time set in the Master actuator (see note 1)	1 – 4	–
ON pressing upper key - OFF pressing lower key	–	0/1
Cyclical ON/OFF The actuator ignores the Room and General controls	PUL	–

1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Configurator M1	Time (minutes)
1	1
2	2
3	3
4	4



# Dimmer actuator

H4678 - L4678

## Description

The device is a dimmer for controlling resistive loads or ferromagnetic transformers. Lets you switch on, switch OFF and adjust the illumination intensity of the load; it can be controlled with the BUS or local key. If you press the key briefly, the load will switch on or switch OFF. If you hold it pressed longer, the brightness can be adjusted. The actuator can signal any load problems such as, for example, the breaking of the lamp. It is also protected by a fuse, which can easily be replaced if it blows. The LED on the actuator changes colour based on the status of the device:

- green/blue LED: voltage – load OFF
- red: load ON
- flashing LED: wrong configuration

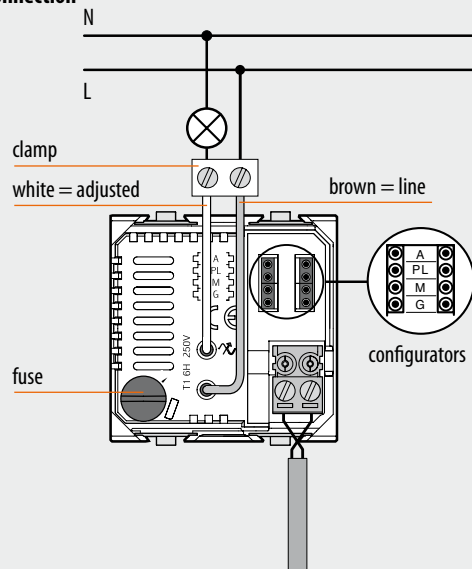
## Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	9 mA
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads:	

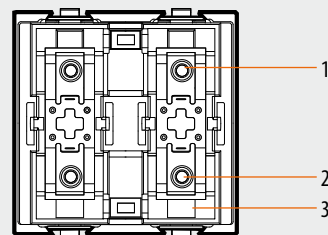
Incandescent lamps		Ferromagnetic transformers		
Halogen lamp				
230 Vac	60 - 300 W	0.25 - 1.30 A	0.25 - 1.30 A	60 - 300 VA

Dissipated power with max. load: 3 W  
Size: 2 flush mounted modules

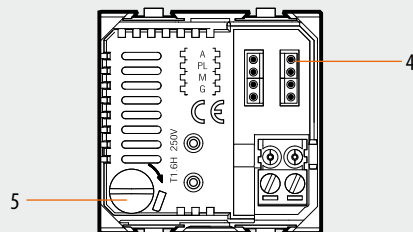
## Connection



Front view



Rear view

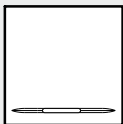
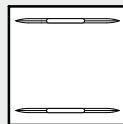


## Legend

1. Upper pushbutton
2. Lower pushbutton
3. LED
4. Configurator socket
5. Fuse

## Configuration

The actuator performs all the basic operating modes that can be configured directly on the control, apart from those which require the use of two interlocked relays.

Possible function	Combination key cover used and configurator in M	
		
Cyclical ON/OFF with short pressure and adjustment with long pressure	No configurator	—
ON pressing the upper key and adjustment UP. OFF on the upper key and adjustment DOWN.	—	0/1
Cyclical ON/OFF The actuator ignores the Room and General controls	PUL	—
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA	—
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set in the Master actuator <sup>1)</sup>	1 – 4	—

1) Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time.

The OFF control switches the light OFF immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Configurator	Time (minutes)
1	1
2	2
3	3
4	4



## Radio control with battery

HA4572 - HB4572 - L4572 - H4572PI - L4572PI

### Description

The radio control is used to drive wire actuators and recall scenarios of the system through the receiving interface (HC/HS4575 and L/N/NT4575N).

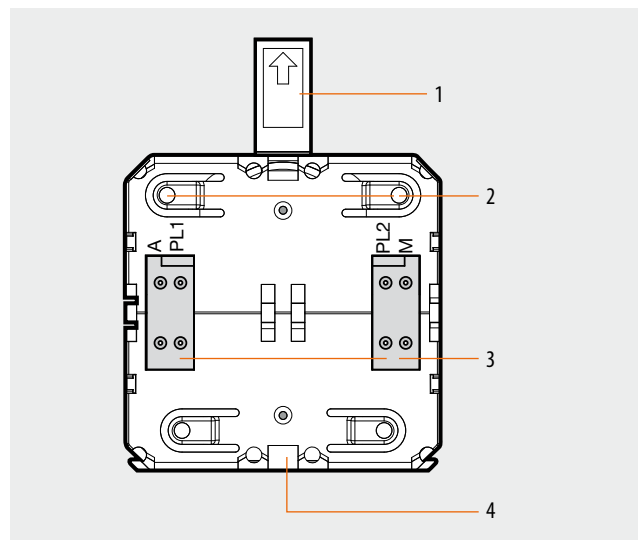
It's available on the catalogue in two versions:

- HA/HB/L4572 with surface mounting frame for installation using double sided tape (supplied) or using standard wall plugs. No flush mounted box or masonry work required. When used with LIVING cover plates remove the side sections of the supporting frame.
- H/L4572PI with frame, for flush mounted installation inside traditional supports.

The radio control is battery operated. When using the control for the first time make sure the battery protection tab is removed.

### Technical data

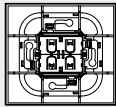


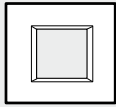
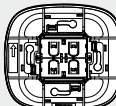


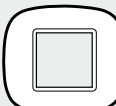
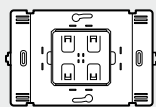



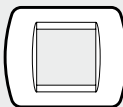
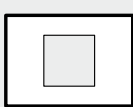
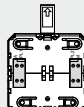


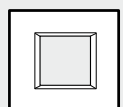
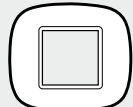

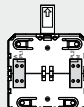



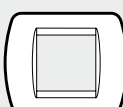
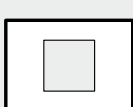

Power supply:	3V battery type CR2032 (Min. duration: 2 years)
Operating temperature:	0 – 40 °C
Radio frequency:	868 MHz
Range:	100 m in free field (metal and reinforced concrete walls reduce the range)
Type of modulation:	FSK
Size:	2 modules



### Legend

1. Tab for removing battery
2. Pushbuttons
3. Configurator socket
4. LED

### Control composition table

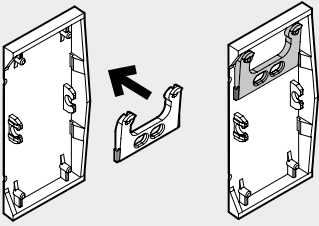
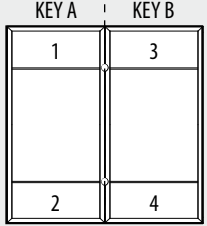
	Residential series		Control	Key cover		Cover plate	Support		
SURFACE	AXOLUTE	Square	 HA4572	 HC4919	 HS4919	 HA4802...			
		Elliptical	 HB4572	 HC4919	 HS4919	 HB4802...			
	LIVING LIGHT LIGHT TECH		 L4572	 L4919	 N4919	 NT4919	 L4802...	 N4819... NT4819...	
FLUSH MOUNTED	AXOLUTE		 H4572PI	 HC 4919	 HS 4919	 HA4802...	 HB4802...	 H4702	
	LIVING LIGHT LIGHT TECH		 L4572PI	 L4919	 N4919	 NT4919	 L4802...	 N4819... NT4819...	 L4702

## HA4572 - HB4572 - L4572 - H4572PI - L4572PI

### Configuration

The radio devices must be configured using the numeric configurators only; "virtual configuration" is therefore not applicable in this case.

The radio control must be configured by placing the appropriate configurators in sockets A, PL1, PL2 and M. If position PL2 is not configured, the right key will be disabled.

Possible function	Fitting of spacer below the key covers	Combination of key covers used / Configurator in M
		
ON control	YES	ON
OFF control	YES	OFF
ON control pressing the upper key, OFF pressing the lower key and long press to adjust the intensity	NO	0/1
Rolling shutter UP/DOWN control - to end of stroke	NO	↑ ↓
Rolling shutter up/down control for the time the key is pressed	NO	↑ ↓ M
Pushbutton mode	YES	PUL
Key A: Cyclical ON/OFF Key B: Up/Down rolling shutters	Key cover A: YES Key cover B: NO	1
Key A: Cyclical ON/OFF Key B: Rolling shutters – Up/Down	Key cover A: YES Key cover B: NO	2
Key A: ON - upper key, OFF - lower key Key B: Up/Down	NO	3
Key A: ON - upper key, OFF - lower key Key B: Rolling shutters – Up/Down	NO	4
Cyclical ON-OFF control and intensity adjustment with extended pressure	YES	No configurator
Scenario management (see the following table)		5 – 8
CEN control to manage MH200		CEN

### M=5 – 8 scenario module

This mode can be used only if the system includes a Scenario Module item F420 that allows you to activate (not program) a previously stored scenario. In this operating mode, positions A and PL1 represent the address of the scenario module on which one can operate.

The control activates a scenario from 1 to 16, depending on the configurator placed in position M and the key pressed, as described in the following table.

Value configurator in M	Key 1	Key 2	Key 3	Key 4
5	Scenario 1	Scenario 2	Scenario 3	Scenario 4
6	Scenario 5	Scenario 6	Scenario 7	Scenario 8
7	Scenario 9	Scenario 10	Scenario 11	Scenario 12
8	Scenario 13	Scenario 14	Scenario 15	Scenario 16



## Flat radio control no battery

HA4572SB - HB4572SB - L4572SB

### Description

The radio control is used to control the MY HOME system using the receiving interface HC/HS/L/N/NT4575SB. This special device does not require the use of a battery as it's already fitted with a piezo-electric generator.

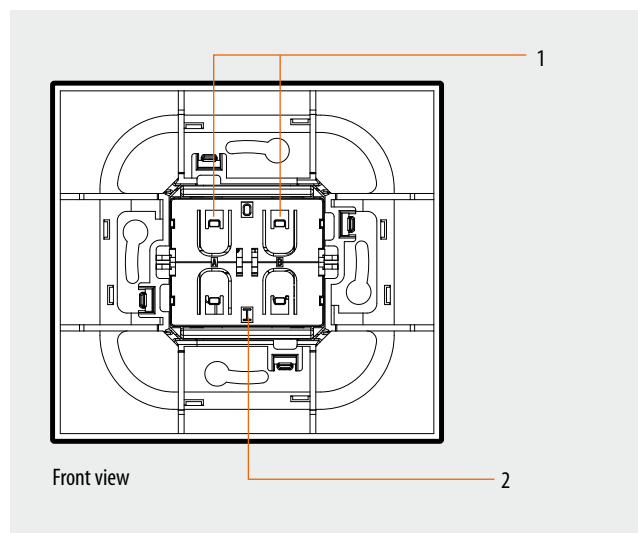
The control does not require flush mounted boxes as it can be installed with double-sided adhesive tape (supplied) or using standard wall plugs. no masonry work is therefore required.

### Technical data

Power supply:	piezo-electric generator
Operating temperature:	0 – 40 °C
Radio frequency:	868 MHz
Range:	70 m in free field (metal and reinforced concrete walls reduce the range)
Type of modulation:	ASK
Size:	2 modules

### Configuration

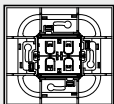


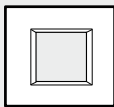
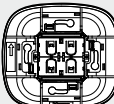


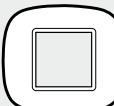
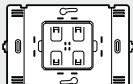



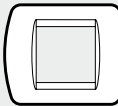

The radio control does not have positions for the configuration of the operating modes, as these are set by configuring the SPE position of the radio receiver HC/HS/L/N/NT4575SB.



### Legend

1. Pushbuttons
2. Piezo-electric generator

### Control composition table

Residential series		Control	Key cover	Cover plate
SURFACE	AXOLUTE	Square  HA4572SB	  HC4919SB HS4919SB	 HA4802...
		Elliptical  HB4572SB	  HC4919SB HS4919SB	 HB4802...
	LIVING LIGHT LIGHT TECH	 L4572SB	   L4919SB N4919SB NT4919SB	  L4802... N4819... NT4819...



## 2 module flush mounted actuator 16 A

HC4672N - HS4672N - HD4672N  
L4672N - N4672N - NT4672N

### Description

The device is an actuator with 1 bistable relay sensor with local pushbutton for load forcing/local control for the Automation and/or Load control management functions.

#### In load control mode:

The actuator will be given a priority indicating the tripping order that will be followed by the F21 load control unit (e.g. Priority 1 will be the first load disabled if the threshold is exceeded). This priority coincides with the address that will be used in all configuration software programs. Using the forcing pushbutton it will be possible to re-enable the load for 4 hours after DISABLING by the central unit, or remove the load forcing previously set.

#### In automation mode, the actuator can perform the following functions:

- all operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays;
- possibility of group configuration (G);
- additional modes using the M configuration socket.

#### In mixed load control and automation mode, the following rules are followed:

The local key performs the load control management function (forcing/end of forcing)

- if the load is ENABLED or FORCED, the status of the relay follows the commands of the Automation system.

- if the load is DISABLED by the central unit for load management, the status of the relay does not follow the commands of the Automation system, but can only be re-enabled by a control, ENABLING or FORCING, from the load control management.

During disabling, the actuator keeps the statuses requested by the Automation commands in the memory. After RE-ENABLING the relay is placed in the status required by the last automation command.

This function has been conceived for applications where the load control management function is implemented, with the need of performing hourly load scheduling. If during DISABLING stage the relay is switched off due to the scheduling settings, when re-enabling takes place it will stay switched off.

The bistable relay enables preserving the status of the load also in case of lack of voltage from the SCS bus (e.g. device reset).

The device consists of 2 modules, so that it can be installed in supports of the Living, Light, Light Tech and Axolute series, and is provided with socket for 6 configurators: A, PL, G, M, P1, P2.

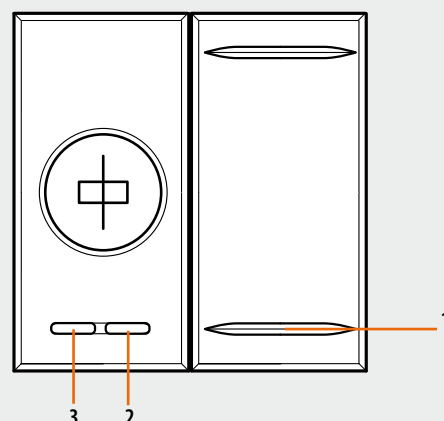
### Technical data

Operating power supply	
with SCS BUS:	18 – 27 Vdc
Absorption:	10 mA max
Operating temperature:	0 – 40 °C
Power/Absorption of driven loads:	Incandescent and halogen lamps 10 A / 2300 W LED lamp and Compact fluorescent lamps 500 W / Max. 10 lamps Linear fluorescent lamp and electronic transformers 4 A / 920 W Ferromagnetic transformers 4 A cosφ 0.5 / 920 VA

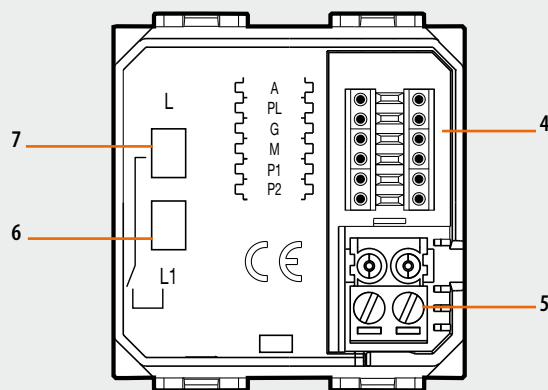
### Dimensional data

2 flush mounted modules

Front view



Rear view



### Legend

1. Local pushbutton for load forcing/local control
2. LED RED
3. Green/red two-colour LED
4. Configurator socket
5. BUS connection
6. Load connection
7. Phase connection

## Configuration

The device can be configured by connecting the physical configurators to the correct sockets.

The device is provided with socket for six configurators, which define:

- A/PL/G/M local address (room, light point), group, and mode in the automation system.
- P1/P2 priority in the load control management system, (P1 = tens, P2 = units)

### 1) Automation Mode:

The actuator performs all the operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays; it can also accept extended switch on, switch off, and time delay controls.

In addition, the following table lists the operating modes required for the configurator

connected to the M position of the actuator itself.

In the A and PL positions it will be necessary to indicate the device address, while the P1 and P2 positions must be configured equal to zero.

The pushbutton operates in ON/OFF cyclical mode.

Possible function	Configurator in M
Actuator as slave. It receives a command sent by a Master actuator with the same address	SLA
Pushbutton (On monostable) ignores Room and General controls	PUL
Master actuator with delayed Off control on the corresponding Slave actuator. Only for point-point type control. With the Off control, the Master actuator is disabled; the Slave actuator is disabled after the time set using the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

<sup>1)</sup> In the Off delayed mode, the master sends the Off command after a period of time set using the 1 - 4 configurator connected to M as shown in the table:

Configurator in M	Time (minutes)
1	1
2	2
3	3
4	4

### LED notifications based on the status of the actuator in automation mode:

Device status	Two-colour LED		Result	Red LED
	green	red		
Load OFF	Fixed ON	OFF	GREEN	OFF
Load ON	Fixed ON	Fixed ON	ORANGE	OFF

## HC4672N - HS4672N - HD4672N L4672N - N4672N - NT4672N

### 2) Load control management mode:

In the P1 and P2 positions it will be necessary to indicate the priorities from 01 to 63, the A, PL, G and M positions must be configured equal to zero.

LED notifications based on the status of the actuator in load control management mode:

Device status	Two-colour LED		Result	Red LED
	Green	Red		
Enabled ON	Fixed ON	Fixed ON	ORANGE	OFF
Enabled OFF	Fixed ON	OFF	GREEN	OFF
Forced	Fixed ON	Flashing 1 s/1 s	ORANGE flashing 1 s/1 s on GREEN	OFF
Disabled	Fixed ON	OFF	GREEN	Fixed ON

### 3) Load control management and automation:

In the P1 and P2 positions it will be necessary to indicate the priorities from 01 to 63.  
In A and PL it will be necessary to indicate the device address.

LED notifications based on the status of the actuator in load control management and automation mode:

Device status	Two-colour LED		Result	Red LED
	Green LED	Red LED		
Enabled + ON	Fixed ON	Fixed ON	ORANGE	OFF
Enabled + OFF	Fixed ON	OFF	GREEN	OFF
Disabled	Fixed ON	OFF	GREEN	Fixed ON
Forced + ON	Fixed ON	Flashing 1 s/1 s	ORANGE flashing 1 s/1 s on GREEN	OFF
Forced + OFF	Flashing 1 s/1 s	Flashing 1 s/1 s	ORANGE flashing 1 s/1 s	OFF

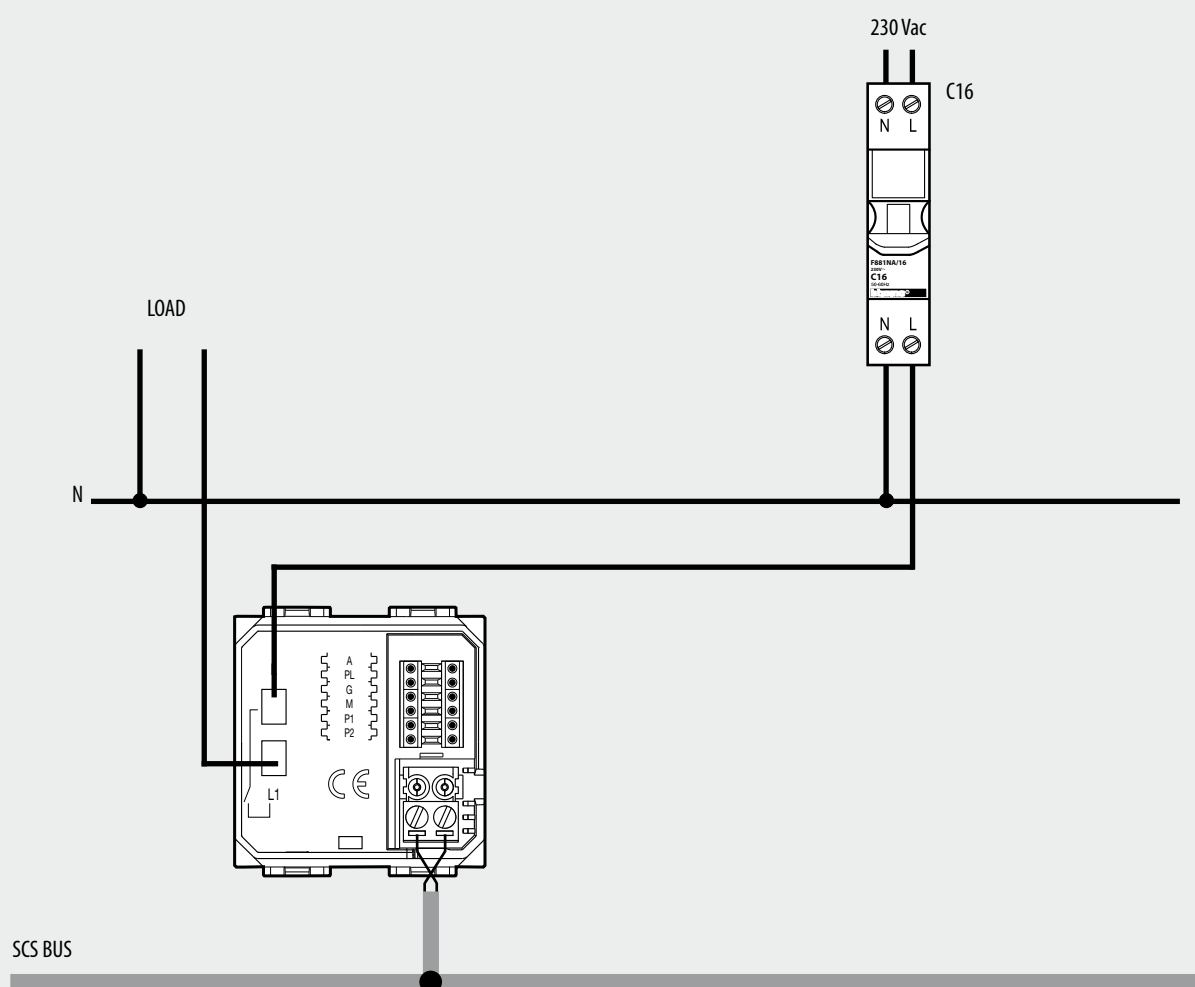
### Common LEDs signalling:

Device status	Two-colour LED		Result	Red LED
	Green LED	Red LED		
No configuration	Fixed ON	Flashing 128 ms/128 ms	ORANGE flashing 128 ms/128 ms on GREEN	OFF
Configuration error	Fixed ON	Flashing irregularly	ORANGE flashing irregularly on GREEN	OFF

HC4672N - HS4672N - HD4672N  
L4672N - N4672N - NT4672N

### Wiring diagrams

Actuator connection:





## Regulation rotative control

HD4563 - HC4563 - HS4563  
L4563 - N4563 - NT4563

### Description

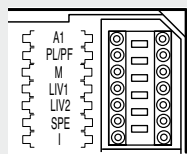
The regulation rotative control is used for the advanced management of dimmer actuators and sound systems. The central pushbutton can be used to switch the controlled dimmer ON and OFF, with times (soft-start and soft-stop) and switch-on intensity (from 1 to 99%) that can be set by configuring the device. The rotary knob instead accurately adjusts the controlled power from the minimum to the maximum value.

In the sound system it's used to send to the BUS controls for the management of various devices such as amplifiers and sound sources; the central pushbutton can be used for "ON/OFF", CD track, or saved radio station cycling control, while the knob can be used to adjust the volume of the loudspeakers. The control may be configured as point-point, room, and general.

### Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Max. Absorption:	5 mA
Operating temperature:	5 – 35 °C
Size:	2 flush mounted modules

### Configuration



<b>A</b>	ROOM
<b>PL/PF</b>	Light point/voice point (Sound system)
<b>M</b>	mode
<b>LIV1</b>	adjustment level 10 – 90
<b>LIV2</b>	adjustment level 1 – 9
<b>SPE</b>	special
<b>I</b>	address of the device to be controlled (see table 1 for details)

#### 1) Mode with SPE=0 - enhanced dimmer functions -

Can switch a dimmer actuator ON, selecting the level from 1% to 99%, and the soft-start and soft-stop speed. The times shown in the table refer to the maximum level. The knob perform adjustment on 99 levels.

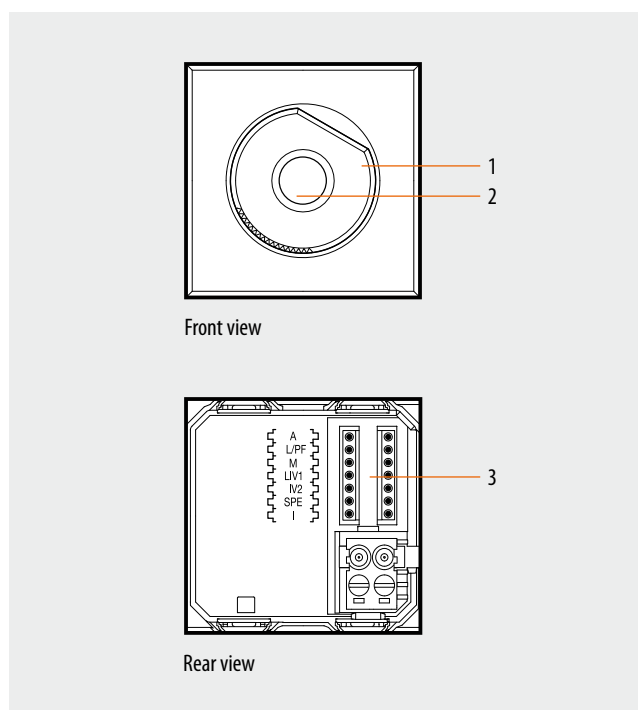
Possible function	Configurator in M	Configurator in LIV1 (tens)	Configurator in LIV2 (unit)
ON-OFF cyclic with selection of soft-start and soft-stop speed (see table 2). If LIV1=LIV2=0 the load switches ON at the last level saved	1 – 9	0 – 9	0 – 9
ON-OFF cyclic with switching ON at the level from 1-99%. If LIV1=LIV2=0 the load switches ON at the last level saved	-	0 – 9	0 – 9

Table 1: address of the device to be controlled

Configurator in I	Address
1 – 9	Systems with logical extension. Address of interface item F422 the BUS of which the dimmer to be driven is found on
0	The dimmer is found in the same system as the control
CEN	Systems with logical extension. The dimmer is found in the riser BUS and the knob control in one of the connected systems

Table 2: start/stop time

Configurator in M	Time (sec.)
0	default
1	1
2	3
3	5
4	10
5	20
6	40
7	1 min.
8	2 min.
9	4 min. and 15 sec.



### Legend

1. Knob
2. Pushbutton/LED
3. Configurator socket

## 2) Mode with SPE=1 - Sound system mode -

Possible function	Value configurator in M	Configurator in LIV1	Configurator in LIV2
Follow-me mode (*)	0	1 – 9 volume level when the amplifier is activated, without configurators the last set level activates	-
Address of the first source to activate	1 – 4	1 – 9 volume level when the amplifier is activated, without configurators the last set level activates	-

The **A** room can be configured from 1 to 9 for point-point function, or with **AMB** to identify a room, and finally with **GEN** for the activation of all the amplifiers of the house.

**NOTE (\*):** the Follow-me mode allows to have the same music in another room after switching OFF the amplifier of the room previously occupied, and switching ON the one in the current room.

## 3) Mode with SPE=2 - basic dimmer functions -

Can switch a dimmer ON, selecting the level from 1 to 9. If M = 0 the load switches ON at the last level saved. Unlike the mode with SPE=0 the knob can perform adjustments on 9 levels.

Possible function	Value configurator in M	Configurator in LIV1 (tens)	Configurator in LIV2 (unit)
Cyclical ON/OFF with switching ON at level 1 to 9	1 – 9	-	-



# Receiving radio interface

HD4575 - HC4575 - HS4575  
L4575N - N4575N - NT4575N

## Description

The interface lets you use radio controls to operate one or more actuators with a wire BUS, thus allowing you to create combined radio and wire systems.

**This device cannot interact with the radio control without batteries (HA/HB/L4572SB).**

## Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply SCS BUS:	18 – 27 Vdc
Absorption:	22 mA
Operating temperature:	0 – 40 °C
Radio frequency:	868 MHz
Size:	2 flush mounted modules

## Configuration

There are four ways to configure the interface:

- PHYSICAL EXPANSION for expanding Automation systems;
- SELF-LEARNING, used in combination with the remote controls item 3527 and item 3528;
- SCENARIO PROGRAMMER for the control of devices item MH200.
- REMOTE SCENARIOS, for managing scenarios stored by the scenario module item F420.

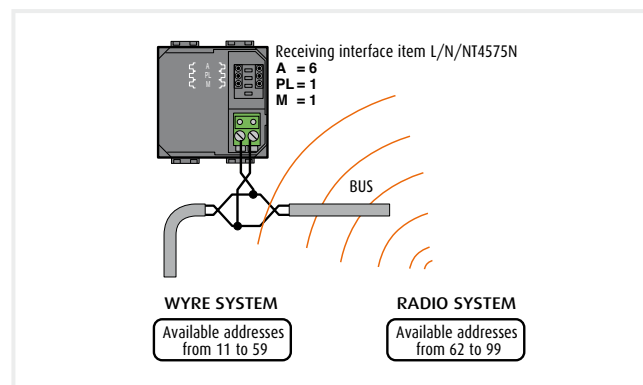
The interface has three configuration sockets: A and PL for the address and M for the operating mode.

### 1) Physical expansion mode - configurator M=1 -

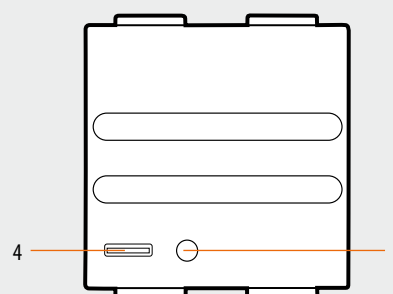
In this mode it is possible to install only one receiving interface for each system; it may be used on the same system of the transmitting interface item HC/HS4576 or item L/N/NT4576N (only if it is likewise configured in Physical expansion mode – M = 1).

Only radio control devices with a configurable address (sockets A, PL, M, G etc.) must be used, such as item HA/HB/L4572 and item H/L4572PI, etc.; these devices must also be configured.

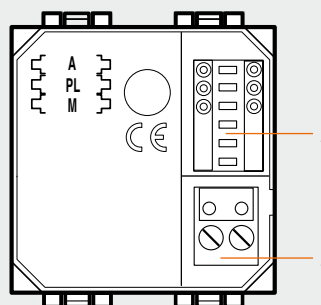
The configurators in A=1 – 9 and PL= 1 – 9 separate the wire system from the radio system; all addresses lower than A and PL are reserved for the wire system while all addresses higher than A and PL are reserved for the automation system. In the example below, the address of the receiving interface is A=6 PL=1; all the messages of controls with an actuator with address lower than 61 (59, 58, etc.) as recipient are transmitted on the BUS.



If there is an HC/HS4576 and L/N/NT4576N transmitting interface in the system, configured with M=1, the latter should have an address next to the one of the receiving interface. Example: A=6 PL=1 M=1 for the receiving interface and A=6 PL=2 M=1 for the transmitting interface.



Front view



Rear view

## Legend

1. Programming/reset pushbutton
2. Configurator socket
3. BUS
4. LED

## Programming

To associate a radio device to the receiving interface, follow the procedure below:

- 1) Press the radio interface programming pushbutton for 3 sec.: the red LED will turn on steadily; release the key.
- 2) Within 20 seconds press the key of the radio control you want to program; The red LED will start flashing quickly for about 2 seconds, thus indicating that the programming has been completed.
- 3) Now repeat 1) and 2) for all codes to be stored inside the interface (max. 128 codes).

To eliminate a code from the receiving interface, follow the procedure below:

- 1) Press the pushbutton for at least 8 seconds (after 3 seconds the red LED will turn on steadily and then after another 5 seconds it will turn OFF). Release the key. The red LED will turn on again.
- 2) Within 20 seconds press the key on the transmitting device using the key of the channel you want to cancel: the red LED will start flashing quickly for about 2 seconds, thus confirming the cancellation.
- 3) From now on, the cancelled key will no longer send any control to the BUS until it is re-programmed.

To cancel all codes from the receiving interface, press the pushbutton for about 12 seconds (after 3 seconds the red LED will turn on steadily, after another 5 seconds it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming that all programming conditions have been cancelled). Release the key.

## 2) Self-learning mode - configurator M = 0 -

This operating mode enables associating a single function to any key of the alarm radio remote control. By following the procedures below, the user can set, delete, or change this association.

It is necessary to insert the numeric configurators in the two A = 0 – 9 and PL = 1 – 9 positions of the interface in order to determine the address of the device in the system, which must be different from the actuator address.

**NOTE:** only radio controls or radio remote controls that cannot be configured can operate in this mode (e.g. 3527, 3528...).

It is also necessary that no transmitting interface, HS4576 and L/N/NT4576N is installed in the system, although several receiving interfaces may be present.

### Functions that the receiving interface can “learn”:

#### a. Automation

- ON/OFF - actuator; operation in cyclical mode. Actuator ON/OFF with short pressure, and dimmer adjustment with long pressure (point-point control only).
- Timed ON.
- Flashing.
- Rolling shutters UP; UP functioning till end of stroke in bistable mode. Long pressure executes UP function, short pressure executes STOP function.
- Rolling shutters DOWN; DOWN functioning till end of stroke in bistable mode. Long pressure executes DOWN function, short pressure executes STOP function.
- Lock/Unlock actuator.
- Scenario activation.

#### b. Video door entry system

- Door lock control (also during a conversation).
- Staircase light control.
- Floor call (also general).
- Auto-switching ON and cycling of cameras(only with SCS F442 modulator)

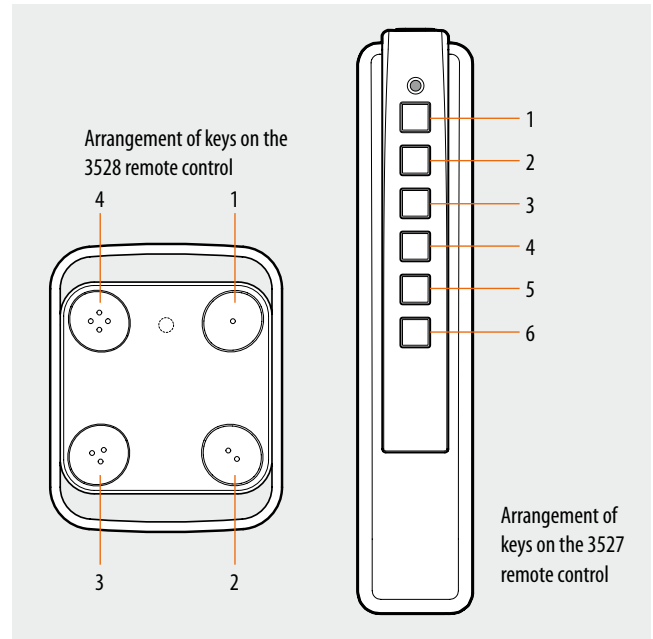
#### c. Sound system

- ON amplifier (always in follow-me mode) amplifier ON with short pressure, volume Up with extended pressure.
- OFF amplifier. amplifier OFF with short pressure, Volume Down with extended pressure.
- Cycling of sources.
- Change radio station or music track.

### Programming

To associate a different control to each of the alarm radio remote control channels, follow the procedure below:

- 1) Press the programming pushbutton of the radio interface for 3 seconds: the red LED will turn on steadily; release the pushbutton.
- 2) Within 20 seconds press the key of the remote control you want to program; the red LED will begin to flash, hence indicating the activation of the programming mode.
- 3) Within 5 minutes, set the function you want to associate to the remote control key using the actuator and/or corresponding control; the red LED will start flashing quickly for about 2 seconds, thus indicating that the programming has been completed.
- 4) You can repeat 1), 2) and 3) for all keys, even for a key that has already been associated (in case you want to change it). A maximum of 24 self-learning operations are possible (e.g. 4 remote controls item 3527).



#### d. Auxiliary channels

- Auxiliary lights ON/OFF; operation in cyclical mode.
- Rolling shutters UP; UP functioning till end of stroke in bistable mode. Long pressure executes UP function, short pressure executes STOP function.
- Rolling shutters DOWN; DOWN functioning till end of stroke in bistable mode. Long pressure executes DOWN function, short pressure executes STOP function.
- Reset.

To cancel the programming of one of the remote control keys, follow the procedure below:

- 1) Press the programming pushbutton on the radio interface for at least 8 seconds (after 4 seconds the red LED will turn ON steadily and then after another 5 seconds it will turn OFF). Release the key. The red LED will turn ON again steadily.
- 2) If you want to cancel the programming condition of a key, press it on the remote control within 20 seconds; the red LED will start flashing quickly for about 2 seconds, thus confirming the cancellation.
- 3) From now on, the cancelled key will no longer activate any control until it is re-programmed.

To cancel all programming conditions of the interface simultaneously, press the pin pushbutton for about 12 seconds:

the red LED will turn on steadily after 3 seconds; after another 5 seconds, it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming the cancellation of all programming conditions.

Release the key. Here you can completely reset the device by cancelling both the associated radio codes and the controls associated to the various remote control keys.

## HD4575 - HC4575 - HS4575 L4575N - N4575N - NT4575N

### 3) Scenario programmer mode - configurator M=CEN

In this mode press one of the keys of remote control item 3527 and item 3528 to activate the scenarios which are programmed and managed by the scenario programmer device item MH200.

In this operating mode the system must not have the transmitting interface item HC/HS4576 or item L/N/NT4576N; several receiving interfaces item HC/HS4575 and item L/N/NT4575N can also be installed.

The numeric configurators to define the address different from that assigned to the actuators must be connected to the two positions A = 0 – 9 and PL = 0 – 9 of the interface (A and PL must not be 0 at the same time)

### Programming

The programming procedure is that described in the “Programming” chapter interface in mode “Physical expansion – Configurator M=1”.

### 4) Remote scenario mode - configurator M = 6 – 8

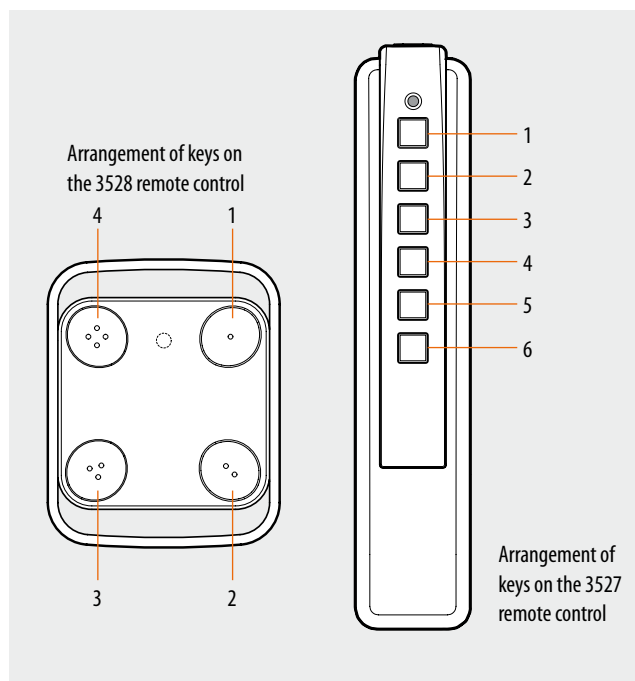
This operating mode enables you to associate each scenario stored by the scenario module item F420 to any key of the radio remote control item 3527 and item 3528.

In the two positions of the interface, A = 0–9 and PL =1-9, it will be necessary to connect the configurators corresponding to the scenario module to control.

The configuration in M determines the correspondence between the keys of the remote control and the scenarios stored, as shown in the table below.

**NOTE:** only radio controls or radio remote controls that cannot be configured can operate in this mode (e.g. 3527, 3528...).  
Furthermore, it is possible to install different receiving interfaces item HC/HS4575 or L/N/NT4575N.

Scenario number in the scenario module	Configurator M=6	Configurator M=7	Configurator M=8
Scenario 1	Key 1 *		
Scenario 2	Key 2 *		
Scenario 3	Key 3 *		
Scenario 4	Key 4 *		
Scenario 5	Key 5		
Scenario 6	Key 6		
Scenario 7		Key 1 *	
Scenario 8		Key 2 *	
Scenario 9		Key 3 *	
Scenario 10		Key 4 *	
Scenario 11		Key 5	
Scenario 12		Key 6	
Scenario 13			Key 1 *
Scenario 14			Key 2 *
Scenario 15			Key 3 *
Scenario 16			Key 4 *



**NOTE:** The keys shown with \* refer to remote control item 3528 with 4 channels.

### Programming

To program a scenario it is necessary:

- 1) To enable the programming mode of the Module item F420 so that the programming status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds).
- 2) Press the programming pushbutton of the interface for 3 seconds: the red LED will turn on steadily.
- 3) Within 20 seconds press the Alarm radio remote control key of the scenario you want to program on the radio remote control: the red LED will begin to flash, hence indicating the activation of the programming mode.
- 4) Set the scenario using the controls and/or actuators of the MY HOME system.
- 5) Press the interface pushbutton to exit the programming mode: the red LED will turn OFF
- 6) Repeat 2) through 5) for all the scenarios you want to program (maximum 128 codes).
- 7) To disable the possibility of programming, or of cancelling any scenarios, press the lock/unlock key of the scenario module until the corresponding LED turns red.

To cancel a scenario, follow the procedure below:

- 1) Enable the programming mode of the Module item F420 so that the programming status LED is green
- 2) Press the interface programming pushbutton for 8 seconds (after 3 seconds the red LED will turn on steadily and then after another 5 seconds it will turn OFF again). Release the pushbutton. The red LED will turn on again.
- 3) Within 20 seconds press the alarm radio remote control key of the scenario to be cancelled from the remote control: when the scenario module confirms the cancellation the red LED will start flashing quickly for about 2 seconds and then it will turn OFF.
- 4) Repeat 2) and 3) for all the scenarios you want to cancel.

To cancel all programming of the interface simultaneously, press the programming pushbutton for about 12 seconds (after 3 seconds the red LED will turn on steadily, after another 5 seconds it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming the cancellation). Release the key.

**NOTE:** This operation will not cancel the scenarios saved in the Scenario Module.

Cancelling all scenarios: to execute this operation, it is necessary to hold down the DEL key directly on the Scenario Module for 10 seconds after pressing the self-learning key so that the LED turns green.



# Receiving radio interface

HD4575SB - HC4575SB - HS4575SB  
L4575SB - N4575SB - NT4575SB

## Description

The receiving interface must be used to allow the radio control without batteries item HA/HB/L4572SB to operate the MY HOME system.

## Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	33 mA
Operating temperature:	0 – 40 °C
Radio frequency:	868 MHz
Size:	2 flush mounted modules

## Configuration

The interface can be configured in five different modes:

- SELF LEARNING
- STANDARD
- REMOTE SCENARIO MANAGEMENT
- SOUND SYSTEM
- VIDEO DOOR ENTRY SYSTEM

Positions A, PL1 and PL2 define the receiver addresses in the MY HOME system.

Positions M1 and M2 define the operating modes.

### 1) Self-learning mode - SPE=0-

This operating mode enables you to associate one of the following functions to each pair of keys, pair 1-3 and pair 2-4 of the radio control item HA/HB/L4572SB.

#### a) Automation

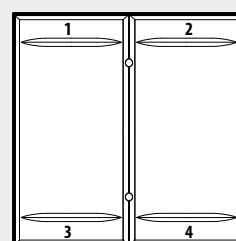
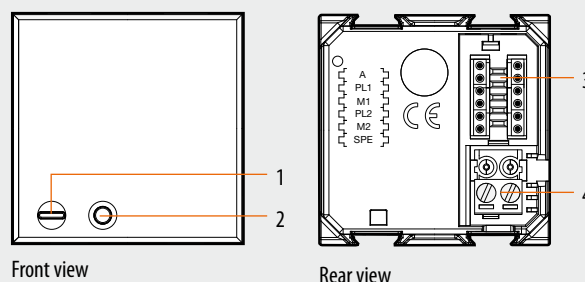
- ON/OFF - actuator; operation in O/I mode. Actuator ON/OFF with short pressure, and dimmer adjustment with long pressure (point-point control only). The upper key of the pair is automatically associated to the ON control and UP intensity adjustment, whereas the lower key is associated to the OFF control and DOWN intensity adjustment.
- Timed ON. Both keys of the pair execute the same function.
- Flashing. Both keys of the pair execute the same function.
- Rolling shutters – UP/DOWN; UP/DOWN functioning till end of stroke in bistable mode. The upper key of the pair is automatically associated to the UP control (UP with long pressure, STOP with short pressure) whereas the lower key is associated to the DOWN control (DOWN with long pressure, STOP with short pressure).
- Lock/Unlock actuator. Both keys of the pair execute the same function.
- Scenario activation. Both keys of the pair execute the same function.

#### b) Video door entry system

- Door lock control (also during a conversation). Both keys of the pair execute the same function.
- Staircase light control. Both keys of the pair execute the same function.
- Floor call (also general). Both keys of the pair execute the same function.
- Auto-switching ON and cycling of cameras(only with SCS F442 modulator). Both keys of the pair execute the same function.

#### c) Sound system

- ON/OFF amplifier; ON always works in Follow me mode. With short pressure amplifier ON/OFF, volume adjustment with extended pressure. The amplifier ON and Up volume adjustment controls are automatically associate to the upper key, while the amplifier OFF and Down volume adjustment controls are associated to the lower key.
- Cycle source/station-track change. The source cycling control is automatically associated to the upper key, while the station-track change control is associated to the lower key.



pair of  
keys 1 and 3

pair of  
keys 2 and 4

Front view of the radio control  
item HA/HB/L4572SB with key covers

## Legend

1. LED
2. Programming/reset pushbutton
3. Configurator socket
4. BUS

#### d) Auxiliary channels

- ON/OFF auxiliary lights; operation in O/I mode. The ON control is automatically given by the upper key of the pair while the OFF control is given by the lower key.
- Rolling shutters – UP/DOWN; UP/DOWN functioning till end of stroke in bistable mode. The upper key of the pair is automatically associated with the UP control (UP with long pressure, STOP with short pressure) whereas the lower key is associated with the DOWN control (DOWN with long pressure, STOP with short pressure).
- Reset. Both keys of the pair execute the same function.

A	0 – 9
PL1	1 – 9
M1	0
PL2	0
M2	0
SPE	0

### Self-learning mode programming

It is possible to associate up to 24 functions to each single receiving interface (hence, for each interface it is possible to associate up to 12 radio controls L4572SB). The association between the required function and the pair of keys is made by following the procedure described below.

In order to associate a function to each radio control key pair, follow the procedure below:

- 1) Press the interface programming pushbutton for 3 seconds. When the red LED turns on steadily. Release the pushbutton.
- 2) Within 20 seconds press a key of the pair you want to program on the radio control; the red LED will begin to flash, hence indicating the activation of the programming mode.
- 3) Within 5 minutes set the function you want to associate to the radio control key, using the corresponding device (e.g. control, actuator, amplifier, etc.). The red LED will start flashing quickly for about 2 seconds, thus indicating that the association has been achieved;
- 4) Repeat 1), 2) and 3) for all key pairs to be associated, even for a pair that has already been associated (in case you want to change it).



To cancel the programming of a radio control key pair, follow the procedure below:

- 1) Press the programming pushbutton of the interface for at least 8 seconds; after 3 seconds the red LED will turn on steadily; after another 5 seconds, it will turn OFF. Release the pushbutton. The red LED will turn on again steadily.
- 2) If you want to cancel a programming condition, press the key of its pair within 20 seconds; the red LED will start flashing quickly for about 2 seconds, thus confirming the cancellation.
- 3) From now on, the cancelled pair of keys will no longer activate any control until it is re-programmed.

To cancel all interface associations simultaneously, press the programming pushbutton of the receiving interface for about 12 seconds; after 3 seconds the red LED will turn on steadily, after another 5 seconds, it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming the cancellation of all programming conditions. Release the pushbutton.

### 2) Standard mode - SPE=1 -

This operating mode allows you to implement the automation standard functions (e.g. controlling lights and rolling shutters). In addition to positions A, PL1 and PL2 – which determine the receiving interface address item HC/HS/L/N/NT4575SB in the Automation system – it is necessary to configure positions M1 and M2, which determine the operating modes of the pair of keys (pair 1-3 and pair 2-4) of the associated radio control.

Possible function	Configurator in position M1 Pair of keys 1 and 3	Configurator in position M2 Pair of keys 2 and 4
		
Cyclical ON/OFF control 2) and intensity adjustment with long pressure 2)	No configurator	No configurator
ON control 2)	ON	ON
OFF control 2)	OFF	OFF
ON control by pressing the upper key, OFF by pressing the lower one and intensity adjustment with long pressure	0/1	0/1
UP control (buttons 1 and 2) and DOWN till end (buttons 3 and 4) of travel	↑ ↓	↑ ↓
UP control (buttons 1 and 2) and DOWN (buttons 3 and 4) rolling shutter – as long as the key is pressed	↑ ↓ M	↑ ↓ M
Pushbutton mode 2)	PUL	PUL
Timed ON control 1) 2)	1 – 8	1 – 8
CEN control to manage MH200	CEN	CEN

- 1) depending on the configurator placed in the control, the actuator turns OFF automatically after a time period specified in the table.
- 2) mount the shim supplied on the back of the key cover, so that only the lower key is used.

**NOTE:** if positions A2 and PL2 are not defined the pair of pushbuttons 2 and 4 will be disabled.

Configurator	Rated time (min.)
1	1
2	2
3	3
4	4
5	5
6	15
7	30 sec.
8	0.5 sec.

## HD4575SB - HC4575SB - HS4575SB L4575SB - N4575SB - NT4575SB

### Standard mode programming

In order to associate a radio control item HA/HB/L4572SB to the receiving interface HC/HS/L/N/NT4575SB, follow the procedure below:

- 1) Press the programming pushbutton of the interface for 3 seconds: the red LED will turn on steadily; release the key.
- 2) within 20 seconds, press a key of the pair you want to program on the radio control; The red LED will start flashing quickly for about 2 seconds, thus indicating that the programming has been completed.
- 3) now repeat 1) and 2) for all codes to be stored inside the interface, up to a maximum of 128.

To eliminate a code from the receiving interface item HC/HS/L/N/NT4575SB, follow the procedure below:

- 1) press the programming pushbutton of the interface for at least 8 seconds. (after 3 seconds the red LED will turn on steadily, after another 5 seconds, it will turn OFF). Release the key. The red LED will turn on again.

- 2) within 20 seconds, press a key of the pair you want to cancel a programming condition on the radio control; the red LED will start flashing quickly for about 2 seconds, thus confirming the cancellation.
- 3) from now on, the cancelled pair of keys will no longer activate any control until it is re-programmed.

To cancel all programming from the receiving interface HC/HS/L/N/NT4575SB, press the programming pushbutton on the interface for about 12 seconds (after 3 seconds the red LED will turn on steadily, after another 5 seconds it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming that all programming conditions have been cancelled). Release the key.

### 3) Remote scenario management mode - SPE=6 -

This operating mode can be used to manage the scenarios saved in the F420 scenario module using the HA/HB/L4572SB radio control. The configuration in A and PL1 of the receiving interface must correspond to that (A and PL) of the scenario module to be controlled.

The configuration in M1 determines the correspondence between the keys of the radio control and the scenarios stored in the Scenario Module.

A	0 – 9
PL1	1 – 9
M1	1 – 4
PL2	0
M2	0
SPE	6

Value configurator in M	Key 1	Key 2	Key 3	Key 4
1	Scenario 1	Scenario 2	Scenario 3	Scenario 4
2	Scenario 5	Scenario 6	Scenario 7	Scenario 8
3	Scenario 9	Scenario 10	Scenario 11	Scenario 12
4	Scenario 13	Scenario 14	Scenario 15	Scenario 16

### Scenario programming

To program a scenario it is necessary:

- 1) In order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the programming status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds).
- 2) Press the programming pushbutton of the interface for 3 seconds: the red LED will turn on steadily.
- 3) Within 20 seconds press the key of the scenario you want to program on the radio control: the red LED will begin to flash, hence indicating the activation of the programming mode.
- 4) Set the scenario using the controls and/or actuators of the MY HOME system.
- 5) Within 35 minutes, press the programming key on the interface to exit the programming mode: the red LED will turn OFF.
- 6) Repeat 2) and 5) for all the scenarios you want to program.
- 7) To disable the possibility of programming, or of cancelling any scenarios, press the lock/unlock key of the scenario module until the corresponding LED turns red.

To cancel a scenario, follow the procedure below:

- 1) Enable the programming mode of the Module item F420 so that the programming status LED is green.

- 2) Press the interface programming pushbutton for 8 seconds (after 3 seconds the red LED will turn on steadily and then after another 5 seconds it will turn OFF again). Release the pushbutton. The red LED will turn on again.
- 3) Within 20 seconds press the key of the scenario you want to cancel on the radio control: when the scenario module confirms the cancellation, the red LED will start flashing quickly for about 2 seconds and then it will turn OFF.
- 4) Repeat 2) and 3) for all the scenarios you want to cancel.

To cancel all programming of the interface simultaneously, press the programmings pushbutton for about 12 seconds (after 3 seconds the red LED will turn on steadily, after another 5 seconds it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming the cancellation). Release the key.

**NOTE:** This operation will not cancel the scenarios saved in the Scenario Module.

Cancelling all scenarios: to execute this operation, it is necessary to hold down the DEL key directly on the Scenario Module for 10 seconds after pressing the self-learning key so that the LED turns green.

## HD4575SB - HC4575SB - HS4575SB L4575SB - N4575SB - NT4575SB

### 4) Sound system mode - SPE=8 -

This operating mode enables implementing the sound system functions. In this operating mode the keys of the radio control operate as follows:

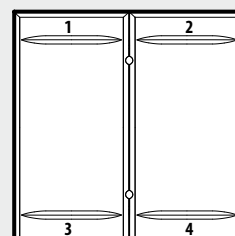
- **Key 1:** a short pressure activates the source and the amplifier. An extended pressure increases the volume.
- **Key 3:** a short pressure switches the amplifier OFF. An extended pressure decreases the volume.
- **Key 2:** changes sound source.
- **Key 4:** changes track or radio station.

The Room (A) and Loudspeaker (PL1/PF1) must be configured following the procedure below:

- A=0 – 9: is the amplifier room; PL1/PF1=0 – 9: is the amplifier loudspeaker;
- A=AMB: is for room controls; PL1/PF1=0 – 9: is the room the control is intended for;
- A=GEN: for general type controls; PL1/PF1 must be 0.

The configuration M1=1-4 defines the source to activate before switching ON the amplifier; If M1=0, source 1 is switched on without first switching OFF the sources (Follow-me mode).

The PL2 and M2 configurators must be equal to zero.



pair of  
keys 1 and 3

pair of  
keys 2 and 4

Front view of the radio control  
item HA/HB/L4572SB with key covers

Example:

- if A=1, PL1/PF1=1 and M=3, the radio control will manage the amplifier with address A=1 and PF=1, and will activate source no. 3.

### Sound system programming

In order to associate a radio control item HA/HB/L4572SB to the receiving interface HC/HS/L/N/NT4575SB, follow the procedure below:

- 1) Press the programming pushbutton of the interface for 3 seconds: the red LED will turn on steadily; release the key.
- 2) within 20 seconds, press a key of the pair you want to program on the radio control; The red LED will start flashing quickly for about 2 seconds, thus indicating that the programming has been completed.
- 3) now repeat 1) and 2) for all codes to be stored inside the interface, up to a maximum of 128.

To eliminate a code from the receiving interface item HC/HS/L/N/NT4575SB, follow the procedure below:

- 1) press the programming pushbutton of the interface for at least 8 seconds. (after 3 seconds the red LED will turn on steadily, after another 5 seconds, it will turn OFF). Release the key. The red LED will turn on again.

### 5) Video door entry system mode - SPE=9 -

This operating mode gives the possibility of interacting with the video door entry system, assigning to the radio control some functions like: staircase light switching ON, floor call, and entrance panel door lock opening.

The M1 (pair of keys 1 and 3) and M2 (pair of keys 2 and 4) mode configurators must be configured in one of the following ways:

- M=1: double door lock release control  
A and PL1 (if M1=1 and M2≠0) are the address of the entrance panel from which the door lock is controlled: key 3 controls the door lock of entrance panel (A/PL1), while key 1 controls the door lock of entrance panel (A/PL1)+1. A and PL2 (if M2=1) are the address of the entrance panel from which the door lock is controlled: key 4 controls the door lock of entrance panel (A/PL2), while key 2 controls the door lock of entrance panel (A/PL2)+1. The address of the entrance panel specified in A/PL1 or in A/PL2 must be lower or equal to 95.

- 2) within 20 seconds, press a key of the pair you want to cancel a programming condition on the radio control; the red LED will start flashing quickly for about 2 seconds, thus confirming the cancellation.
- 3) from now on, the cancelled pair of keys will no longer activate any control until it is re-programmed.

To cancel all programmings from the receiving interface HC/HS/L/N/NT4575SB, press the programming pushbutton on the interface for about 12 seconds (after 3 seconds the red LED will turn on steadily, after another 5 seconds it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming that all programming conditions have been cancelled). Release the key.

- M=2: Floor call control  
A and PL1 (if M1=2) and/or A and PL2 (if M2=2) are the address (two digits) of the handset to call.
- M=3: staircase light switching ON control  
A and PL1 (if M1=3) or A and PL2 (if M2=3) are the address (two digits) corresponding to the handset from which the staircase lights are controlled.

## HD4575SB - HC4575SB - HS4575SB L4575SB - N4575SB - NT4575SB

### Example of Configuration

Configuration radio interface HC/HS/L/N/NT4575SB

A	2
PL1	1
M1	1
PL2	6
M2	3
SPE	9

If the PL2 and M2 positions have not be configured, the right side keys (2 and 4) are disabled.

The only exceptions are as follows:

- M1=1, M2=0, PL2=0: quadruple door lock release.

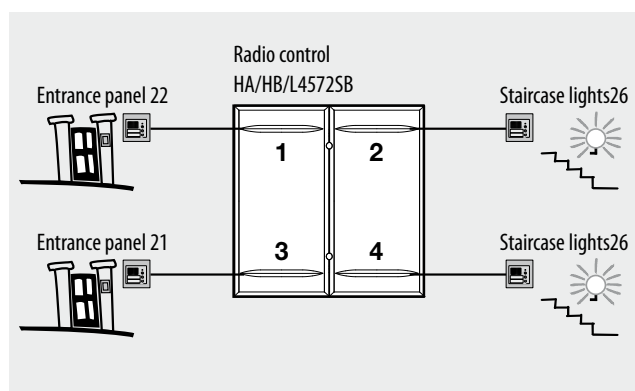
Radio interface configuration - HC/HS/L/N/NT4575SB

A	1
PL1	3
M1	1
PL2	0
M2	0
SPE	9

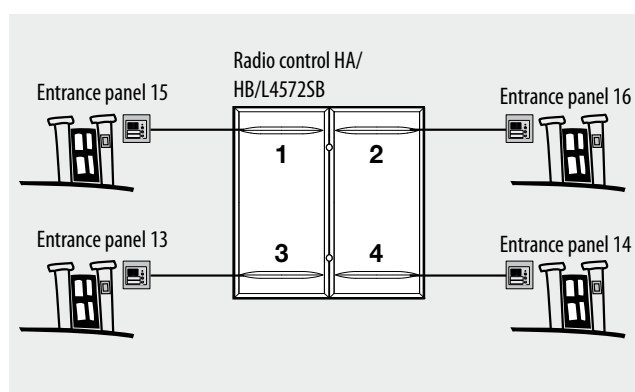
### Video door entry system programming

In order to associate a radio control item HA/HB/L4572SB to the receiving interface HC/HS/L/N/NT4575SB, follow the procedure below:

- 1) Press the programming pushbutton of the interface for 3 seconds: the red LED will turn on steadily; release the key.
- 2) within 20 seconds, press a key of the pair you want to program on the radio control; The red LED will start flashing quickly for about 2 seconds, thus indicating that the programming has been completed.
- 3) now repeat 1) and 2) for all codes to be stored inside the interface, up to a maximum of 128.



A and PL1 are the address (two digits) of the entrance panel for which the door lock is to be controlled: Key 3 controls the door lock of entrance panel (A/PL1), key 4 controls the door lock of entrance panel (A/PL1)+1, key 1 that of entrance panel (A/PL1)+2, and key 2 that of entrance panel (A/PL1)+3. The address of the entrance panel specified in A/PL1 must be lower or equal to 95.



To eliminate a code from the receiving interface item HC/HS/L/N/NT4575SB, follow the procedure below:

- 1) press the programming pushbutton of the interface for at least 8 seconds. (after 3 seconds the red LED will turn on steadily, after another 5 seconds, it will turn OFF). Release the key. The red LED will turn on again.
- 2) within 20 seconds, press a key of the pair you want to cancel a programming condition on the radio control; the red LED will start flashing quickly for about 2 seconds, thus confirming the cancellation.
- 3) from now on, the cancelled pair of keys will no longer activate any control until it is re-programmed.

To cancel all programmings from the receiving interface HC/HS/L/N/NT4575SB, press the programming pushbutton on the interface for about 12 seconds (after 3 seconds the red LED will turn on steadily, after another 5 seconds it will turn OFF and after another 4 seconds it will start flashing quickly for about 2 seconds, thus confirming that all programming conditions have been cancelled). Release the key.



## Radio transmitting interface

HD4576 - HC4576 - HS4576  
L4576N - N4576N - NT4576N

### Description

The interface lets you control one or more radio actuators from a control in the Automation wire system, thus allowing you to create combined radio and wire systems.

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	40 mA
Operating temperature:	0 – 40 °C
Radio frequency:	868 MHz
Range:	100 m in free field (metal and reinforced concrete walls reduce the range)
Size:	2 flush mounted modules

### Configuration

The interface can be configured in PHYSICAL EXPANSION mode.

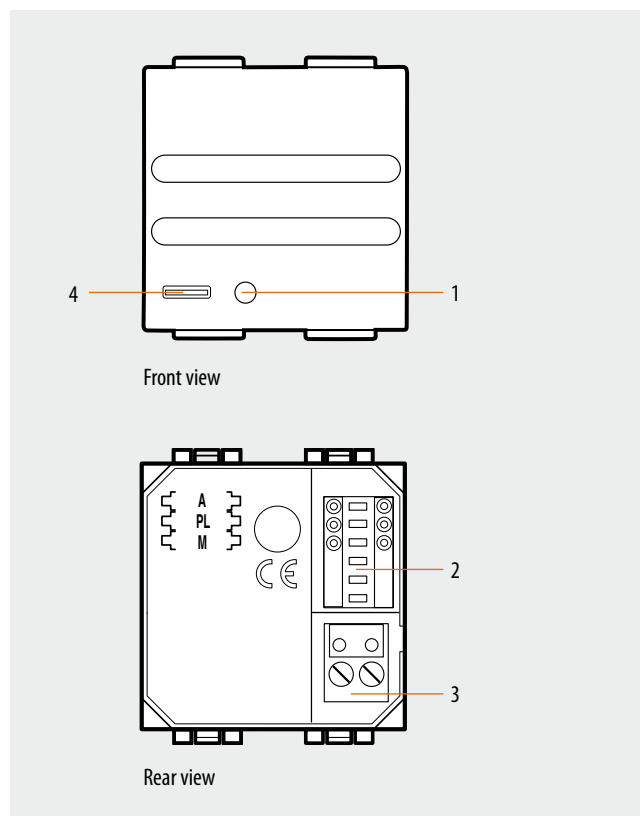
It is possible to install only one interface item HC/HS4576 or item L/N/NT4576N for each system; it may be used on the same system of the receiving interface item HC/HS4575 and item L/N/NT4575N (only if it is configured in physical expansion mode – M = 1).

The configurators in positions A and PL separate the wire system from the radio system; all addresses lower than A and PL are reserved for the wire system. All addresses higher than A and PL will be reserved to the radio part of the Automation system.

In the example below, the address of the receiving interface is A=6 PL=2; all control messages having an actuator with address higher than 62 (63, 64, etc.) as their recipient are radio-transmitted.

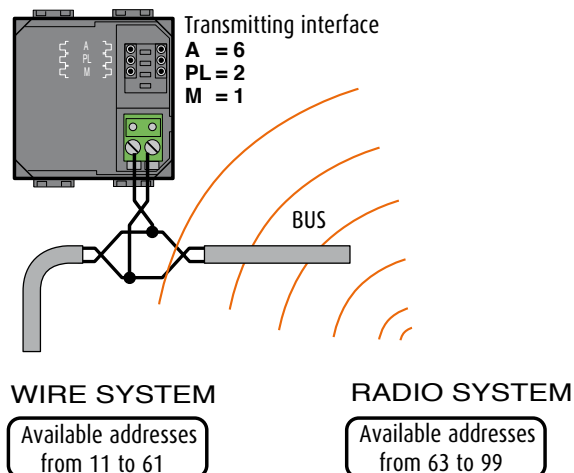
If there is a receiving interface, item HC/HS4575 and item L/N/NT4575N, in the system configured with M=1, the latter should have an address next to the one of the transmitting interface item HC/HS4576 and item L/N/NT4576N.

Example: A=6 PL=1 M=1 for the receiving interface and A=6 PL=2 M=1 for the transmitting interface.



### Legend

1. Programming/reset pushbutton
2. Configurator socket
3. BUS
4. LED





## Soft touch control

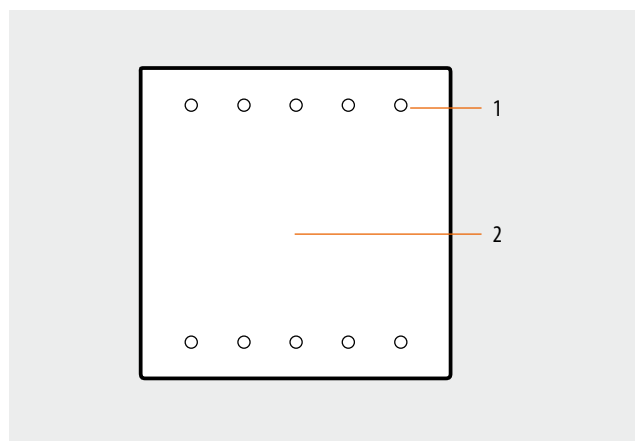
HD4653M2 - HC4653/2 - HS4653/2  
HD4653M3 - HC4653/3 - HS4653/3

### Description

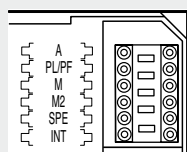
Two-module and three-module touch control. The difference between the two versions is only mechanical, the configuration procedures and the operating modes are the same. If the device is properly configured, it is possible to send controls for the automation system and sound system and to manage the scenarios stored in the scenario module.

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Max. Absorption:	18 mA
Operating temperature:	5 – 35 °C
Size:	2 flush mounted modules for item HC/HS4653/2
Size:	3 flush mounted modules for item HC/HS4653/3



### Configuration



<b>A</b>	room
<b>PL/PF</b>	Light point/voice point (sound system SPE=8)
<b>M</b>	mode
<b>M2</b>	mode 2 (scenario selection SPE=6)
<b>SPE</b>	special
<b>INT</b>	LED intensity adjustment

### Legend

1. LED
2. Sensitive area

Possible function	SPE	M
For point-point controls, it executes the cyclical ON/OFF function for short approaching and load power adjustment (dimmer actuators) for long approaching. As for the other controls, it executes only ON/OFF	None	None
Timed control. The device sets the actuator to OFF after a predetermined time (see table 1)	None	1 - 8
ON control	None	ON
OFF control	None	OFF
Pushbutton (ON monostable)	None	PUL
Cyclic ON/OFF without adjustment	1	7
ON control with flash. Flashing time (see table 2)	2	None – 9
Selects the fixed adjustment level of the dimmer ( see table 3)	3	1 – 9
Sound system function	8	Se = 0 Follow-me mode (*)
Audio and video door entry functions	9	If = 1 – 4 Address of the first source to activate
		If = 1 Door lock ON control; A/PL address (2 digits) of the entrance panel from which the door lock is controlled.
		If = 2 floor call control; A/PL address (2 digits) of the handset to call
Activation of scenarios managed by the scenario programmer MH200	None	If = 3 staircase light control; A/PL address (2 digits) of the handset from which the lights are controlled
		CEN

**NOTE (\*)**: the Follow-me mode allows to have the same music in another room after switching OFF the amplifier of the room previously occupied, and switching ON the one in the current room.

Table 1	SPE = none
M	Time
1	1 min. 2 sec. (SPE=7)
2	2 min. 10 min. (SPE=7)
3	3 min.
4	4 min.
5	5 min.
6	15 min.
7	30 sec.
8	0.5 sec.

Table 2	SPE = 2
M	Time
None	0.5 sec.
1	1 sec.
2	1.5 sec.
3	2 sec.
4	2.5 sec.
5	3 sec.
6	3.5 sec.
7	4 sec.
8	4.5 sec.
9	5 sec.

Table 3	SPE = 3
M	% power on the load
1	10 %
2	20 %
3	30 %
4	40 %
5	50 %
6	60 %
7	70 %
8	80 %
9	90 %

#### Operating modes for scenario management

By connecting configurator 6 in the SPE socket, the touch Control can call, program and cancel any of the 16 scenarios contained in a Scenario Module item F420.

The scenario number can be selected using configurators 1-9 in positions M and M2, as in the following table. The address of the Scenario Module to control must be indicated in positions A and PL.

Table 4		
M	M2	Scenario number
0	1	1
0	2	2
...	...	...
1	6	16

#### A - PL

Address (2 digits) of the Scenario Module to be controlled

#### Programming a scenario

- 1) the Scenario Module must be enabled in order to execute the programming process;
- 2) put your hand near the detector zone of the control (the LEDs will switch on at their maximum intensity) and keep it in position. The intensity of the LEDs will decrease to their lowest level after 3 seconds; now move your hand away from the control;
- 3) the LEDs will begin to flash with a very low frequency, hence indicating the activation of the programming mode;
- 4) set the scenario using the controls and/or actuators;
- 5) put your hand briefly near the control to exit the programming mode; the LEDs will stop flashing and will return to their lowest level of intensity.

#### Cancelling a scenario

- 1) The Scenario Module must be enabled in order to execute the programming process;
- 2) put your hand near the detector zone of the control (the LEDs will switch on at their maximum intensity) and keep it in position. The intensity of the LEDs will decrease to their lowest level after 3 seconds; keep your hand in position for about another 5 seconds;
- 3) the LEDs will start flashing at a high frequency, thus indicating that the scenario has been cancelled; they will then return to their lowest level of intensity.

**NOTE:** To cancel all scenarios of the module, use the reset key directly on the scenario module.

#### Selecting the intensity of the LEDs (INT configurator)

Connect the configurators in the INT socket to choose different LEDs brightness levels, according to the installation requirements. Specifically:

<b>INT = none</b>	when inactive and with load OFF, the LEDs are lit at 30%, with load on (only for point-point light controls) they are lit at 60%
<b>INT = 1</b>	when inactive and with load OFF, the LEDs are lit at 45%, with load on (only for point-point light controls) they are lit at 70%
<b>INT = OFF</b>	when inactive and with load OFF, the LEDs are unlit, with load on (only for point-point light controls) they are lit at 30%

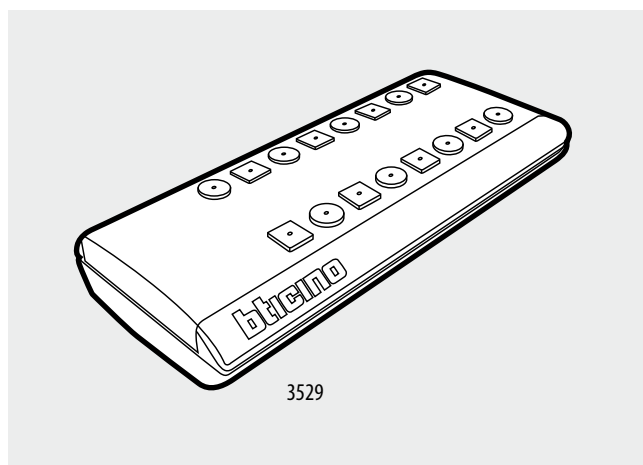


## IR receiver

HD4654 - HC4654 - HS4654 - L4654N  
N4654N - NT4654N - AM5834

### Description

The receiver enables adding or replacing the manual control with an infrared remote control item 3529. It is possible to associate to the remote control pushbuttons controls intended for 1-relay actuators for single loads and 2-relay actuators for double loads (rolling shutter motor etc.), manage scenarios, as well as sound system and video door entry systems. In addition to the IR receiving lens, the front of the device shows a programming pushbutton and a notification LED, to confirm that the IR signal sent by the remote control has been received, and notification of the programming procedure.



3529

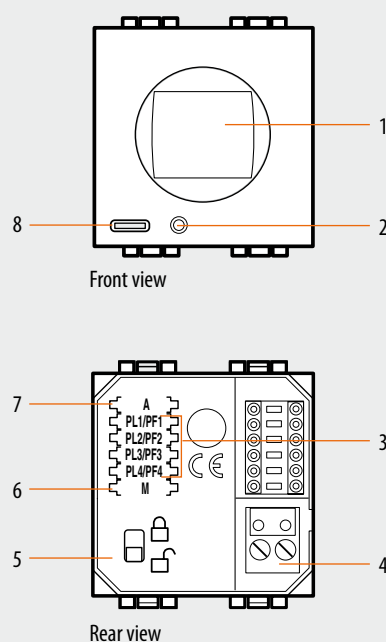
### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	8.5 mA
Operating temperature:	5 – 35 °C
Size:	2 flush mounted modules

### Configuration

The IR receiver can be set up for 5 different operating modes depending on the configuration of positions A, PL1, PL2, PL3, PL4 and M:

Mode	M	Possible function
A - remote control	1 – 4	Repeating of 4 generic controls (ON/OFF, UP/DOWN) with the 4 remote control keys. The desired control are saved in the receiver during installation by connecting the configurators in the A, PL1-PL4 and M position. The modification of the preset functions will require the reconfiguration of the IR receiver.
B - advanced scenarios	CEN	Activation of scenarios managed by the scenario programmer item MH200
C - remote self-learning	none	Repeating of generic controls (ON/OFF, UP/DOWN) with the remote control keys. In this case the receiver saves the controls by performing a self-learning procedure. The customer can change the succession and the controls saved to be recalled with the remote control at any time.
D - scenario module control	6	Management with the remote control of a maximum of 16 recorded scenarios in the scenario module item F420.
E - Sound system	9	Management using the remote control of the amplifier to be controlled.



### Legend

1. Receiving lens
2. Programming/reset pushbutton
3. Channel selection
4. BUS
5. Two-way switch, to enable programming
6. Operating modes
7. Room number receiving the control
8. LED

### 1) Mode "A" (remote control) M = 1 – 4

This mode lets the user associate generic controls (ON/OFF, UP/DOWN) intended for single loads or double loads to the remote control keys.

The correspondence between the remote control keys and the loads controlled is determined in the installation phase by the configuration of positions A and PL 1 to PL 4 of the IR receiver, as shown in the table below. The following can be associated to the remote control pushbuttons:

- Point-point controls, i.e. intended for single or double loads (rolling shutter motor) whose address is specified by configurator 1 to 9 in positions PL 1 to PL 4. The various operating modes are determined by the association of the configurators to the PL positions.

- Controls intended for actuators for single and double loads belonging to the room defined with configurator 1 to 9 in position A. In this case the operating modes are defined by the configurators marked by the graphics of the function performed, connected to positions PL 1 to 4.

Function	Type of control	Position A	Position PL1/PF1	Position PL2/PF2	Position PL3/PF3	Position PL4/PF4
Cyclical ON/OFF with short pressure + adjustment (dimmer)	Light point in the room indicated in A	1 – 9	1 – 9	1 – 9	1 – 9	1 – 9
Cyclical ON/OFF	Room control <sup>2)</sup>	1 – 9	AMB	AMB	AMB	AMB
Rolling shutter UP/DOWN <sup>1)</sup>	Light point n the room indicated in A	1 – 9	1 – 9	1 – 9		
				1 – 9	1 – 9	
					1 – 9	1 – 9
			1 – 9			1 – 9
			1 – 9		1 – 9	
Monostable rolling shutter UP/DOWN <sup>1)</sup>	Room control <sup>2)</sup>	1 – 9		1 – 9		1 – 9
			↑↓ M	↑↓ M		
				↑↓ M	↑↓ M	
					↑↓ M	↑↓ M
			↑↓ M			↑↓ M
UP/DOWN rolling shutter to end of stroke <sup>1)</sup>	Room control <sup>2)</sup>	1 – 9	↑↓	↑↓		
				↑↓	↑↓	
					↑↓	↑↓
			↑↓			↑↓
			↑↓		↑↓	
ON control	Room control <sup>2)</sup>	1 – 9		↑↓		↑↓
			ON	ON	ON	ON
OFF control	Room control <sup>2)</sup>	1 – 9		↑↓		↑↓
			OFF	OFF	OFF	OFF

1) The two PL positions must have the same configurator. The UP control is associated to the first PL position and the DOWN control with the second PL position.

**Example 1:** if on the receiver configurator 7 is connected to positions PL2 and PL3, the remote control operates double actuator No. 7 of the room indicated in A, raising the rolling shutters with pushbutton 2 and lowering them with pushbutton 3.

2) The control is intended for devices belonging to the room indicated in A.

**Example 2:** if on the receiver configurator ↑↓ is connected to positions PL2 and PL3, and configurator 2 is connected to position A, the remote control operates all the actuators in room 2, raising the rolling shutters with pushbutton 2 and lowering them with pushbutton 3.

## HD4654 - HC4654 - HS4654 - L4654N N4654N - NT4654N - AM5834

Up to 4 IR receivers can be installed in the room considered. They can manage maximum 16 separate controls.

The correspondence between the channels of a remote control and the respective IR receiver is established by configuring position M of the IR receiver correctly.

### Configurator in M

CH1	
CH2	
CH3	
CH4	
CH5	
CH6	
CH7	
CH8	

### Configurator in M

CH9	
CH10	
CH11	
CH12	
CH13	
CH14	
CH15	
CH16	

### 2) Mode "B" (advanced scenarios) M=CEN

This mode uses the IR remote control item 3529 as "scenario control" to activate one or more advanced scenarios saved in the Programmer item MH200.

The IR receiver must be also configured in positions A and PL using the numeric configurators for the definition of the address in the system.

The association between one or more remote control pushbuttons (maximum 6) with the scenarios created and saved in the Programmer item MH200 is performed when creating the scenario itself using the TiMH200 application.



Detail of the TiMH200 program to define pushbutton 3 of the remote control for the activation of the Night scenario.

Address A=1 and PL=3 of the IR receiver is specified in the "Object" field.

### 3) Mode "C" (remote self-learning) M=0

This mode enables to associate a single control to any key of the remote control. Using only one receiver it is possible to associate up to 16 controls to a remote control. Configure the receiver with address A=0 and PL=1-9 that cannot be used by actuators.

Controls that the receiver can "learn":

- ON/OFF actuator (ON/OFF cyclical functioning with short pressure and adjustment with long pressure)
- Timed ON
- Flashing
- UP/DOWN rolling shutter (UP/DOWN until end of stroke)
- Lock/Unlock actuator
- ON/OFF lights - auxiliary, (Cyclical ON/OFF functioning)
- UP/DOWN rolling shutter auxiliary (UP/DOWN until end of stroke)
- Video door entry system (door lock and staircase lights)
- Sound system (management of the amplifier to be controlled)

To associate a different control to each of the remote control channels, follow the procedure below:

- 1) press the programming pushbutton of the receiver for 3 seconds: the LED will turn on steadily;
- 2) within 20 seconds press the key of the channel you want to program on the remote control: the LED will begin to flash, hence indicating the activation of the programming mode;
- 3) set up the control you want to associate to the remote control key using the controls and/or corresponding actuator: the LED will turn on steadily;
- 4) you can now repeat 2) and 3) for all keys, even for a key that has already been associated, in case you want to change it;
- 5) press the key to exit the programming mode: the LED will turn OFF.

To cancel the programming of one of the remote control channels, follow the procedure below:

- 1) press the programming pushbutton for at least 8 seconds: the LED will turn on steadily after 3 seconds; after another 5 seconds, it will turn OFF; release the pushbutton within 4 seconds: the LED will turn on steadily;
- 2) within 20 seconds press the key of the channel you want to cancel on the remote control: The LED will start flashing quickly for about 4 seconds, thus confirming the cancellation;
- 3) from now on, the cancelled key will no longer activate any control until it is re-programmed.

To cancel the programming of all remote control channels simultaneously, press the programming pushbutton for about 12 seconds: the LED will turn on steadily after 3 seconds; it will turn OFF after another 5 seconds; after another 4 seconds, it will start flashing quickly for about 4 seconds, thus confirming the cancellation of all programming conditions.

**NOTE:** with the two-way switch in the "closed padlock" position programming and cancelling the IR receiver are forbidden.

#### 4) Mode "D" (Scenario module control) M=6

This mode enables creating, deleting or changing the scenarios saved in the scenario module, item F420, and to recall them using the remote control. The procedure lets you store up to 16 scenarios using all 16 channels of the remote control.

To program, change or delete a scenario, the programming of Module item F420 must be enabled, confirmed by the programming status LED turning green (press the lock/unlock key for at least 0.5 seconds), and the two-way switch on the back of the IR receiver must be in the "padlock open" position. Follow the procedure below:

- 1) press the programming pushbutton of the receiver for 3 seconds: the LED will turn on steadily; Release the pushbutton;
- 2) within 20 seconds press the key of the scenario you want to program on the remote control: the LED will begin to flash, hence indicating the activation of the programming mode;
- 3) set the scenario using the controls and/or actuators;
- 4) press the key to exit the programming mode: the LED will turn OFF;
- 5) repeat 1) and 4) for all the scenarios you want to program.

#### 5) Mode "E" (Sound system) M=9

In the Sound system, the IR receiver can control up to 4 amplifiers.

The control is always in "follow me (\*)" mode, and the functions that can be performed are:

- **Key A:** With a short pressure, the "ON" control is sent. An extended pressure will increase the volume
- **Key B:** With a short pressure, the "OFF" control is sent. An extended pressure will decrease the volume
- **Key C:** cycling of the radio stations saved, or CD track change
- **Key D:** cycling of the sources

To cancel a scenario, follow the procedure below:

- 1) Press the programming pushbutton of the receiver for 8 sec.: the LED will turn on steadily after 3 seconds; it will turn OFF again after another 5 seconds; release the key within 4 seconds: the LED will turn on steadily;
- 2) within 20 seconds press the key of the scenario you want to cancel on the remote control; when the scenario module sends the deleting confirmation, the LED will start flashing quickly for about 2 seconds and then it will turn OFF;
- 3) repeat 1) and 2) for all the scenarios you want to cancel.

The entire memory can only be reset from the scenario module. To prevent the possibility of programming or deleting the scenarios from the IR receiver, move the two-way switch on the back to the "lock closed" position.

**NOTE:** configure the device with address A=0 and PL=1-9 which cannot be used by actuators. For example, if the scenario module is configured with A=0 and PL=3, the IR receiver must be configured with A=0; PL=3 and M=6.

The association of the A-B-C-D keys to those of the remote control is performed as shown in the table:

	Key A	Key B	Key C	Key D
PF1	Ch 1	Ch 2	Ch 3	Ch 4
PF2	Ch 5	Ch 6	Ch 7	Ch 8
PF3	Ch 9	Ch 10	Ch 11	Ch 12
PF4	Ch 13	Ch 14	Ch 15	Ch 16

Where:

- PF1 = 0 – 9 address of the 1<sup>st</sup> amplifier to control
- PF2 = 0 – 9 address of the 2<sup>nd</sup> amplifier to control
- PF3 = 0 – 9 address of the 3<sup>rd</sup> amplifier to control
- PF4 = 0 – 9 address of the 4<sup>th</sup> amplifier to control
- A = 1 – 9 room receiving the control

**NOTE (\*):** the follow-me mode allows to have the same music in another room after switching OFF the amplifier of the room previously occupied, and switching ON the one in the current room.



## AXOLUTE NIGHTER and WHICE control

HD4657M3 - HC4657M3 - HS4657M3  
HD4657M4 - HC4657M4 - HS4657M4

### Description

The Nighter and Whice control is a control where the traditional pushbuttons are replaced by capacitive sensors. The device can be used to perform the functions typical of a special SCS control by simply moving a finger close to the surface. It is produced in the 3 and 4 module flush mounted version, 6 and 8 keys respectively. Each zone corresponding to a key is marked at the centre by a light blue LED. When the user moves a finger close to the zone, its intensity increases sensibly, and remains so until the finger is moved away again. The brightness level of the LEDs can be changed using the appropriate adjustment pushbutton.

The Nighter and Whice control can operate in 4 different ways: self-learning, scenarios, swivelling, CEN.

- **The self-learning mode** (cyclic or non-cyclic) allows to associate to each key most of the typical automation system, sound system, video door entry system (staircase light, open-door, call to the floor, door lock, and cycling of cameras) functions, in addition to auxiliary controls.
- **The scenario mode** can be used to recall, program and delete 6 scenarios of a scenario module.
- **The swivelling mode** can be used to drive the 3 or 4 consecutive light points or rolling shutters (or rooms or groups).
- **The CEN mode** enables using the control with the scenario programmer item MH 200.

In order to clean the device, it is possible to temporarily disable the sensitive zones by pressing two diagonally opposite zones at the same time. The LEDs will flash in sequence. Normal operation is automatically reinstated after 10 seconds.

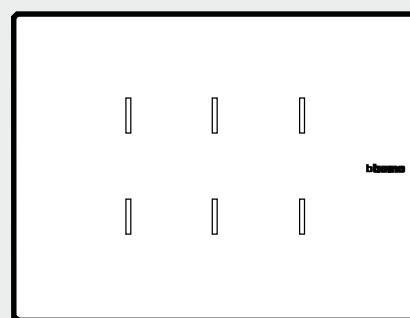
### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Max absorption HD/HC/HS4657M3:	20 mA
Max absorption HD/HC/HS4657M4:	25 mA
Operating temperature:	0–40 °C

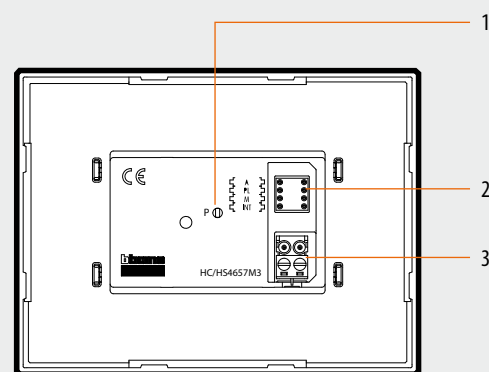
### Installation

Nighter and Whice can be easily wall mounted using the following items, available to order:

- for the 3-module control: box, item 503E, and screw support, item H4703
- for the 4-module control: box, item 504E, and screw support, item H4704



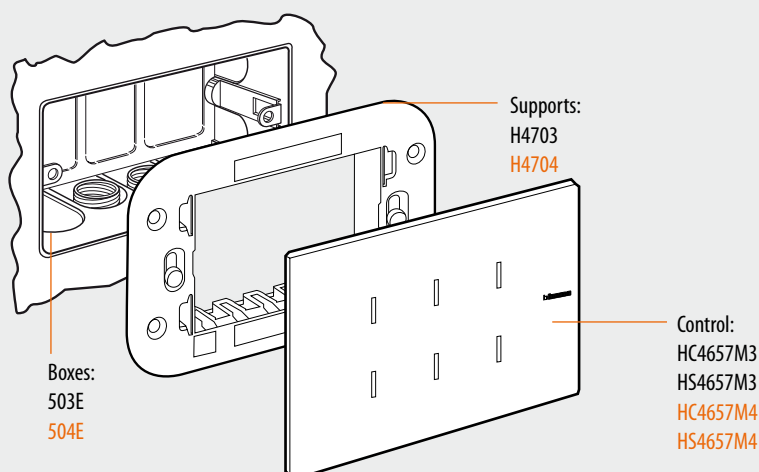
Front view



Rear view

### Legenda

1. LED intensity programming and adjustment pushbutton
2. Configurator socket
3. BUS

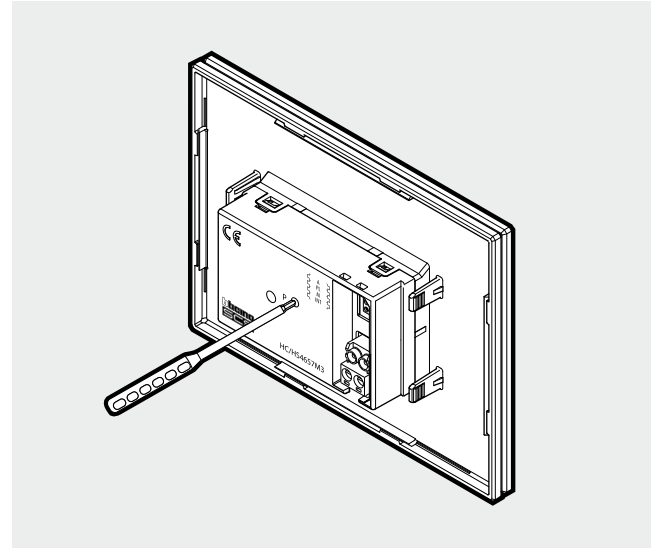
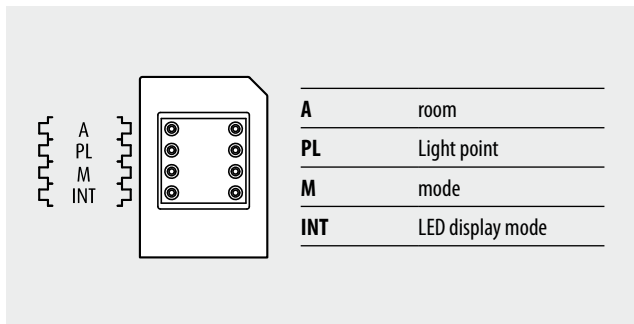


## Configuration

The configuration of the Nighter & Whice control can be made in two different modes:

- **PHYSICAL CONFIGURATION:** by connecting the physical configurators to their sockets;
- **VIRTUAL CONFIGURATION:** the control can be configured remotely, when no physical configurators are available. (For the details refer to the Virtual Configuration).

Regardless of the mode, an A/PL address must always be assigned to the control.



For the activation of the programming pushbutton and the LED adjustment, only use the screwdriver provided

### 1) Self-learning mode M=0

#### Possible function

#### Value configurator in M

This operating mode can be used to associate one individual control to any key of the device. It is possible to create, delete or change each control. The device may be configured using any A/PL address already present in the system, or a unique address not used by other devices.

#### Programming the Keys

To associate a different control to each key, proceed as follows:

- 1) Press and release the key on the back, the LEDs come on in succession;
- 2) Lightly touch the key to be programmed within 20 seconds: the LED will start flashing, confirming that the programming mode is active;
- 3) Set up the control you want to associate to the key using the controls and/or corresponding actuator. The LEDs start flashing in succession
- 4) You can now repeat 2) and 3) for all keys, even for a key that has already been associated, in case you want to change it;
- 5) Press the pushbutton to exit programming, or wait 20 seconds to exit programming automatically.

#### Deleting the programming of the keys

- 1) Press and release the key on the back, the LEDs come on in succession;
- 2) Within 20 seconds press and hold down for 4 seconds the key for which programming is to be cancelled; from now on, no controls will be activated when this key is pressed, until the key is programmed again.
- 3) The corresponding LED flashes for 4 seconds in alternative to the others, after which it will be possible to repeat point 2, to delete other programming sequences;
- 4) Short press the pushbutton, or wait 20 seconds to automatically exit delete programming.

**NOTE:** To cancel the programming of all keys at the same time press and release the key on the back. The LEDs will come on in succession. Press the pushbutton on the back again, and hold it down for 10 seconds: all LEDs will flash for about 4 seconds to confirm that all programming has been deleted.

### 2) Non-cyclical self-learning mode M=6

#### Possible function

#### Value configurator in M

This mode is a variant of the self-learning mode (**M=0**), in which, however, the keys never work cyclically. Therefore, if for example, the ON of an actuator or dimmer is learnt, the couple of keys is configured automatically to switch on or increase the light intensity level for the upper key, and switch off or decrease the level of intensity for the lower one. If, on the other hand, a single function is learnt (e.g. recalling of a scenario), the other key of the pair remains without function, or retains the previous function. The device may be configured using any A/PL address already present in the system, or a unique address not used by other devices.

HD4657M3 - HC4657M3 - HS4657M3  
HD4657M4 - HC4657M4 - HS4657M4

### 3) Scenario mode M = 1 – 4

Possible function	Value configurator in M
This operating mode is useful if the system includes a scenario module, item F420. 1 – 4	
The combination is ensured by assigning to both items the same address, identified by A=0-9 and PL=1-9. The user may create, delete or change the scenarios saved in the scenario module, and can recall them using the keys. With this procedure it is possible to save up to 16 scenarios using two 8-key devices or three 6-key devices .	

The following table shows the correspondence between the number of the scenario saved in the scenario module, and the keys of the control in the possible configurations:  
3 module control (6 scenarios)

No. of the key	M=1	M=4	M=3
Key 1	Scenario 1	Scenario 7	Scenario 13
Key 2	Scenario 2	Scenario 8	Scenario 14
Key 3	Scenario 3	Scenario 9	Scenario 15
Key 4	Scenario 4	Scenario 10	Scenario 16
Key 5	Scenario 5	Scenario 11	
Key 6	Scenario 6	Scenario 12	

4 module control (8 scenarios)

No. of the key	M=1	M=2
Key 1	Scenario 1	Scenario 9
Key 2	Scenario 2	Scenario 10
Key 3	Scenario 3	Scenario 11
Key 4	Scenario 4	Scenario 12
Key 5	Scenario 5	Scenario 13
Key 6	Scenario 6	Scenario 14
Key 7	Scenario 7	Scenario 15
Key 8	Scenario 8	Scenario 16

#### Programming a scenario

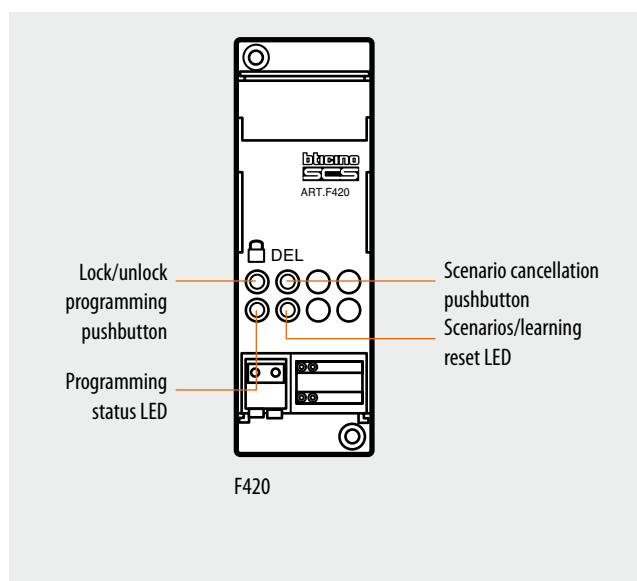
For the programming of the scenario, the procedure is as follows:

- 1) The self-learning configuration of the scenario module, item F420, must be enabled (to do so press the self-learning pushbutton, so that the corresponding LED turns green; if the LED is red, self-learning is disabled);
- 2) Press and release the key on the back; the LEDs of the keys enabled and programmed for the scenario function will flash (1 sec. ON and 1 sec. OFF);
- 3) Touch the key corresponding to the scenario to be programmed: the LED will start flashing (upon receiving the update of the scenario module), confirming that programming mode is active;
- 4) Set the scenario using the controls and/or actuators;
- 5) Press the pushbutton to exit programming: the LEDs flash in succession, it is now possible to repeat points 2, 3 and 4 for all scenarios, including those keys that have already been associated, if they need changing;
- 6) Press the pushbutton to exit programming, or wait 20 seconds to exit programming automatically.

#### Cancelling a scenario

- 1) The scenario module, item F420 must be in configuration mode with self-learning enabled;
- 2) Press and release the key on the back, the LEDs come on in succession;
- 3) Within 20 seconds press and hold down for 4 seconds the key of the scenario to be cancelled;;
- 4) The LEDs for the deleted key of the device will flash for 4 seconds. It is now possible to repeat the instruction at point 2 to delete other programs. .
- 5) Briefly press the pushbutton, or wait 20 seconds to automatically exit delete programming mode.

**NOTE:** the entire memory can only be reset from the scenario module: press and hold down the "DEL" key for 10 seconds after enabling programming on the scenario module.



#### 4) Swivelling modes M=0/I; ↑↓; ↑↓M

These modes enable quick installation without the need for learning procedures or scenario modules, allowing control of 4 or 3 consecutive light points or rolling shutters. The **A PL** address is the light point or rolling shutter controlled by the first pair of keys. The subsequent pairs control the subsequent light points or rolling shutters. If the configurators **Amb** or **Gr** are connected to **A**, in the same way the 4 or 3 pairs of keys control consecutive rooms or groups, starting from the one indicated by the configurator in **PL**.

**NOTE:** the maximum value of PL is 6 for the 4 module version, and 7 for the 3 module version.

Possible function	Value configurator in M
ON/OFF control: On control using the upper key, OFF control using the lower key. 0/I	
For point-point controls, the ON/OFF functions are performed by a short pressure, while a longer pressure will be used for the adjustments; for the other controls only the ON/OFF functions are performed	
Control (UP-DOWN for rolling shutters): up-down control to end of stroke	↑↓
Monostable control (UP-DOWN for rolling shutters): up and down control for the time the key is pressed	↑↓M

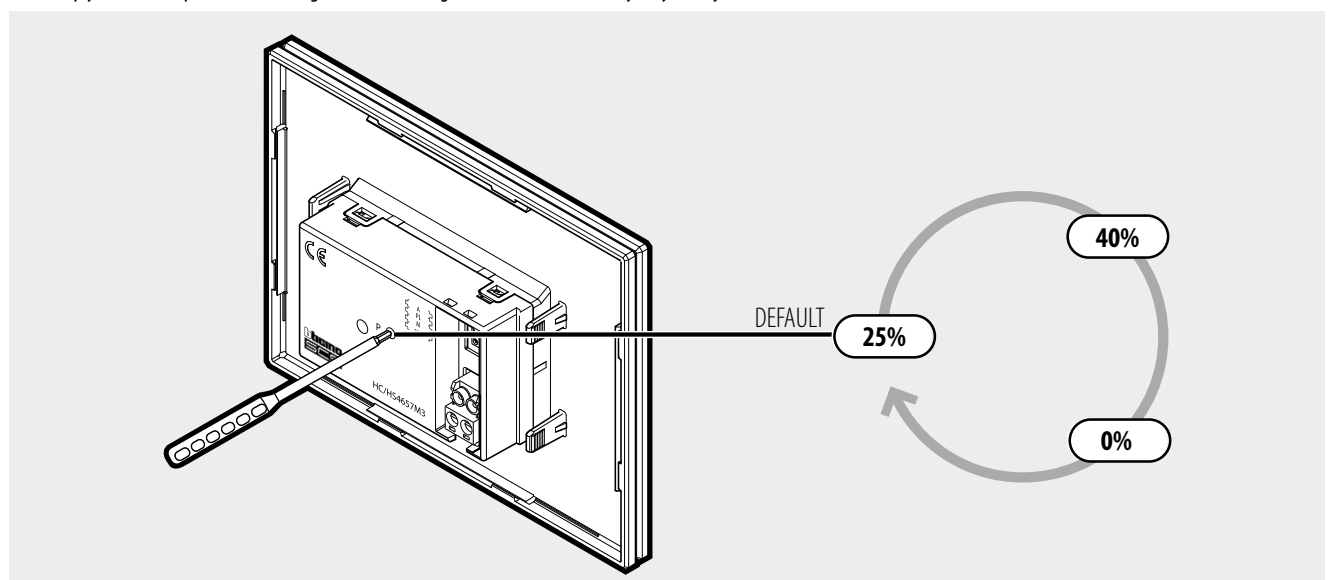
#### 5) Scenario programmer mode, M=CEN

The association of a scenario configured in the scenario programmer MH200N and the corresponding Nighter & Whice control activation keys, is performed during the programming of the scenario itself using the software TIMH200N.

Possible function	Value configurator in M
Always assign to the control a specific A/PL address on the system (not to be used by any other device installed on the BUS). The A=0, PL=0 configuration cannot be accepted.	CEN
This operating mode can only be used if the system includes a scenario programmer (MH200N).	

#### 6) Selecting the intensity of the LEDs

Once the device has been configured, it is possible to adjust the LED intensity by pressing and holding down (>2 sec.) the pushbutton on the back. The pushbutton operates on 3 intensity levels: starting from the default value (25%), the intensity changes every 2 seconds, showing the 3 levels that can be set, as per the following drawing. To select the desired level simply release the pushbutton. Using the virtual configuration, the LED intensity may be adjusted to 10 different levels.



If the user has decided that the keys should lit up when pressed (status return), the brightness level will depend on the adjustment of the LEDs as shown below:

LED intensity level	status return intensity
25%	65%
40%	70%
0%	20%

## HD4657M3 - HC4657M3 - HS4657M3 HD4657M4 - HC4657M4 - HS4657M4

### 7) LED display selection mode – SET position

Using the SET configurator it is possible to select:

- if in the idle conditions the unused/not configured LEDs should stay off or on;
- if the LED should come on or not when the corresponding key is pressed (status return); for optimum status return effect, it is recommended that the LED brightness level is kept low.
- if the “fade” effect on the lighting pushbuttons should be enabled or disabled.

Configurator in the SET socket	Behaviour
0	<ul style="list-style-type: none"> <li>• LED on even if the key has not been configured</li> <li>• No status return</li> <li>• Fade effect enabled</li> </ul>
1	<ul style="list-style-type: none"> <li>• LED on even if the key has not been configured</li> <li>• No status return</li> <li>• Fade effect disabled</li> </ul>
2	<ul style="list-style-type: none"> <li>• LED on only if the key has been configured (not configured -&gt; LED off)</li> <li>• No status return</li> <li>• Fade effect enabled</li> </ul>
3	<ul style="list-style-type: none"> <li>• LED on only if the key has been configured (not configured -&gt; LED off)</li> <li>• No status return</li> <li>• Fade effect disabled</li> </ul>
4	<ul style="list-style-type: none"> <li>• LED on even if the key has not been configured</li> <li>• Status return enabled</li> <li>• Fade effect enabled</li> </ul>
5	<ul style="list-style-type: none"> <li>• LED on even if the key has not been configured</li> <li>• Status return enabled</li> <li>• Fade effect disabled</li> </ul>
6	<ul style="list-style-type: none"> <li>• LED on only if the key has been configured (not configured -&gt; LED off)</li> <li>• Status return enabled</li> <li>• Fade effect enabled</li> </ul>
7	<ul style="list-style-type: none"> <li>• LED on only if the key has been configured (not configured -&gt; LED off)</li> <li>• Status return enabled</li> <li>• Fade effect disabled</li> </ul>



Once the device has been installed, wait two minutes for the self-calibration procedure to be completed. During this period, controls may be automatically sent to the system.

# Green Switch

HD/HC/HS4658 - L/N/NT4658N - AM5658

## Description

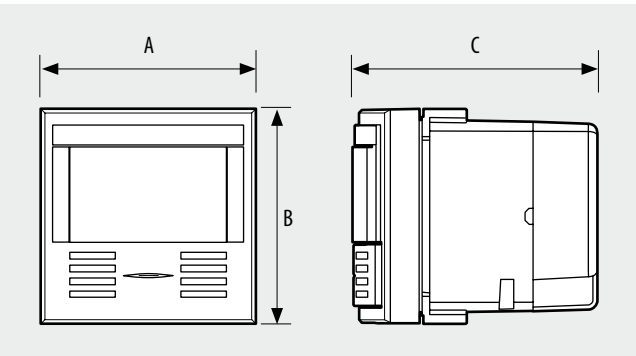
This device features a PIR and US (ultrasound) movement detector, and a brightness sensor for automatic activation of various types of loads following the detection of a movement, and a brightness level lower than the set level. The enabling/disabling of the load can also be performed manually using the appropriate front pushbutton and/or using an external BUS control device. It is possible to configure several operating modes; for the detailed descriptions see page 4.

## Technical data

Voltage:	27 V=
Absorption:	17 mA
Collegamento tra rilevatore e attuatore:	BUS SCS connector
Sensor type:	movement detector (PIR+US) with 180° detection angle and brightness sensor.
Flush mounted box depth:	40 mm
Weight:	60 g
Shock resistance:	IK04
Penetration of solids and liquids:	IP20
Time delay:	5 sec. - 59 min. 59 sec
Brightness:	5 lux - 1275 lux
Operating temperature:	(- 5) - (+ 45)°C
Storage temperature:	(- 20) - (+ 70)°C

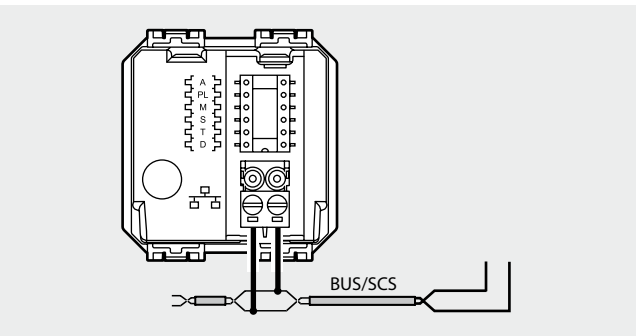
## Dimensional data

Size: 2 flush mounted modules

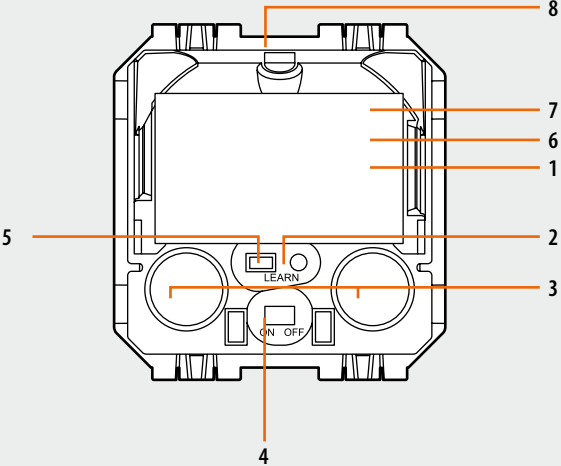


A	B	C
45	45	51

## Wiring diagram



Front view



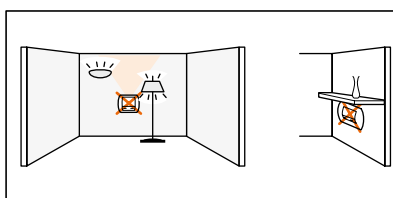
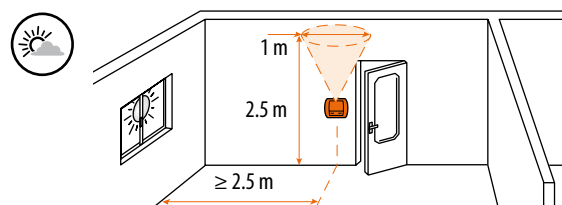
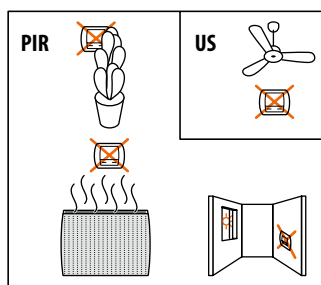
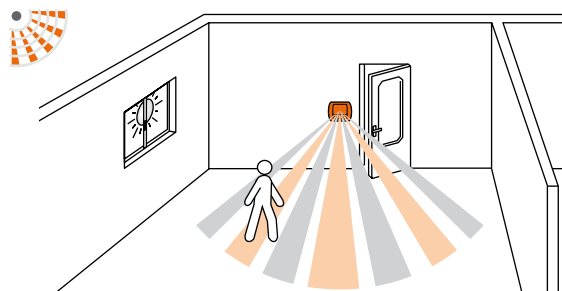
## Legend

1. PIR sensor
2. LEARN LED
3. US sensor
4. ON-OFF key
5. LEARN key
6. Movement detector sensor (under the lens)
7. Infrared transmitter (under the lens)
8. Light sensor

## HD/HC/HS4658 - L/N/NT4658N - AM5658

## Installation

### Detector position



Position the detector so that it is not affected by the artificial light already present in the room.

## Configuration

### Detection parameters:

Sensor parameters		Preset value	Adjustable parameters	Configuration tools		Available in	
				BMS04001	BMS04003	Distributed mode	Central mode
Time delay		15 mn	3,5,10,15,20 min 30s - 255 h 59 min 59s	–	✓	✓	✓
Sensitivity		PIR (molto alta) / US (alta)	Low, medium, high, very high	✓	✓	✓	✓
Mode	Auto	Not active	Activate/Deactivate	✓	✓	✓	–
	Walkthrough	Active	Activate/Deactivate	✓	✓	✓	–
	Eco	Not active	Activate/Deactivate	✓	✓	✓	–
Detection mode	Iniziale	PIR and US	PIR and/or US, PIR, US	✓	–	✓	Available but not separate
	Maintenance	PIR or US	PIR and/or US, PIR, US	✓	–	✓	
	Retrigger	PIR or US	PIR and/or US, PIR, US, Deactivate	✓	–	✓	
Alarm		Not active	Activate/Deactivate	✓	–	✓	–

**Time delay:** the time delay after which the load is switched off, if no movement is detected and the lighting level is sufficient

**Sensitivity:** detection interval setting.

### Mode:



#### Auto:

Automatic switch on:  
- upon detection of a movement if the level of natural light is insufficient.  
Automatic switch off:  
- if no movement is detected, at the expiry of the time delay set;  
- or if the level of natural light is sufficient (set brightness threshold).  
Another detection causes automatic switching on if the light is insufficient



#### Walkthrough:

- If a movement is detected for a period of time of less than 20", the sensor will switch the load off after 3 minutes;  
- Otherwise the load will be switched off after the set time delay. .



#### Eco:

Manual switching on/automatic switching off:  
- if no movement is detected, at the expiry of the time delay set;  
After switching off, if the detector detects a movements within 30 seconds the lights automatically come on; after 30 seconds the lights must be switched on manually.

## HD/HC/HS4658 - L/N/NT4658N - AM5658

### Detection mode:

**Initial detection:** the lights are switched on upon detection, if the natural light is below the brightness threshold.


**Maintenance:** the lights stay on if another movement is detected.


**Retrigger:** If the sensor detects a movement during the 30 s immediately after switching off of the load, this is immediately switched on again. After the 30 s the sensors returns to normal operation. After 30 seconds the device must be switched on manually

**Alarm:** before the device is switched off a sound signal is emitted (1 minute, 30 seconds, and 10 seconds before switching off),


### Brightness parameters:

Sensor parameters	Preset value	Adjustable parameters	Configuration tools		Available in	
			BMS04001	BMS04003	Distributed mode	Central mode
<b>Brightness threshold</b>	300 lux	20, 100, 300, 500, 1000 lux 0 - 1275 lux	– ✓	✓ –	✓	–
<b>Advanced mode</b>	<b>Calibration</b>	– 0 - 99995 lux	✓	–	✓	✓
	<b>Brightness adjustment</b>	Not active Activate/Deactivate	✓	–	✓	–
	<b>Light contribution</b>	Automatic Automatic - 1275 lux	✓	–	✓	–

 **Brightness threshold:** value at which the lights come on if the brightness level is below the set values, and switch off if above this threshold.

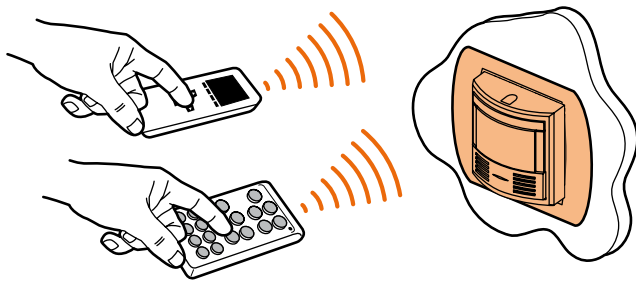
 **Brightness adjustment:** function for the switching off of the lights 10 minutes after the brightness threshold set is reached. In addition to this time there is a further time interval (safety threshold to avoid inappropriate switching off).

### Advanced mode:

 **Calibration:** For calibration to be performed, it is necessary to measure the brightness level present using a lux metre, sending the value to the sensor using a configuration remote control (BMS04001).

**Light contribution:** amount of supplementary light supplied by the lighting device switched on.

### Modification of the parameters using the configuration tools



- **BMS04001** : advanced configuration tool
- **BMS04003** : simplified configuration tool

When the detector receives an IR command from a configuration tool, it emits a sound that confirms that the modification has been acquired.

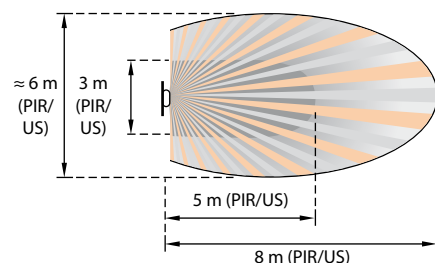
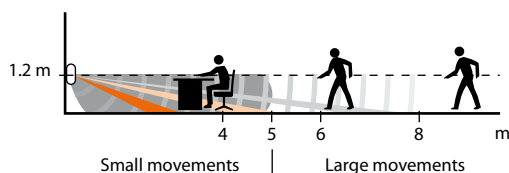
### Return to the factory settings:

1<sup>st</sup> pressure: press and release LEARN, the LED flashes slowly.

2<sup>nd</sup> pressure: press and hold down LEARN for 10 seconds until the LED starts flashing quickly.

## Performance

### Height



## HD/HC/HS4658 - L/N/NT4658N - AM5658

### My Home configuration

If the sensor is installed in a My Home system, it can be configured in two ways:

- PHYSICAL CONFIGURATION, connecting the configurators to the relevant sockets;
- VIRTUAL CONFIGURATION, connecting the system to the PC, using the kit Cat. no. 3503N, or the Web server. In this case the virtual configurator software must be installed on the PC.

Note: when configuring the product using the PHYSICAL CONFIGURATION or the VIRTUAL CONFIGURATION, it will not be possible to use the configuration remote controls. Therefore, the advanced functions (not settable using configurators) will not be accessible.

### Physical configuration

The sensor parameters are defined by 6 configurator sockets and the functions depend on the operating mode:

Light point: PL = 1 – 9

Mode: M = 0 – 4

Sensitivity of the movement sensor: S = 0 – 3

Control timer: T = 0 – 9

Sensitivity of the light sensor: D = 0 – 5

Warning: the addresses A = 0 and PL = 0 do not exist

Possible function	Configurator mode
The sensor controls the light unit, the address of which defined in A and PL. When a movement is detected, and if the brightness level is below the configured value, the system switches the specified light unit and keeps it on until the expiry of the period configured using the configurator in T (automatic mode). The Sensitivity of the PIR movement detector is configured using the configurator in S. For appropriate operation, the Sensitivity of the light sensor must be configured using the configurator in D. If a user manually switches off the lights, a control action can be used to disabled the movement detector until a movement is detected, for a period set by T.	0
In this mode, the sensor only works based on the light conditions, and the movement sensor is disabled. When the brightness falls below the threshold configured, the system switches on the light unit, switching it off again when the brightness exceeds the set threshold (automatic mode). Configurator A = 1 and PL = 1-9, configurators GEN, AMB (room), and GR cannot be connected. In this mode, configurators S and T are not connected.	1
In this mode the sensor does not manage the lights directly, but sends movement and brightness signals to the scenario programmer MH200N. In this case, the sensor address is entered in A and PL and must be unique inside the system. Therefore it is not possible to connect configurators GEN, AMB, and GR. In this mode the S and T configurators are not connected because these parameters are directly managed by the scenario programmer.	2
In this mode the system directly manages a light unit, ensuring a consistent brightness level inside the room (this mode is only effective if the sensor manages the dimmer). The system switches the lights on when a movement is detected and keeps them on based on the presence of people and the lighting threshold configured (automatic mode). When a movement is detected, and if the brightness level is below the configured value, the system switches the specified light unit on and keeps it on until the expiry of the period configured using the configurator in T. During operation the sensor keeps a consistent brightness level, depending on the configurator in D. For example, when the brightness of the natural light increases, the sensor reduces the brightness of the light unit controlled. For appropriate operation, the brightness Sensitivity threshold of the sensor must be configured using the D configurator. The threshold value can be modified using a brightness control. The new value is then configured as the new sensor threshold, until the next activation.	3
In this mode, the sensor only operates on the basis of the brightness conditions, and directly manages a light unit to ensure a consistent brightness level inside the room (this mode is only effective if the sensor manages the dimmer). The movement sensor is disabled. The lights are manually switched on, and automatically switched off by the sensor, based on the brightness threshold configured (eco mode). Therefore, when the lights are off, the sensor does not switch them on; but it waits for the user to switch them on manually. During operation, the sensor keeps a consistent brightness level, depending on the configurator in D. For example, when the brightness of the natural light increases, the sensor reduces the brightness of the light unit controlled. When the lights are off, if the level of natural light decreases, the sensor does not switch them on. but it waits for the user to switch them on manually. For appropriate operation, the brightness Sensitivity threshold of the sensor must be configured using the D configurator. The threshold value can be modified using a brightness control. The new value is then configured as the new sensor threshold, until the next activation.	4

**Warning:** to manage scenarios using the sensor signals, through the MH200N scenario programmer, the sensor must be configured in Mode 2.

**1) Duration of the light timer based on the configurator connected to T:**

Configurator in T	Light timer in minutes
No configurator	15
1	0.5
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

**2) Sensitivity PIR movement detector based on the configurator connected to S:**

Configurator in S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

**3) Sensitivity of the light sensor based on the configurator connected to D:**

Configurator in D	Sensitivity in lux
No configurator	300
1	20
2	100
3	300
4	500
5	1000

**Virtual configuration**

The virtual configurator software can offer all the functions listed below:

- brightness/movement detector, local
- brightness sensor, local
- movement detector, local
- brightness/movement detector, central
- brightness sensor, central
- movement detector, central
- IR PLUS scenario control

**Configuration of the light management function**

If the sensor is used in the Lighting Management system, it can be configured with the following modes:

- **Plug&Go, Push&Learn** (see the specific technical manual)

- **Project&Download.**

The virtual configurator software can offer all the functions listed below:

- brightness/movement detector, local
- brightness sensor, local
- movement detector, local
- brightness/movement detector, central
- brightness sensor, central
- movement detector, central
- IR PLUS scenario control

For more detailed information on the functions, see the glossary at the beginning of the Technical Sheets section.

**Maintenance**

Keep the lenses clean.

Clean the surface using a cloth.

Do not use: acetone, detergents for removing tar, or trichloroethylene.

Maintenance using the following products:

- hexane (En 60669-1)
- methylated spirit
- soapy water
- diluted ammonia
- bleach, diluted 10%
- glass detergents

**Warning :** an initial test is required in order to use other special maintenance products.

**Standards**

Directive: EC  
 installation norms: NFC 15-100  
 Product norms: IEC 60669-2-1

Environmental standards:  
 - UE 2002/96/EC directive: RAEE (electric and electronic device waste).  
 - UE 2002/95/EC directive: RoHS (restriction on the use of dangerous substances)  
 - Standard: ERP (public buildings)  
 ERT (buildings used as workplaces)  
 IGH (very high buildings)



## Light / movement sensor - PIR

HD/HC/HS4659 - L/N/NT4659N - AM5659

### Description

This device features a PIR movement detector, and a brightness sensor for automatic activation of various types of loads following the detection of a movement, and a brightness level lower than the set level.

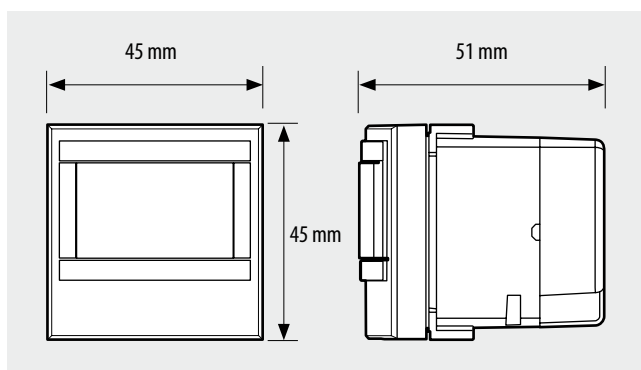
It is possible to configure several operating modes; for the detailed descriptions see page 4.

### Technical data

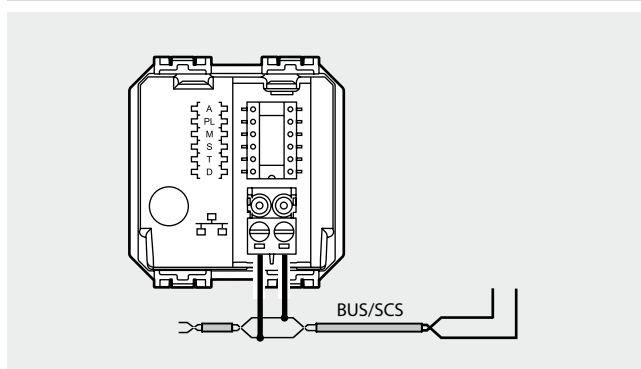
Voltage:	27 V $\pm$
Max. Absorption:	15 mA
Connection between detector and actuator:	SCS BUS connector
Sensor type:	PIR movement detector with 180° detection angle and brightness sensor.
Flush mounted box depth:	40 mm
Weight:	60 g
Shock resistance:	IK04
Penetration of solids and liquids:	IP20
Time delay:	5 sec - 59 min. 59 sec
Brightness:	5 lux - 1275 lux
Operating temperature:	(-5) - (+45) °C
Storage temperature:	(-20) - (+70) °C

### Dimensional data

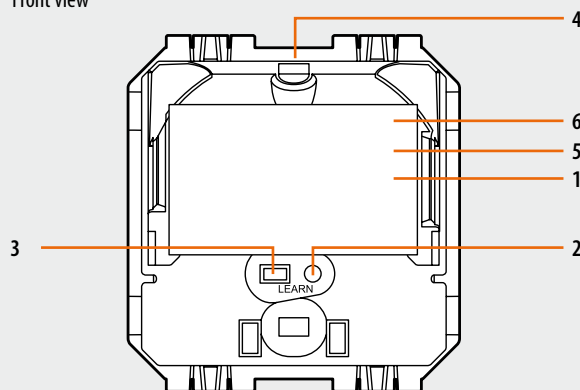
Size: 2 flush mounted modules



### Wiring diagram



Front view



### Legend

1. PIR sensor
2. LEARN LED
3. LEARN key
4. Light sensor
5. Movement detector sensor (under the lens)
6. Infrared transmitter (under the lens)

**Detection mode:**

**Initial detection:** the lights are switched on upon detection, if the natural light is below the brightness threshold.


**Maintenance:** the lights stay on if another movement is detected.

**Retrigger:** If the sensor detects a movement during the 30 s immediately after switching off of the load, this is immediately switched on again. After the 30 s the sensors returns to normal operation. After 30 seconds the device must be switched on manually


**Alarm:** before the device is switched off a sound signal is emitted (1 minute, 30 seconds, and 10 seconds before switching off),.


**Brightness parameters:**

Sensor parameters	Preset value	Adjustable parameters	Configuration tools		Available in	
			BMS04001	BMS04003	Distributed mode	Central mode
Brightness threshold	300 lux	20, 100, 300, 500, 1000 lux 0 - 1275 lux	- ✓	✓ -	✓	-
Advanced mode	Calibration	0 - 99995 lux	✓	-	✓	✓
	Brightness adjustment	Activate/Deactivate	✓	-	✓	-
	Light contribution	Automatic - 1275 lux	✓	-	✓	-

 **Brightness threshold:** value at which the lights come on if the brightness level is below the set values, and switch off if above this threshold.

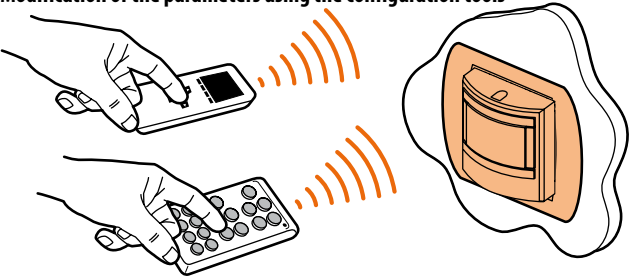
**Advanced mode:**

 **Calibration:** For calibration to be performed, it is necessary to measure the brightness level present using a lux metre, sending the value to the sensor using a configuration remote control (BMS04001).

 **Brightness adjustment:** Automatic switch-off of the load 10 minutes after the light level threshold is exceeded combined with an additional safety threshold (to avoid unintended switch-off).

**Light contribution:** amount of supplementary light supplied by the lighting device switched on.

**Modification of the parameters using the configuration tools:**



- **BMS04001** : advanced configuration tool
- **BMS04003** : simplified configuration tool

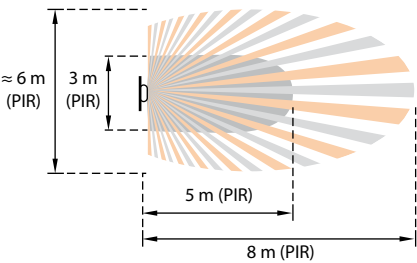
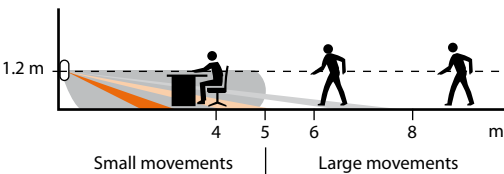
When the detector receives an IR command from a configuration tool, it emits a sound that confirms that the modification has been acquired.

**Return to the factory settings:**

1<sup>st</sup> pressure: press and release LEARN, the LED flashes slowly.  
2<sup>nd</sup> pressure: press and hold down LEARN for 10 seconds until the LED starts flashing quickly.

**Performance**

**Height**



## HD/HC/HS4659 - L/N/NT4659N - AM5659

### My Home configuration

If the sensor is installed in a My Home system, it can be configured in two ways:

- PHYSICAL CONFIGURATION, connecting the configurators to the relevant sockets;
- VIRTUAL CONFIGURATION, connecting the system to the PC, using the kit Cat. no. 3503N, or the Web server. In this case the virtual configurator software must be installed on the PC.

Note: when configuring the product using the PHYSICAL CONFIGURATION or the VIRTUAL CONFIGURATION, it will not be possible to use the configuration remote controls. Therefore, the advanced functions (not settable using configurators) will not be accessible.

### Physical configuration

The sensor parameters are defined by 6 configurator sockets and the functions depend on the operating mode:

Local: A = 1 – 9

Light point PL = 1 – 9

Mode: M = 0 – 4

Sensitivity of the PIR movement sensor: S = 0 – 3

Control timer: T = 0 – 9

Sensitivity of the light sensor: D = 0 – 5

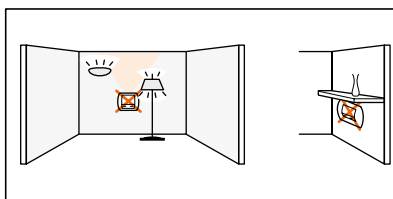
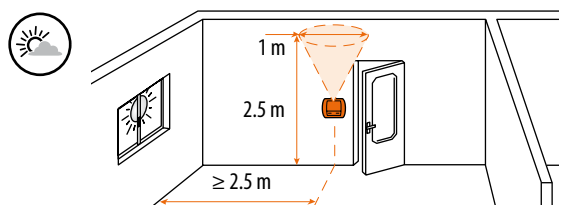
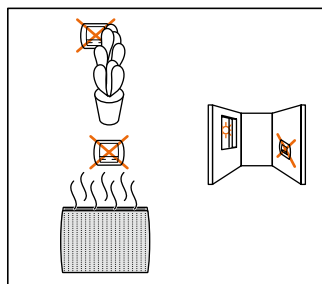
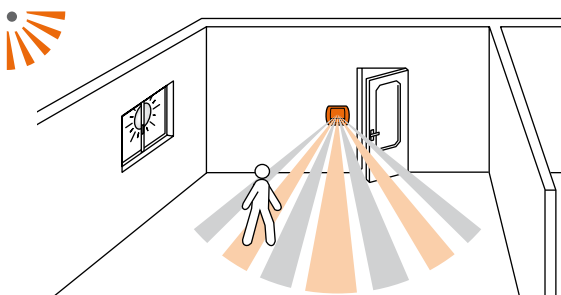
Warning: the addresses A = 0 and PL = 0 do not exist

Possible functions	Configurator mode
The sensor controls the light unit, the address of which defined in A and PL. When a movement is detected, and if the brightness level is below the configured value, the system switches the specified light unit and keeps it on until the expiry of the period configured using the configurator in T (automatic mode). The Sensitivity of the PIR movement detector is configured using the configurator in S. For appropriate operation, the Sensitivity of the light sensor must be configured using the configurator in D. If a user manually switches off the lights, a control action can be used to disabled the movement detector until a movement is detected, for a period set by T.	0
In this mode, the sensor only works based on the light conditions, and the movement sensor is disabled. When the brightness falls below the threshold configured, the system switches on the light unit, switching it off again when the brightness exceeds the set threshold (automatic mode). Configurator A = 1 and PL = 1-9, configurators GEN, AMB (room), and GR cannot be connected. In this mode, configurators S and T are not connected.	1
In this mode the sensor does not manage the lights directly, but sends movement and brightness signals to the scenario programmer MH200N. In this case, the sensor address is entered in A and PL and must be unique inside the system. Therefore it is not possible to connect configurators GEN, AMB, and GR. In this mode the S and T configurators are not connected because these parameters are directly managed by the scenario programmer.	2
In this mode the system directly manages a light unit, ensuring a consistent brightness level inside the room (this mode is only effective if the sensor manages the dimmer). The system switches the lights on when a movement is detected and keeps them on based on the presence of people and the lighting threshold configured (automatic mode). When a movement is detected, and if the brightness level is below the configured value, the system switches the specified light unit on and keeps it on until the expiry of the period configured using the configurator in T. During operation the sensor keeps a consistent brightness level, depending on the configurator in D. For example, when the brightness of the natural light increases, the sensor reduces the brightness of the light unit controlled. For appropriate operation, the brightness Sensitivity threshold of the sensor must be configured using the D configurator. The threshold value can be modified using a brightness control. Quindi il nuovo valore viene configurato come nuova soglia dal sensore, fino all'attivazione successiva	3
In this mode, the sensor only operates on the basis of the brightness conditions, and directly manages a light unit to ensure a consistent brightness level inside the room (this mode is only effective if the sensor manages the dimmer). The movement sensor is disabled. The lights are manually switched on, and automatically switched off by the sensor, based on the brightness threshold configured (eco mode). Therefore, when the lights are off, the sensor does not switch them on; but it waits for the user to switch them on manually. During operation, the sensor keeps a consistent brightness level, depending on the configurator in D. For example, when the brightness of the natural light increases, the sensor reduces the brightness of the light unit controlled. When the lights are off, if the level of natural light decreases, the sensor does not switch them on. but it waits for the user to switch them on manually. For appropriate operation, the brightness Sensitivity threshold of the sensor must be configured using the D configurator. The threshold value can be modified using a brightness control. The new value is then configured as the new sensor threshold, until the next activation.	4

**Warning:** to manage scenarios using the sensor signals, through the MH200N scenario programmer, the sensor must be configured in Mode 2.

## Installation

### Detector position



Position the detector so that it is not affected by the artificial light already present in the room.

## Configuration

### Detection parameters:

Sensor parameters		Preset value	Adjustable parameters	Configuration tools		Available in	
				BMS04001	BMS04003	Distributed mode	Central mode
<b>Time delay</b>		15 min	3,5,10,15,20 min 30s - 255 h 59 min 59s	–	✓	✓	✓
<b>Sensitivity</b>		PIR (very high)	Low, medium, high, very high	✓	✓	✓	✓
<b>Mode</b>	<b>Auto</b>	Not active	Activate/Deactivate	✓	✓	✓	–
	<b>Walkthrough</b>	Active	Activate/Deactivate	✓	✓	✓	–
	<b>Eco</b>	Not active	Activate/Deactivate	✓	✓	✓	–
<b>Detection system</b>	<b>Initial</b>	PIR	Cannot be modified	✓	–	✓	Available but not separate
	<b>Maintenance</b>	PIR	Cannot be modified	✓	–	✓	
	<b>Retrigger</b>	PIR	PIR/Deactivate	✓	–	✓	
<b>Alarm</b>		Not active	Activate/Deactivate	✓	–	✓	–

**Time delay:** the time delay after which the load is switched off, if no movement is detected and the lighting level is sufficient

**Sensitivity:** detection interval setting.

### Modalità:

#### **Auto:**

Automatic switch on:  
- upon detection of a movement if the level of natural light is insufficient.  
Automatic switch off:  
- if no movement is detected, at the expiry of the time delay set;  
- or if the level of natural light is sufficient (set brightness threshold).  
Another detection causes automatic switching on if the light is insufficient.

#### **Walkthrough:**

- If a movement is detected for a period of time of less than 20", the sensor will switch the load off after 3 minutes;  
- Otherwise the load will be switched off after the set time delay..

#### **Eco:**

Manual switching on/automatic switching off:  
- if no movement is detected, at the expiry of the time delay set;  
After switching off, if the detector detects a movements within 30 seconds the lights automatically come on; after 30 seconds the lights must be switched on manually.

## HD/HC/HS4659 - L/N/NT4659N - AM5659

### 1) Duration of the light timer based on the configurator connected to T:

Configurator in T	Light timer in minutes
No configurator	15
1	0.5
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

### 2) Sensitivity PIR and US movement detector based on the configurator connected to S:

Configurator in S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

When using the configurators it is not possible to individually set the sensitivity of the detection technology. Both will have the value set by the S configurator.

### 3) Sensitivity of the light sensor based on the configurator connected to D:

Configurator in D	Sensitivity in lux
No configurator	300
1	20
2	100
3	300
4	500
5	1000

### Virtual configuration

The virtual configurator software can offer all the functions listed below:

- brightness/movement detector, local
- brightness sensor, local
- movement detector, local
- brightness/movement detector, central

- brightness sensor, central
- movement detector, central
- IR PLUS scenario control

### Configuration of the light management function

If the sensor is used in the Lighting Management system, it can be configured with the following modes:

- **Plug&Go, Push&Learn** (see the specific technical manual)
- **Project&Download.**

The virtual configurator software can offer all the functions listed below:

- brightness/movement detector, local
- brightness sensor, local
- movement detector, local
- brightness/movement detector, central
- brightness sensor, central
- movement detector, central
- IR PLUS scenario control

For more detailed information on the functions, see the glossary at the beginning of the Technical Sheets section.

### maintenance

Keep the lenses clean.

Clean the surface using a cloth.

Do not use: acetone, detergents for removing tar, or trichloroethylene.

Maintenance using the following products: - hexane (En 60669-1)

- methylated spirit
- soapy water
- diluted ammonia
- bleach, diluted 10%
- glass detergents

**Warning:** an initial test is required in order to use other special maintenance products.

### Standards

Directive: EC  
 installation norms: NFC 15-100  
 Product norms: IEC 60669-2-1

Environmental standards:

- UE 2002/96/EC directive:
- Direttiva UE 2002/95/CE:

- Standard:

RAEE (electric and electronic device waste).  
 RoHS (restriction on the use of dangerous substances).  
 ERP (public buildings)  
 ERT (buildings used as workplaces)  
 IGH (very high buildings)



## Scenario control

HD4680 - HC4680 - HS4680  
L4680 - N4680 - NT4680

### Description

The Scenario Control is a device that does not directly manage the scenarios by storing them inside. It Basically acts as a control to activate, create and change 4 scenarios stored in the Scenario Module item F420 for the MY HOME system, or in Lighting Management devices, provided that this has been enabled for change using the programming block/unblock key.

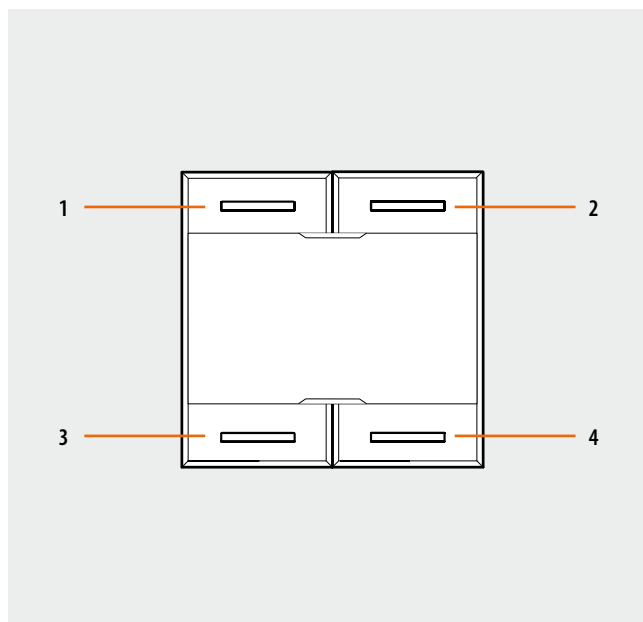
The device may be installed in a MY HOME system and can be configured both physically and virtually, or as a component of the Lighting Management system, using specific configuration procedures (Project&Download).

### Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	9 mA

### Dimensional data

Size: 2 flush mounted modules



### Legend

1. Key 1
2. Key 2
3. Key 3
4. Key 4

HD4680 - HC4680 - HS4680  
L4680 - N4680 - NT4680

### MY HOME configuration

When installed in a MY HOME system, the device may be configured in two ways:

- PHYSICAL CONFIGURATION, by connecting the physical configurators to their sockets.
- VIRTUAL CONFIGURATION, by connecting the system to the PC using the 3503N Kit or the web server. The Virtual configurator software must be installed on the PC.

### Physical configuration

Positions A and PL of the scenario control must correspond to those in the scenario module item F420. The association of each key of the control to one of the scenarios stored by the module is made by configuring socket M. It is possible to configure positions N and DEL to set the number of the scenario to be activated with a delay (from 15s to 15m).

### Correspondence between the 4 keys of the scenario control and the number of scenarios stored in the module item F420:

Configurator M	Key 1	Key 2	Key 3	Key 4
1	Scenario 1	Scenario 2	Scenario 3	Scenario 4
2	Scenario 5	Scenario 6	Scenario 7	Scenario 8
3	Scenario 9	Scenario 10	Scenario 11	Scenario 12
4	Scenario 13	Scenario 14	Scenario 15	Scenario 16

Depending on the configurators connected to position N, it is possible to set a delay to be associated to one or all scenarios before actuation is performed.

The configurator in the DEL position determines the delay in activating the scenario.

Configurator N	Key 1	Key 2	Key 3	Key 4
0	None	None	None	None
1	Delay ON	None	None	None
2	None	Delay ON	None	None
3	None	None	Delay ON	None
4	None	None	None	Delay ON
5	Delay ON	Delay ON	Delay ON	Delay ON

Configurator DEL	Delay
0	None
1	1 min.
2	2 min.
3	3 min.
4	4 min.
5	5 min.
6	10 min.
7	15 min.
8	15 min.
9	30 min.

#### Scenario programmer

In order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

- 1) press one of the four control keys the scenario should be associated to for 4 seconds. The corresponding LED starts flashing;
- 2) set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;
- 3) confirm the scenario by briefly pressing the corresponding key on the control to exit programming mode;
- 4) To change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1.

To call a set scenario just press its pushbutton on the control quickly.

#### NOTES:

Once the operations have been performed lock the programming, pressing the lock/unlock pushbutton, of the senario module, for at least 0.5 seconds, so that the corresponding LED becomes red.

Controls to the MH200N programmer:

by configuring M = CEN, N = 0 and DEL = 0, the pressure of a key sends to a MH200N a control with A/PL address and pushbutton number the same as the key pressed.

To delete a scenario, proceed as follows:

- 1) the scenario module must be enabled for programming.
- 2) press the pushbutton of the scenario you want to cancel for at least 10 seconds: the corresponding LED will start flashing quickly for about 2 seconds, thus indicating that the scenario has been cancelled. . If the LED does not flash, it means that the control has failed.

To erase the entire memory keep the DEL pushbutton on the Scenario module pressed for 10 seconds, the yellow "reset scenarios" LED flashes quickly.

#### Virtual configuration

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- double scenario control
- double CEN control
- double scenario PLUS control
- double CEN PLUS control

#### Lighting Management configuration

When installed in a Lighting Management system, the device can be configured in the following ways:

- Project&Download,

Using the Virtual Configurator software it is possible to perform all the functions listed below:

- double scenario control
- double CEN control
- double scenario PLUS control
- double CEN PLUS control

For more information on the functions see the glossary before the Technical sheets chapter.



HD4891 - HC4891 - HS4891  
L4891 - N4891 - NT4891

## Local display

### Description

Local Display is a device that gives the possibility of 4 home automation functions by means of simple and intuitive icons displayed on a 1.2" OLED display with touch screen technology.

It can be used to manage the temperature control, sound system, energy management, and scenario functions.

The back of Local Display has a USB socket, which can be used to connect the device to a PC, to update the configuration, the set of characters, and the icon, as well as the firmware.

### Technical data

- Power supply from BUS: 18 – 27 Vdc
- Stand-by Absorption: max 10 mA @ 27 Vdc  
max 15 mA @ 18 Vdc
- Operating absorption: max 50 mA @ 27 Vdc  
max 70 mA @ 18 Vdc
- Operating temperature: 5 – 35 °C
- Size: 2 flush mounted modules

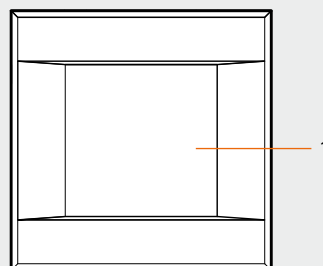
### Configuration

Local Display may be configured in two ways:

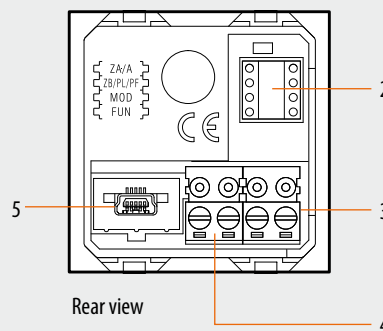
- physical configuration, by connecting the configurators to the appropriate sockets. This mode gives the possibility of configuring with basic parameters only 1 function to manage, among the ones listed below. For the configuration of the advanced parameters use the TiLocalDisplay software.
- from the PC, using the dedicated TiLocalDisplay software. This mode gives the possibility of configuring all the parameters, for the management of 1 to 4 functions listed below.

### Funzioni gestibili

- Scenario control
- Temperature control with external probe 3457
- Temperature control with probe HD/HC/HS4693, L4693, N4693, NT4693.
- Sound system
- Consumption display
- Load management
- Advances scenarios (with MH200N programmer installed in the system), to be configured using the software only



Front view



Rear view

### Legend

1. OLED technology Touch Screen
2. Configurator socket
3. BUS clamp
4. Clamp for the connection of the external temperature probe
5. USB connector

## Installation

Local Display is installed using a traditional procedure, using a box, support, and AXOLUTE or LIVINGLIGHT cover plate; the device is not fitted with a temperature probe. Therefore, it will not be necessary to comply with the probe installation requirements. The recommended installation height is 150 - 160 cm.

## Local Display physical configuration

### - Scenario control mode - FUN = 1

Thanks to this mode, it will be possible to manage and change 4 different associated scenarios of the F420 scenario module, and activate them by pressing one of the 4 icons shown on the display.

A	Room	0 - 9, room of the scenario module item
PL	Light point	1 - 9, light point of the scenario module item F420
MOD	Mode	1 - 4, scenario number (*)
FUN	Function	1

(\*) Correspondence among the 4 icons and the numbers of the scenarios that can be saved in the F420 module

Configurator MOD	Icon 1	Icon 2
1	Scenario 1	Scenario 2
2	Scenario 5	Scenario 6
3	Scenario 9	Scenario 10
4	Scenario 13	Scenario 14

Configurator MOD	Icon 3	Icon 4
1	Scenario 3	Scenario 4
2	Scenario 7	Scenario 8
3	Scenario 11	Scenario 12
4	Scenario 15	Scenario 16

### Scenario programmer

In order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

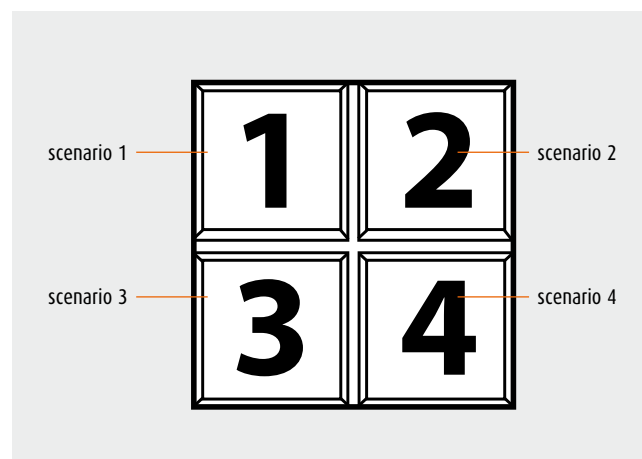
- 1) press one of the four control keys the scenario should be associated to for 3 seconds. The screen shows the name and icon of the selected scenario and the programming bar, to indicate that the learning procedure has started. If the device does not receive any input for 30 minutes from the start of the learning procedure, programming will automatically be interrupted;
- 2) set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;
- 3) confirm the scenario by quickly pressing the display
- 4) to change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1.

To call a set scenario just press its pushbutton on the control quickly.

## Main functions that can be set using the Tilocal Display software

Main possible functions using the software:

- selection of the operating mode to set for the device, temperature control, scenarios, sound system, load management, consumption display.
- configuration of the settings of the probe and of its parameters;
- definition of the type of temperature central unit;
- parameters for the measurement of energy production, or consumption costs;
- configuration of the general device parameters;
- icon style definition.



**NOTE:** Once the operations have been performed lock the programming, pressing the lock/unlock pushbutton, of the senario module, for at least 0.5 seconds, so that the corresponding LED becomes red.

To delete a scenario, proceed as follows:

- 1) the scenario module must be enabled for programming.
- 2) press the pushbutton of the scenario you want to cancel for at least 7 seconds; The display will confirm that the scenario has been deleted and return to the main screen.

To erase the entire memory keep the DEL pushbutton on the Scenario module pressed for 10 seconds, the yellow "reset scenarios" LED flashes quickly.

HD4891 - HC4891 - HS4891  
L4891 - N4891 - NT4891

– Sound system control mode - FUN = 2

With this mode, for the associated amplifier the user can control the switching ON or OFF, the volume, the cycling through the sources, and their management (where allowed). Information on the currently active source is also displayed.

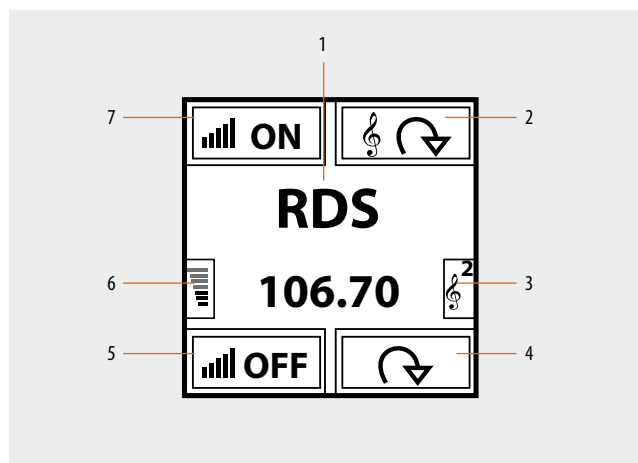
In this mode the parameters that can be configured are the local address of the display (which must coincide with the A/Pf address, and the M1 mode of the associated amplifier), and the name of the sources that can be controlled.

A	Room	0 - 9, amplifier room
PF	Loudspeaker	1 - 9, Amplifier loudspeaker
MOD	Mode	0 - 8, Source switching ON (*)
FUN	Function	2

**NOTA (\*):** If M=0, source 1 is switched on without first switching OFF the sources (follow-me mode).

### Functions

A quick pressure of keys 5 and 7 will respectively switch ON and OFF the associated amplifier. If the associated amplifier is on, an extended pressure of keys 5 and 7 may be used to adjust the volume, the intensity of which will be displayed by means of an icon 5. A short pressure of keys 2 and 4, will respectively cycle through the sources installed in the system, and launch a control for the currently active source. If the associated amplifier is off and no source is on, the screen will not show any information. Press key 4 for 3 seconds to configure the alarm clock (see the user manual for details).



### Legend

1. Indication of the amplifier status or radio frequency
2. Cycling of sources (radio/aux)
3. Active source indication
4. Change radio station
5. Associated amplifier OFF and volume decrease
6. Volume level indication
7. Associated amplifier ON and volume increase

### - Temperature control probe mode with external probe - FUN = 3

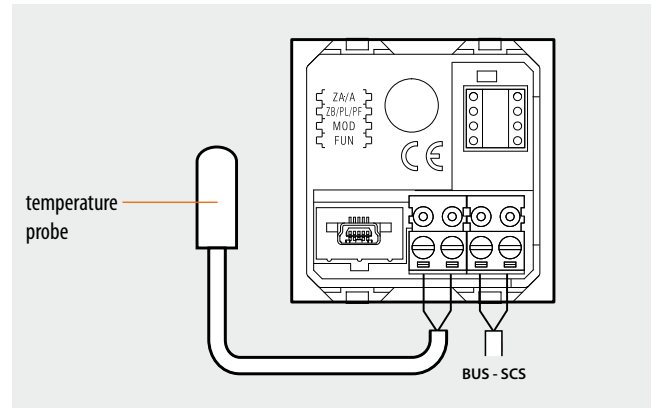
**Warning:** the physical configuration can only be performed if the system includes a 99-zone temperature central unit.

An external temperature probe, item 3457, with the following characteristics, can be connected on the back of Local Display:

- 10 KΩ at 25 °C BETA 3435
- max. length of the connection 10 metres

Local Display shows the temperature value measured by the external probe, the set temperature value, and the local selector adjustment. The operations that may be performed by user are:

- variation of the temperature set using the local selector,
- FAN-COIL speed management,
- operating mode management.



ZA	Zone address	0 – 9, Local Display address
ZB	Zone address	1 – 9, Local Display address
MOD	Mode	0 – 8, Slave probe number
FUN	Function	3

For simple systems, where each zone controls at most one heating actuator and one air conditioning actuator, both of the ON/OFF type, and on a system with only one pump per function, the configuration of the system can be performed by simply connecting the configurators that identify the address of the device and, in case of probe, indicate the number of slaves present.

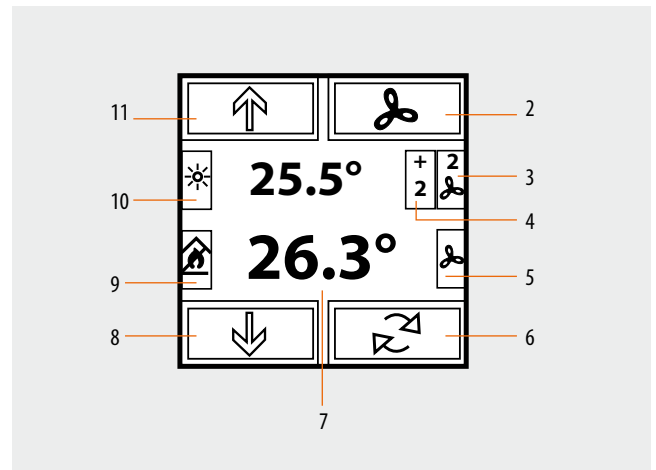
For more complex systems, the probe can memorize the actuators to activate, and the pumps to control on the BUS. The programming operation must be completed directly from the central unit. The central unit can also be used for the calibration of the probe. During the system setting stage, it will be necessary to specify the actuators used for the heating system, and those used for the air conditioning system, as they operate in a complementary way.

### Legend

1. Set temperature
2. Fan-Coil adjustment
3. Fan-Coil speed indication
4. Temperature variation indication
5. Fan-Coil operation indication
6. Change operating mode
7. Measured temperature
8. Decrease temperature
9. Operating mode indication
10. System status indication
11. Increase the temperature

### Functions

A short pressure of keys 8 and 11 can be used to locally change the temperature by  $\pm 3$  °C, in relation to the settings received from the central unit. A short pressure of key 6 can be used to select the mode of operation, cycling through the OFF, antifreeze/thermal protection, and automatic statuses respectively. Each mode of operation is identified by a different icon. A short pressure of key 2 will force the speed the fan-coils, cycling through speed 1, 2, 3 or automatic.



## HD4891 - HC4891 - HS4891 L4891 - N4891 - NT4891

### - Temperature control probe mode with item HC4693, HS4693, L4693, N4693, NT4693 probe - FUN = 4

**Warning:** physical configuration can only be used if a 99-zone temperature control central unit is installed in the system

This mode is different from the previous one in the fact that the external probe is not connected to Local Display. Being unable to autonomously establish the temperature, it must be associated to at least one probe, items HC4693, HS4693, L4693, N4693, or NT4693. The user is shown the temperature value measured by the associated probes, the set temperature value, and the adjustment of the local selector.

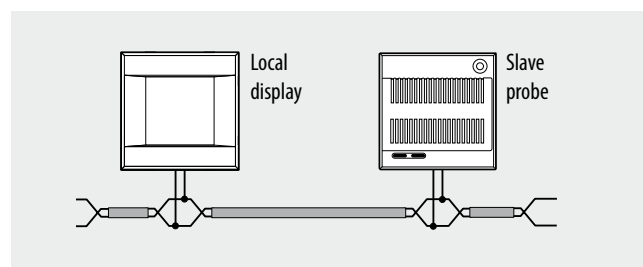
ZA	Zone address	0 – 9, probe address
ZB	Zone address	1 – 9, probe address
MOD	Mode	1 – 8, Slave probe number
FUN	Function	4

For simple systems, where each zone controls at most one heating actuator and one air conditioning actuator, both of the ON/OFF type, and on a system with only one pump per function, the configuration of the system can be performed by simply connecting the configurators that identify the address of the device and, in case of probe, indicate the number of slaves present.

The possible operations for the user are the adjustment of the set temperature using the local selector, and the change of status of the probe. In this mode, the parameters that can be configured are the local display address (which must coincide with the ZA/ZB address of the associated probe), the type of control of the pump, the type of mode, and the number of slave probes.

For more complex systems, the probe can memorize the actuators to activate, and the pumps to control on the BUS. The programming operation must be completed directly from the central unit. The central unit can also be used for the calibration of the probe. During the system setting stage, it will be necessary to specify the actuators used for the heating system, and those used for the air conditioning system, as they operate in a complementary way.

### Example of configuration of a zone (address 47) with Local Display and probe item HC4693, HS4693, L4693, N4693, NT4693



Local Display (HC/HS/L/N/NT4891)		Sonda Slave (HC/HS/L/N/NT4693)	
Socket	Configurator	Socket	Configurator
ZA	4	ZA	4
ZB	7	ZB	7
MOD	1	MOD	SLA
FUN	4	SLA	1

### Functions

A short pressure of keys 8 and 11 can be used to locally change the temperature by  $\pm 3^{\circ}\text{C}$ , in relation to the settings received from the central unit. A short pressure of key 6 can be used to select the mode of operation, cycling through the OFF, antifreeze/thermal protection, and automatic statuses respectively.

Each mode of operation is identified by a different icon. A short pressure of key 2 will force the speed the fan-coils, cycling through speed 1, 2, 3 or automatic.

## - Energy Management Mode – consumption display FUN=5

It is possible to display the consumptions and the production of several energies of the system, with monitoring of up to a maximum of ten lines.

Warning: with physical configuration, only the consumptions of one line can be displayed.

For each line, the consumptions and the instantaneous, daily, monthly, and annual economic evaluation are displayed.

It will be possible to set two maximum consumption values, with the device emitting visual and sound notifications if these are exceeded. In this case, the displayed value will be green when below both limits, yellow when one has been exceeded, and red when both have been exceeded.

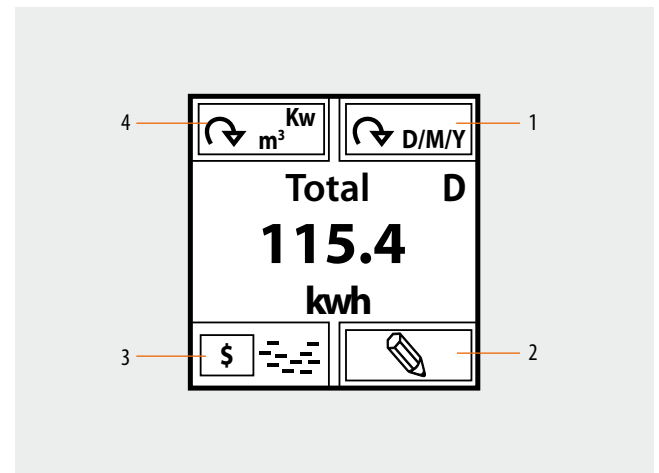
ZA	Line address	0 – 9
ZB	Line address	1 – 9
MOD	Type	0 = ELECTRICITY 1 = WATER 2 = GAS 3 = DHW 4 = HEATING/COOLING
FUN	Function	5

### Functions

Once the device has been configured, it will be possible to scroll through the various lines using icon 4. For each measurement interface, by pressing briefly icon 3 it will then be possible to display the consumptions or the economic evaluation.

Press and hold down icon 3 to access a submenu where it will be possible to change the basic value of the economic evaluation.

Consumption and economic evaluations are themselves split into: instantaneous, daily (D), monthly (M), annual (Y). It is possible to scroll through these settings using icon 1. Press and release icon 2 to access a submenu that can be used to set the time, the date, the threshold levels (if enabled), and the possibility of enabling or disabling the beep emitted when the threshold is exceeded.



### Legend

1. selection of display times
2. setting of the functions (time, date, max. power, etc.)
3. economic display of the consumptions
4. selection of the lines to display

HD4891 - HC4891 - HS4891  
L4891 - N4891 - NT4891

### - LOAD MANAGEMENT mode

This mode, only available if Local Display is configured using the software, gives the possibility of displaying loads, with their priority levels, and force their activation. The device can manage up to 20 loads; if these are connected to actuators with current sensor it will be possible to display other load information, like the instantaneous power consumption.

When the central unit for load management intervenes on a load, the device (if enabled during the configuration) notifies the event with an indication on the display and an audible notification.

#### Functions

After the configuration of the device it will be possible to select the various loads using icon 1.

Icon 4 is disabled until the moment the central unit disables the load; when this happens, the icon becomes active, and can be selected to force the activation of the load. In this condition, icon 3, used to intervene on the status of the load, is disabled.

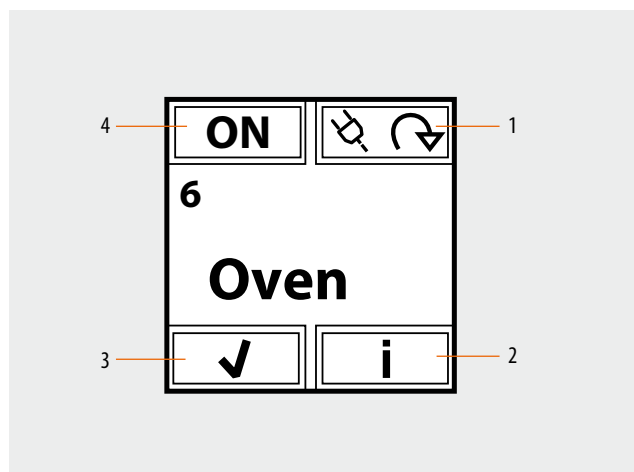
However, if icon 4 is disabled, it will be possible to select icon 3 to pre-force the load, and avoid disconnection in case of intervention of the central unit when consumptions are exceeded.

If the loads are connected to actuators with current sensor, use icon 2 to access a submenu that can be used to display the instantaneous power consumption, as well as information from the line total consumption meters. While in this submenu, you can use the RESET icon to reset the meters. Press key 2 for 3 seconds to access the menu used for setting the time, the date, and the sound notification (beep).

### - Advanced CEN SCENARIO mode

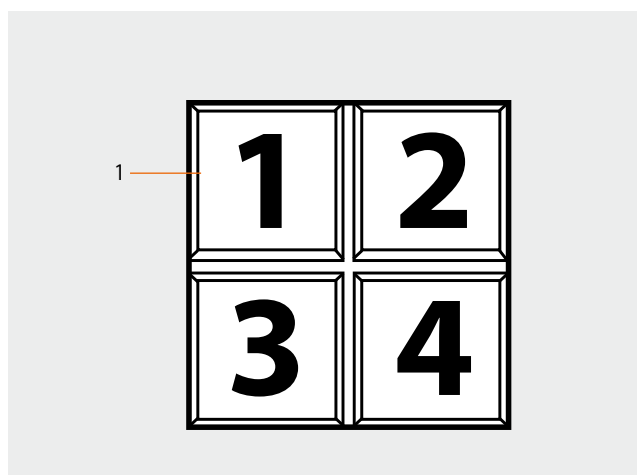
For systems with MH200N scenario programmers, Local Display can be used to enable 1 of the 4 scenarios displayed. This is done using the associated icons.

This function is only available if Local Display has been configured using the software.



#### Legend

1. selection of the load to control
2. display of consumption data and device setup
3. activation/deactivation of the load
4. forced activation of the load disconnected by the energy management central unit, due to consumptions being exceeded.



#### Legend

1. scenario indication icon



## BUS cable

L4669 - L4669/500

### Description

The grey BUS/SCS cable has been purposely designed and produced for the installation of the Automation, Temperature Control and Burglar Alarm systems. This cable is used for the distribution of the power supplies and the operating signals to all system devices.

The cable consists of a grey external sheathing and two twisted flexible conductors with a section of 0.35 mm<sup>2</sup> one blue and one white.

The cable is sold in 2 different type of coils:

- 100 m coil, item L4669
- 500 m coil, item L4669/500

The cable has 300/500 V insulation. Using the clear clamp protections included in all the devices, the systems can also be installed in the same boxes and ducts as the power lines (110 Vac, 127 Vac and 230 Vac).

### WARNING

Although the construction of the grey cable ensures 300/500 V category electric insulation, correct system operation is not guaranteed when installed together with the power cables in the following cases:

- industrial environments,

In residential/service sector environments, when the power cables provide power supply to:

- lift,
- inverters,
- pumps,
- motors and controlled motors,
- metal iodines lamps.

**The grey BUS/SCS cable is not suitable for underground installation.**

### Technical data

Insulation voltage:	300/500 V
Can be buried:	NO
Reference standards:	It complies with the tests required by the following regulations: EN60811, EN50289, EN50290, EN60228, 50265-2-1, EN50395, EN50396 as described inside the IMQ CPT 062 document
External sheath colour:	grey (RAL 7001)
External sheath diameter:	5.5 +/- 0.1 mm
External sheath thickness:	0.8 mm
External sheath material:	PVC (RZ)
Number of internal conductors:	2 unshielded twisted flexible conductors with sheath
Colour of internal conductors:	white and blue
Sheath thickness of internal conductors:	0.60 mm
Sheath diameter of internal conductors:	PVC (R2)
Conductor material:	red electrolytic copper
Conductor section:	0.35 mmq (12 x 0.20 mmq)
Operating temperature:	15 - 70 °C
Maximum short circuit temperature:	150 °C
Coil length:	100 m or 500 m



# Halogen free BUS cable

L4669HF

## Description

This white BUS-SCS cable has been purposely designed and built for the installation of Automation and Temperature control systems in rooms with high risk of fire.

Produced without halogens, the cable will burn without releasing toxic substances or heavy, dense smoke, significantly increasing the safety level.

This cable, consisting of an external sheath and two internal twisted conductors, is used for the distribution of the power supplies and the operating signals to all system devices.

The cable has 450/750 V insulation. Using the clear clamp protections included in all the devices, the systems can also be installed in the same boxes and ducts as the power lines (110 Vac, 127 Vac and 230 Vac).

## WARNING

Although the construction of the white cable ensures 450/750 V category electric insulation, correct system operation is not guaranteed when installed together with the power cables in the following cases:

- industrial environments,

In residential/service sector environments, when the power cables provide power supply to:

- lift,
- inverters,
- pumps,
- motors and controlled motors,
- metal iodines lamps.

The cable may be installed underground (inside appropriate protective conduits)

## Technical data

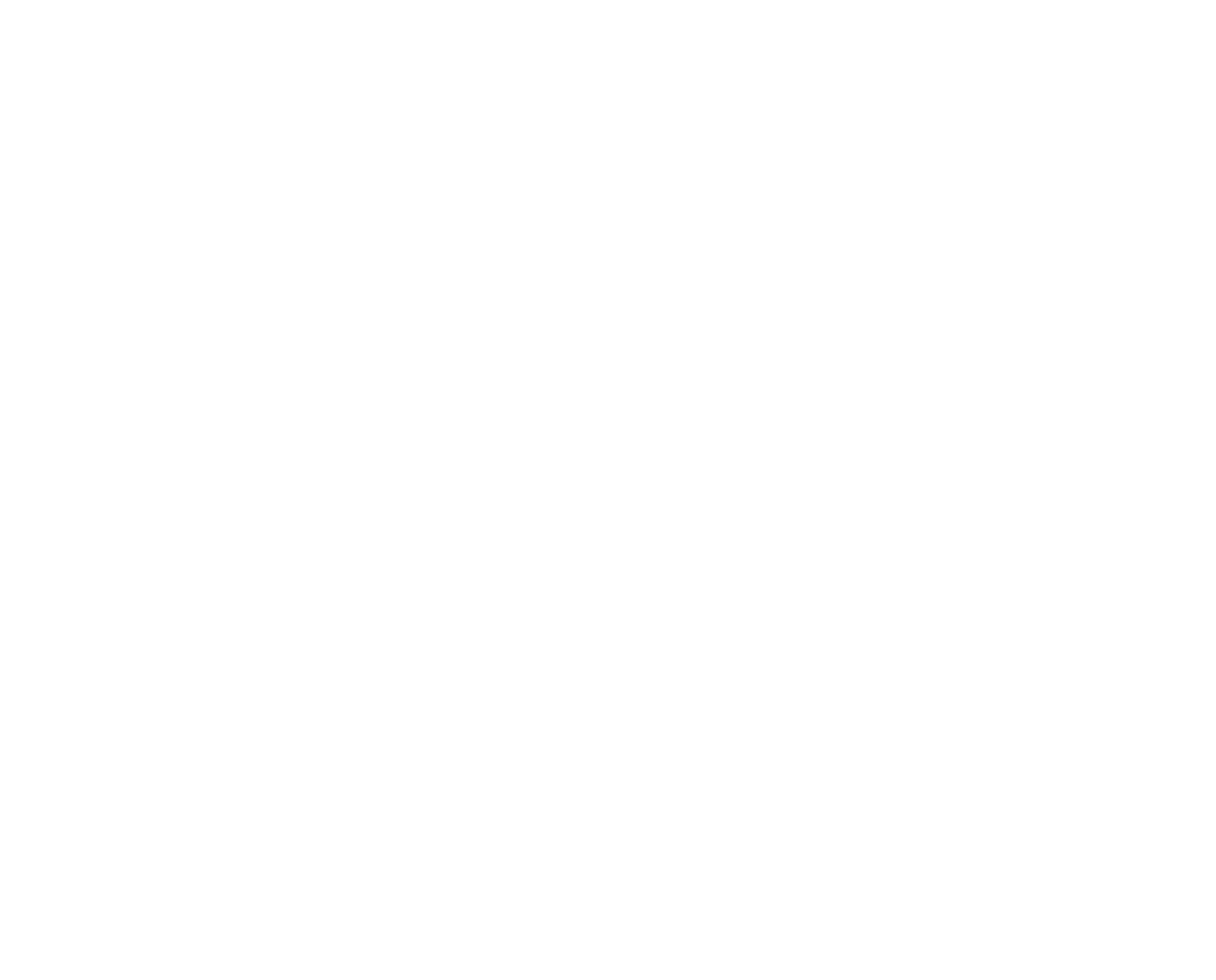
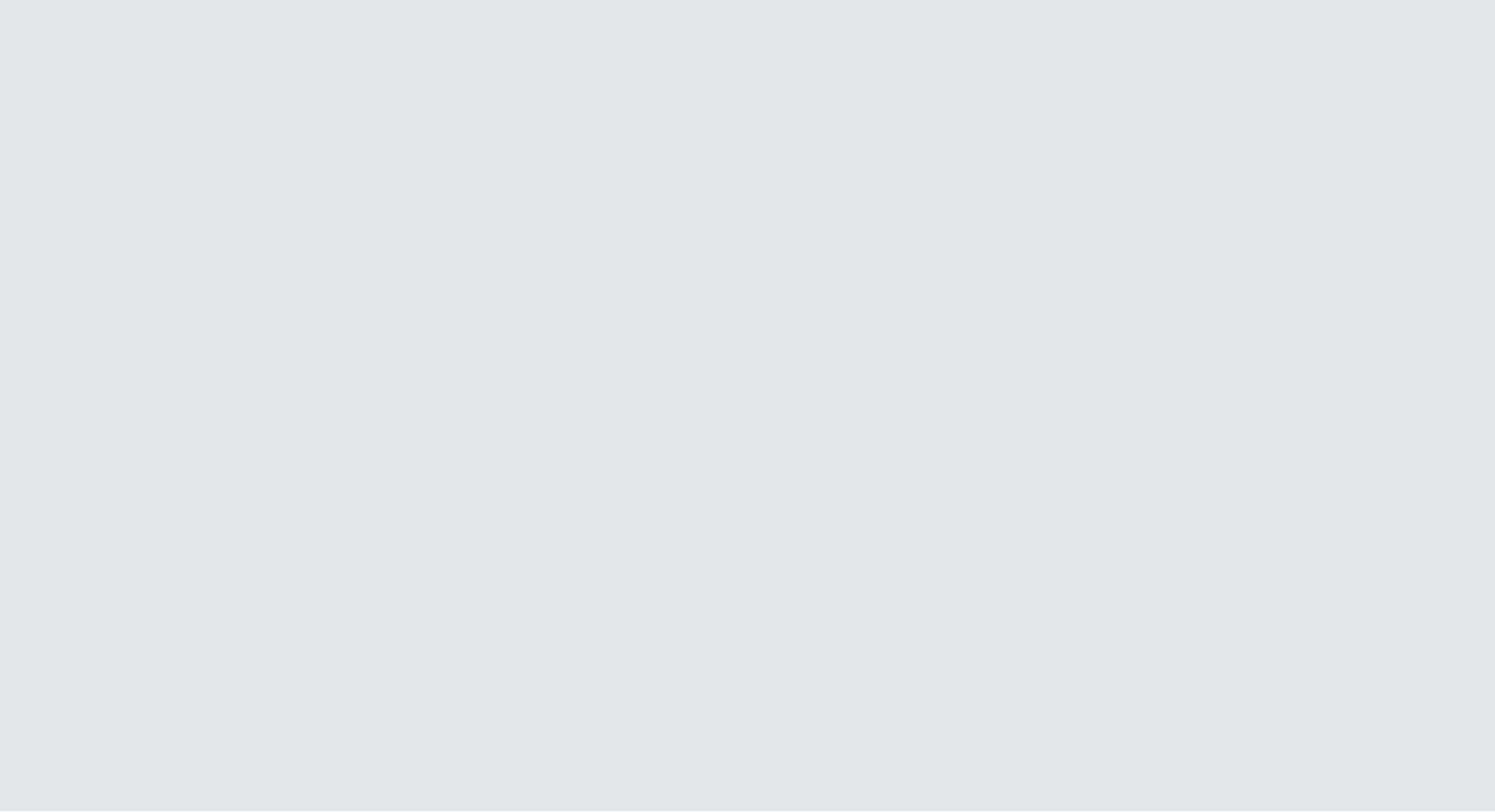
Insulation voltage:	450/750 V
Can be buried:	YES inside appropriate protective conduits
External sheath colour:	white (RAL 9010)
External sheath diameter:	5.2 +/- 0.1 mm
External sheath thickness:	0.8 mm
External sheath material:	LDPRPE Thermoplastic quality M1, hardness 95 A Shore
Number of internal conductors:	2 unshielded twisted flexible conductors with sheath
Colour of internal conductors:	brown and brown/white
Sheath thickness of internal conductors:	0.45 mm
Sheath material of internal conductors:	LDPE POLYETHYLENE
Conductor material:	red electrolytic copper
Conductor section:	0.52 mmq (7 x 0.308 mm)
Operating temperature:	(-15) – (+70) °C
Maximum short circuit temperature:	150 °C
Coil length:	100m

## Standards, Certifications, Marks

It complies with the tests required by the following regulations: UL13, UL1581, EN60811, EN50289, EN50290, EN60228, 50265-2-1, EN50395, EN50396 as described inside the IMQ CPT 062 document

Marks:





860	MY HOME	Technical sheets - Burglar alarm	
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## CONTENTS

Technical sheets – Burglar alarm



## Radio IR detector

3440

### Description

This device, sensitive to the movement of warm bodies, is suitable for the protection of interiors. The configuration can be changed to adjust the tripping sensitivity and set the system to perform typical Automation functions, such as, for example, the delayed switching on of lights, when the person crosses the protected area.

The sensor is powered by a 3.6V AA battery and is self protected against opening. Its free field range is 100 m.

After some detections, these sensors automatically deactivate for 3 minutes, to prevent the intruder to guess the sensor covering area. It also permits to save energy, thus extending the life of the battery.

### Technical data

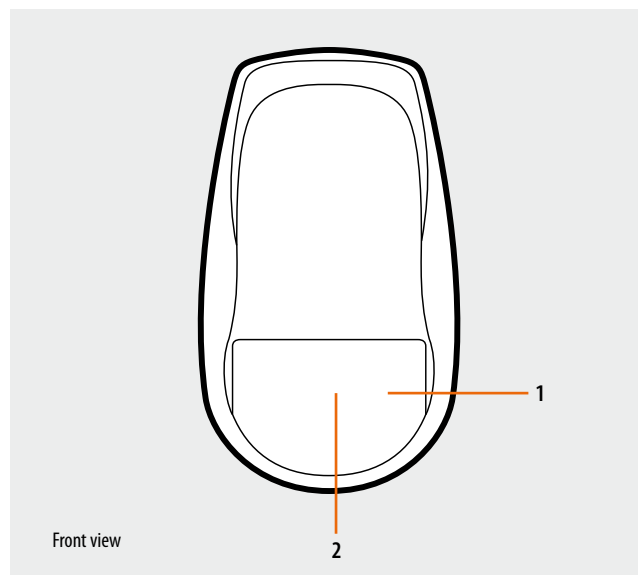
- Power supply: 3.6 V lithium battery - type 1/2 AA
- Operating temperature: 5 - 40°C (indoor use)
- Minimum battery duration: 3 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field  
(metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

### CONFORMITY DECLARATION

Item 3440 meets the essential requirements of directive 1999/5/CE, as it complies with the following standards:

**ETSI EN300 220-3 ETSI EN301 489-3 EN60950 EN50090-2-2 EN50090-2-3.**

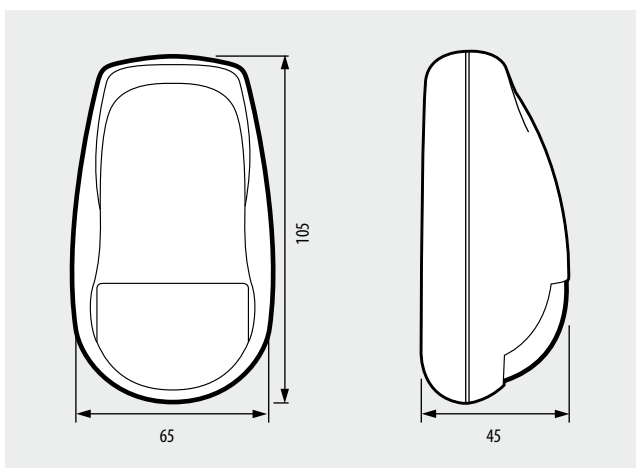
Year of approval of the CE mark in accordance with the above directive: 2007



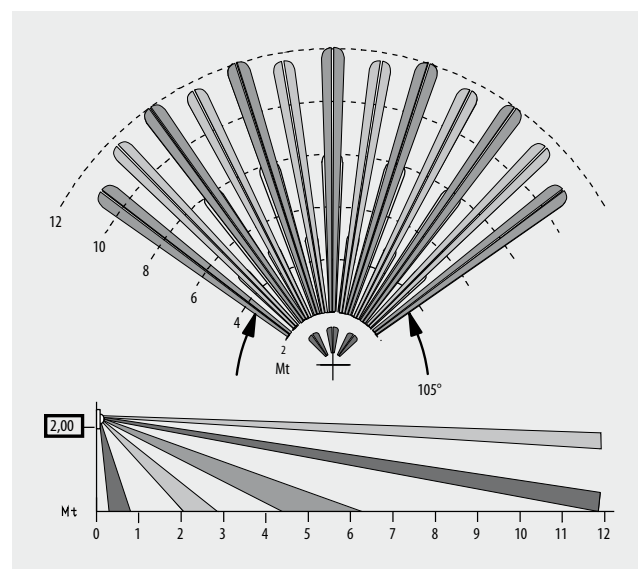
### Legend

- 1 - Fresnel lens;
- 2 - LED: Two red flashes signal an alarm; only one flash indicates that the battery is exhausted.

### Dimensional data



### Covering range



## Configuration

Infrared radio detectors require assigning of the zone they belong to, of the progressive sensor number within the zone, setting of the detection mode and the allocation of an auxiliary prealarm channel.

**WARNING:** the configuration operations must be performed with the battery disconnected.

### Z

This configurator assigns the number of the appropriate zone to the detector.

Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

### N

This configurator assigns the progressive number of the detector inside the appropriate zone.

Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

### MOD

This configurator sets the sensor detection mode.

It can be used, for **EXAMPLE**, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1 <sup>st</sup> level of sensitivity (1 high sensitivity impulse)
1	1 <sup>st</sup> level of sensitivity (pulse counter <sup>1</sup> - high sensitivity)
2	2 <sup>nd</sup> level of sensitivity (1 high sensitivity impulse)
3	3 <sup>rd</sup> level of sensitivity (1 high sensitivity impulse)
4	1 <sup>st</sup> level of sensitivity (1 high sensitivity impulse) delayed <sup>2</sup>
5	1 <sup>st</sup> level of sensitivity (pulse counter <sup>1</sup> - high sensitivity) delayed <sup>2</sup>
6	2 <sup>nd</sup> level of sensitivity (1 high sensitivity impulse) delayed <sup>2</sup>
7	3 <sup>rd</sup> level of sensitivity (1 high sensitivity impulse) delayed <sup>2</sup>
9	The device sends an auxiliary type alarm through the specified channel in the AUX position only when the system is armed

### NOTE:

- 1) Use the pulse counter function to avoid false alarms caused by thermal variations (radiators etc.).
- 2) Feature available on central units produced starting from week 08W06.

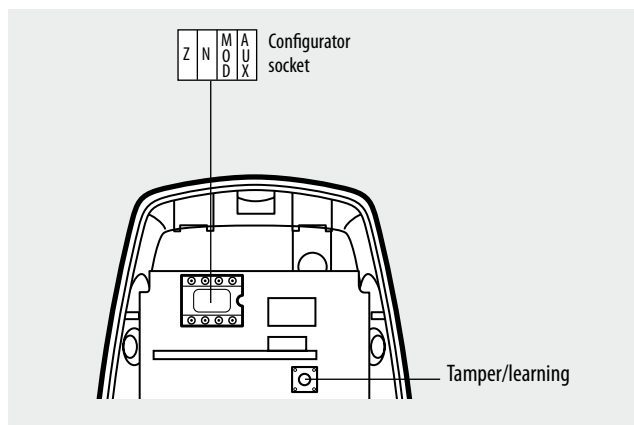
### AUX

This configurator activates the prealarm function and assigns an auxiliary channel (AUX). To enable and use the AUX channels, refer to the description for wired IR detectors.

**NOTE:** When the system is armed, the detector generates a normal burglary alarm.

### AUTOMATION – TIMED CONTROL mode:

Passive IR detectors can generate and send an ON timed control directly to one or more actuators of the automation system.



### ON timed control

For this mode, configure in the Z and N positions of the detector the addresses A and PL of the actuator to control respectively.

To the MOD position connect the ON configurator to enable the time delay function.

The switching ON period is set by connecting numerical configurators 1 to 9 to the AUX position as shown in the following table:

AUX	1	2	3	4	5	6	7	8	9
Time	1 min.	2 min.	3 min.	4 min.	5 min.	15 min	30 sec.	0.5 sec.	2 sec.

### AUTOMATION mode – GENERIC CONTROL USING AUXILIARY CHANNELS

In this case, the control intended for the actuator is managed by a control device, item H/L4651M2 or AM5831M2, which, based on its own operating mode, set in its own M position, activates the actuator with address set in A and PL.

The communication between the detector and the associated control device item H/L4651M2 or AM5831M2 is established by defining an auxiliary channel that has been configured in the IR detector by connecting the AUX configurator to the MOD position and specifying, with numeric configurators 1-9 in the AUX position, the number of the auxiliary channel. Obviously, in order to univocally set the auxiliary channel, also the AUX position of the control must have the same configurator as the IR detector.

### Pairing IR radio sensors

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the sensor tamper contact twice.
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.  
If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Perform self learning of the system from the central unit.
7. Exit "maintenance" mode.

### Cancelling the IR radio sensors

1. Switch the system to maintenance mode.
2. Remove the power supply from the receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled. After 10 seconds the LED starts flashing quickly. If the pushbutton is released now, only the sensors are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.



# Radio glass-breaking detector

3442

## Description

This sensor protects doors and windows and generates an alarm signal in case of unwanted opening. The device consists of two elements:

- a magnet, to be installed on the window /door, with corresponding bracket/spacer;
- a battery powered radio transmitter with NC contact to be installed on the window/door frame.

The alarm is generated when, by opening the door or the window, the magnet is moved away from the corresponding radio transmitter. Up to 3 NC additional contacts can be connected to the device, protecting 3 more units (doors/windows).

## Technical data

- Power supply: 3.6 V lithium battery - type 1/2 AA
- Operating temperature: +5 – +40°C (indoor use)
- Minimum battery duration: 3 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field  
(metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

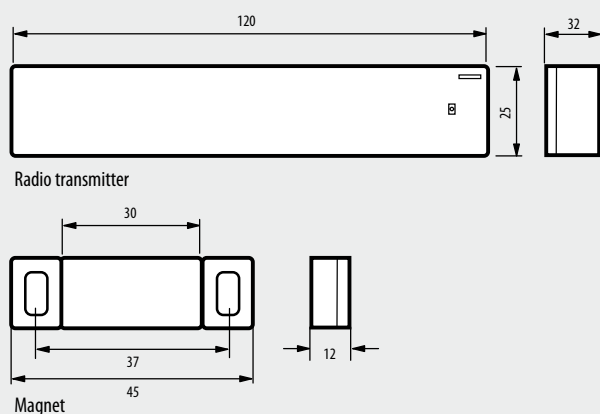
## CONFORMITY DECLARATION

Item 3442 meets the essential requirements of directive 1999/5/CE, as it complies with the following standards:

**ETSI EN300 220-3 ETSI EN301 489-3 EN60950 EN50090-2-2 EN50090-2-3**

Year of approval of the CE mark in accordance with the above directive: 2007

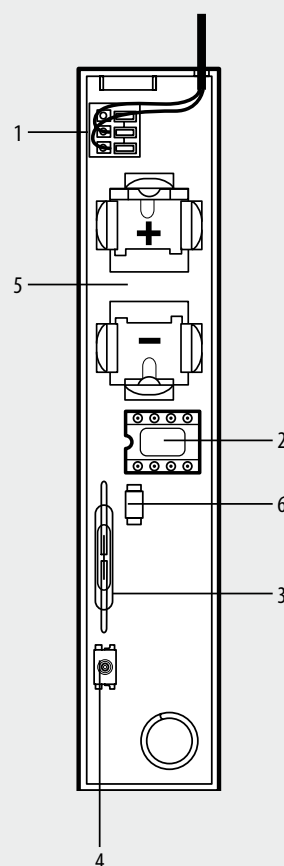
## Dimensional data



Magnet



Radio transmitter



Transmitter internal view

## Legend

- 1 - Additional contact line clamp;
- 2 - Configurator socket;
- 3 - Magnetic contact;
- 4 - Tamper/learning;
- 5 - Battery housing;
- 6 - LED: two red flashes signal an alarm; only one flash indicates that the battery is exhausted.

### Configuration

The device requires allocation of the zone it belongs to, the progressive number of the sensors within the same zone, and the setting of the detection mode, as well as the possible allocation of an auxiliary prealarm channel.

**WARNING:** the configuration operations must be performed with the battery disconnected.

#### Z

This configurator assigns the number of the appropriate zone to the detector.

Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

#### N

This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

#### MOD

The configurator connected to this socket specify the detection mode associated to the NC contact supplied and any other, max. 3, NC contacts connected to the internal clamp.

Configurator	Operating mode
0	Not delayed
2	Delayed <sup>(1)</sup>
9	The device sends an auxiliary type alarm through the specified channel in the AUX position only when the system is armed.
AUX	Prealarm function. With the system armed or disarmed, the device sends an auxiliary type alarm through the specified channel in the AUX position. If the zone it belongs to is divided, the auxiliary command is disabled.

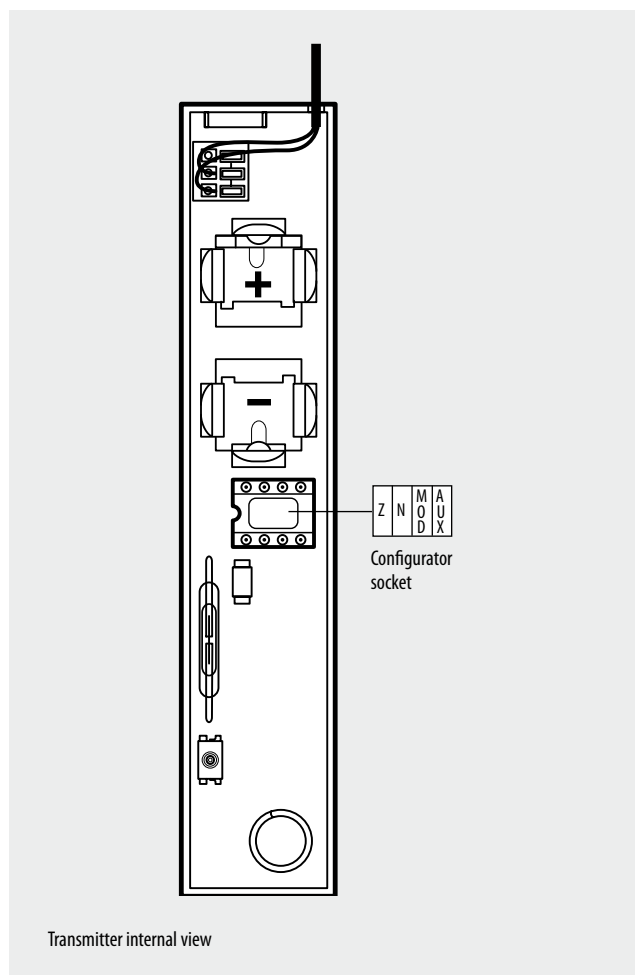
**NOTE<sup>(1)</sup>:** function available only with central units item 3485/B, item 3486 and HC/HD/HS/L/N/NT4601.

#### AUX

The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

**Note:** to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

**NOTE:** When the system is armed, the detector generates a normal burglary alarm.

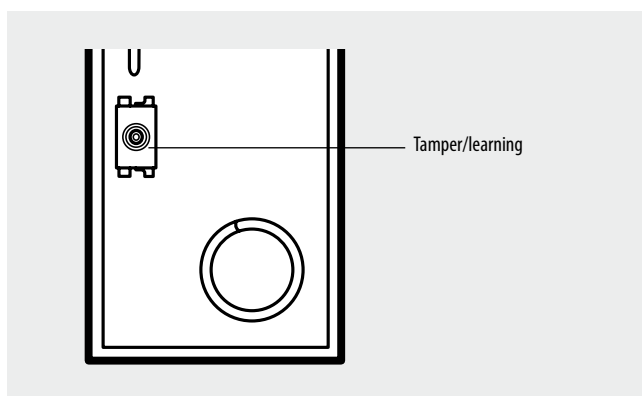


Transmitter internal view

## Configuration

### Pairing magnetic contacts

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the tamper contact twice.
4. If the pairing of the device has been performed correctly, the red LED of the receiver will go off. If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Close the sensors to deactivate the tamper.
7. Perform self learning of the system from the central unit.
8. Exit "maintenance" mode.



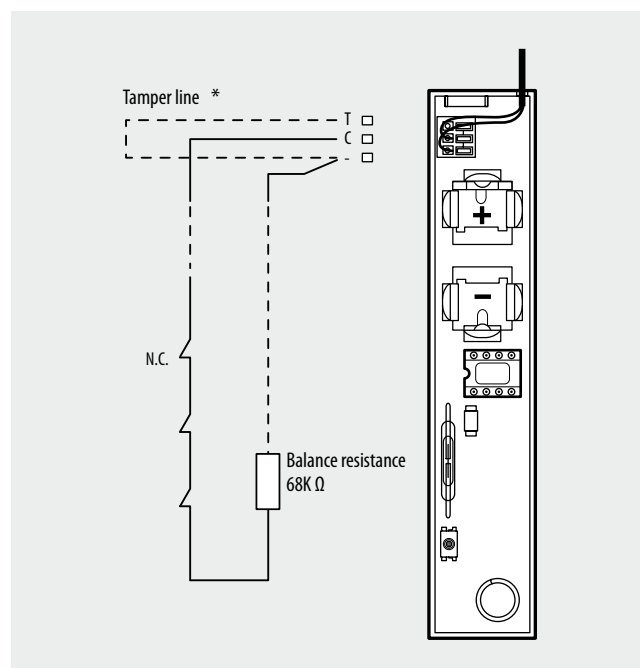
### Wiring diagram

In addition to the standard NC magnetic contact, the sensor can also control the opening of other optional NC contacts (max. of 3) connected to an appropriate clamp of the transmitting unit, as shown in the following diagram.

**WARNING:** For correct operation of the device the corresponding magnetic contact, or any additional magnetic contacts, must be activated within 12 hours from the moment the device starts operation.

### Cancelling magnetic contacts

1. Switch the system to maintenance mode.
2. Remove the power supply from the radio receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.  
After 10 seconds the LED starts flashing quickly. If the pushbutton is released now, only the sensors are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.



Note (\*): short circuit contacts – and T if no tamper line is installed



## Radio glass-breaking detector

3444

### Description

This device generates an alarm signal when the sensor detects the vibrations cause by the breaking of door or window glass. It consists of two elements:

- a vibration sensor, to be installed on the glass of the door or window to protect;
- a battery powered radio transmitter, to be installed on the frame;

Also supplied is an NC contact with additional magnet for the protection of doors and windows.

### Technical data

- Power supply: 3.6 V lithium battery - type 1/2 AA
- Operating temperature: 5 – 40°C (indoor use)
- Minimum battery duration: 3 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field  
(metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

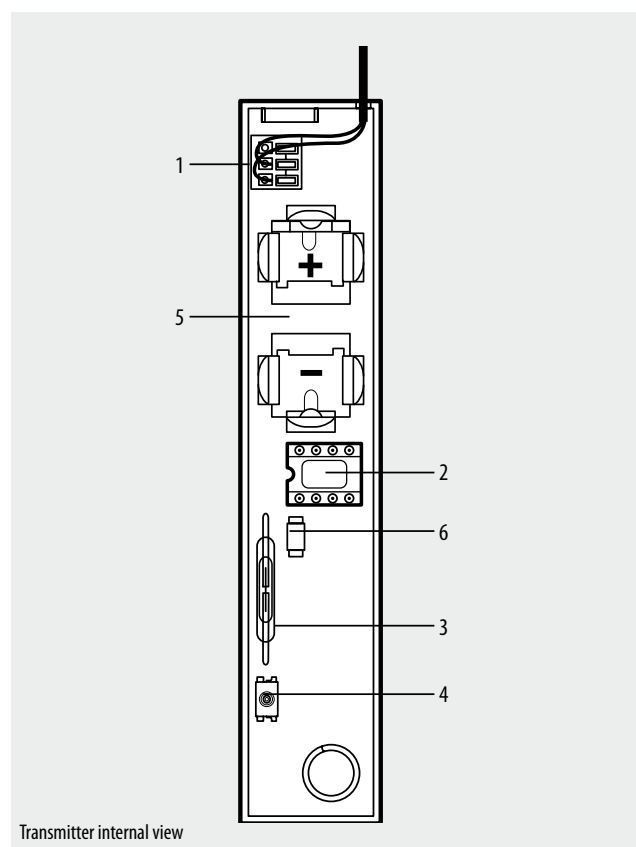
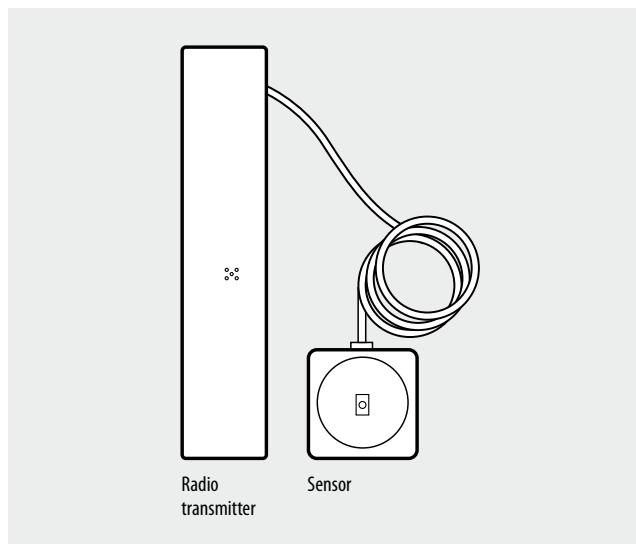
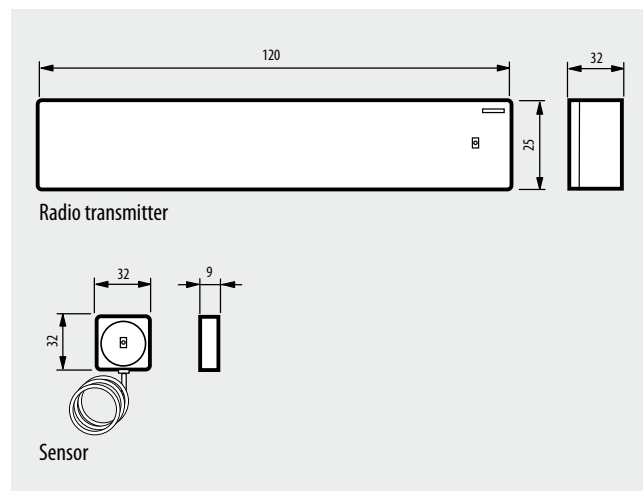
### CONFORMITY DECLARATION

Item 3444 meets the essential requirements of directive 1999/5/CE, as it complies with the following standards:

**ETSI EN300 220-3 ETSI EN301 489-3 EN60950 EN50090-2-2 EN50090-2-3**

Year of approval of the CE mark in accordance with the above directive: 2007

### Dimensional data



### Legend

- 1 - Sensor connection clamp;
- 2 - Configurator socket;
- 3 - Additional Magnetic contact;
- 4 - Tamper/learning;
- 5 - Battery housing;
- 6 - LED: two red flashes signal an alarm; only one flash indicates that the battery is exhausted.

### Configuration

The device requires allocation of the zone it belongs to, the progressive number of the sensors within the same zone, and the setting of the detection mode, as well as the possible allocation of an auxiliary prealarm channel.

**WARNING:** The configuration operations must be performed with the battery disconnected

#### Z

This configurator assigns the number of the appropriate zone to the detector. Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

#### N

This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

#### MOD

The configurator connected to this socket specifies the detection mode associated to the glass-breaking sensor supplied and the NC contact with additional magnet.

Configurator	Operating mode
0	Not delayed
2	Delayed <sup>(1)</sup>
9	The device sends an auxiliary type alarm through the specified channel in the AUX position only when the system is armed.
AUX	Prealarm function. With the system armed or disarmed, the device sends an auxiliary type alarm through the specified channel in the AUX position. If the zone it belongs to is divided, the auxiliary command is disabled.

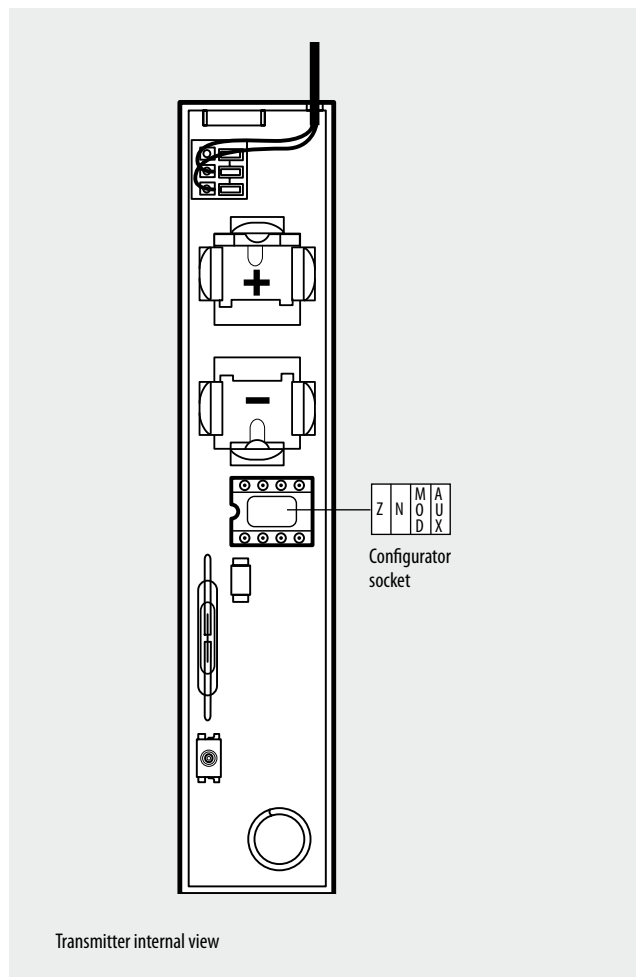
**NOTE<sup>(1)</sup>:** function available only with central units item 3485/B, item 3486 and HC/HD/HS/L/N/NT4601.

#### AUX

The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

**Note:** to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

**NOTE:** When the system is armed, the detector generates a normal burglary alarm.

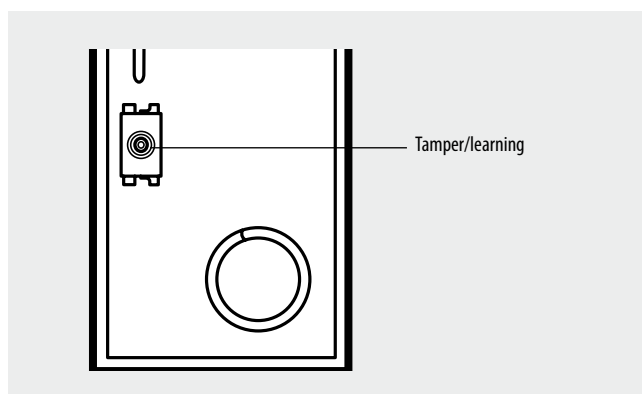


Transmitter internal view

## Configuration

### Pairing detectors

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the tamper contact twice.
4. If the pairing of the device has been performed correctly, the red LED of the receiver will go off. If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Close the sensors to deactivate the tamper.
7. Perform self learning of the system from the central unit.
8. Exit "maintenance" mode.



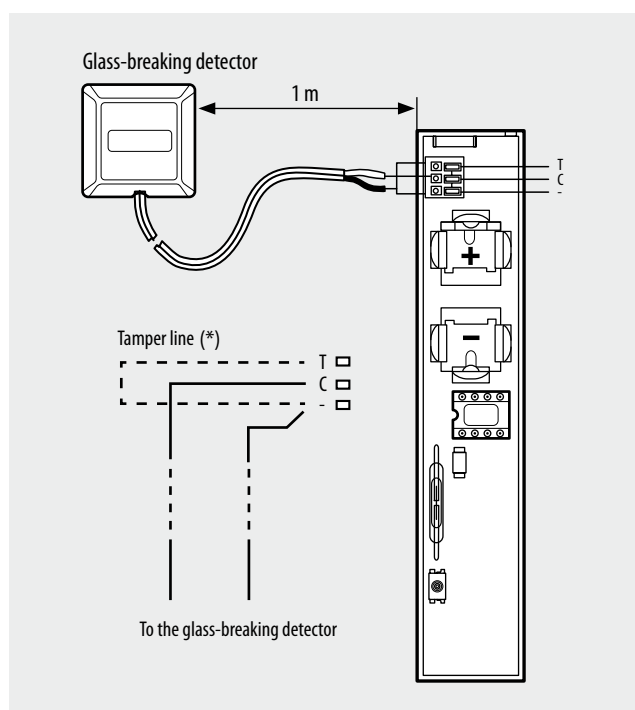
## Wiring diagram

The sensor must be connected using the transmitting unit as shown in the figure. Do not extend the probe cable.

**WARNING:** For correct operation of the device the glass-breaking detector, or any additional magnetic contacts, must be activated within 12 hours from the moment the device starts operation.

### Cancelling detectors

1. Switch the system to maintenance mode.
2. Remove the power supply from the radio receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.  
After 10 seconds the LED starts flashing quickly. If the pushbutton is released now, only the sensors are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.



Note (\*): short circuit contacts – and T if no tamper line is installed



# Radio rolling shutter opening detector

3445

## Description

This device is the radio version of the wired detector, item 3514. It generates an alarm if anyone attempts to open a rolling shutter.

It consists of two elements:

- a coil guide type rope detector to be fitted to the rolling shutter;
- a battery powered radio transmitter to be installed inside the box of the rolling shutter or on the frame of the window to be protected.

Also supplied is an NC contact with additional magnet for the protection of doors and windows.

The alarm is generated when the rope of the detector changes length following an attempt to open the rolling shutter.

## Technical data

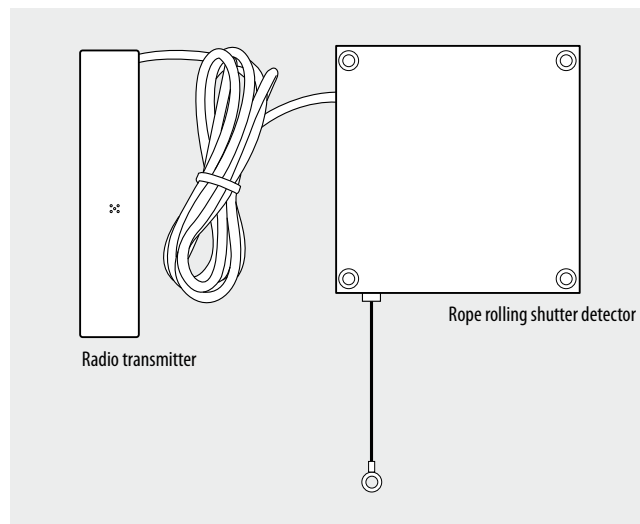
- Power supply: 3.6 V lithium battery - type 1/2 AA
- Operating temperature: 5 – 40°C (indoor use)
- Minimum battery duration: 3 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field  
(metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

## CONFORMITY DECLARATION

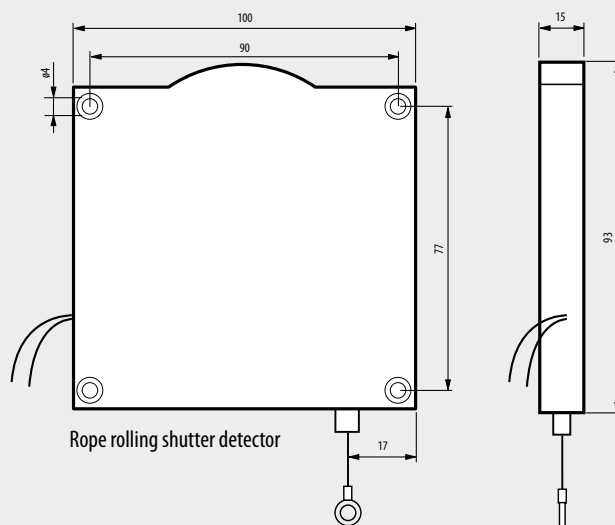
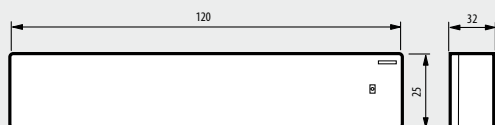
Item 3445 meets the essential requirements of directive 1999/5/CE, as it complies with the following standards:

**ETSI EN300 220-3 ETSI EN301 489-3 EN60950 EN50090-2-2 EN50090-2-3**

Year of approval of the CE mark in accordance with the above directive: 2007



## Dimensional data



### Configuration

The device requires allocation of the zone it belongs to, the progressive number of the sensors within the same zone, and the setting of the detection mode, as well as the possible allocation of an auxiliary prealarm channel.

**WARNING:** The configuration operations must be performed with the battery disconnected

#### Z

This configurator assigns the number of the appropriate zone to the detector. Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

#### N

This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

#### MOD

The configurator connected to this position, specifies the detection mode associated to the rolling shutter sensor.

Configurator	Operating mode
0	Not delayed
2	Delayed <sup>(1)</sup>
9	The device sends an auxiliary type alarm through the specified channel in the AUX position only when the system is armed.
AUX	Prealarm function. With the system armed or disarmed, the device sends an auxiliary type alarm through the specified channel in the AUX position. If the zone it belongs to is divided, the auxiliary command is disabled.

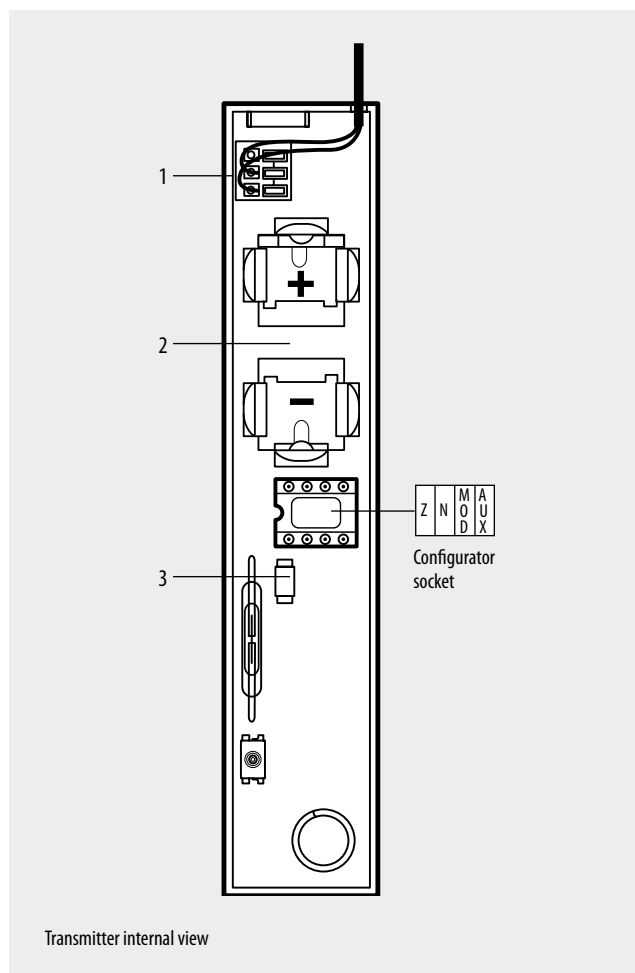
**NOTE<sup>(1)</sup>:** function available only with central units item 3485/B, item 3486 and HC/HD/HS/L/N/NT4601.

#### AUX

The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

Note: to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AMS794 see the appropriate technical sheet.

**NOTE:** When the system is armed, the detector generates a normal burglary alarm.



### Legend

- 1 - Rope rolling shutter detector connection clamp;
- 2 - Battery housing;
- 3 - LED: two red flashes signal an alarm; only one flash indicates that the battery is exhausted.

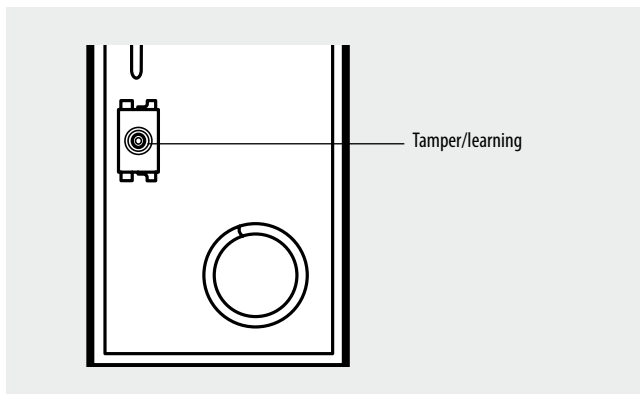
## Configuration

### Pairing detectors

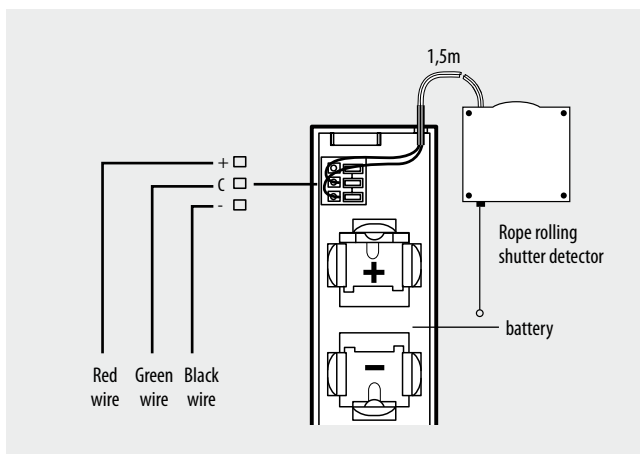
1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
2. Press the tamper contact twice.
4. If the pairing of the device has been performed correctly, the red LED of the receiver will go off. If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Close the sensors to deactivate the tamper.
7. Perform self learning of the system from the central unit.
8. Exit "maintenance" mode.

### Cancelling detectors

1. Switch the system to maintenance mode.
2. Remove the power supply from the radio receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled. After 10 seconds the LED starts flashing quickly. If the pushbutton is released now, only the sensors are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.



## Wiring diagram



**NOTE:** do not extend the cable of the detector.

**WARNING:** For correct operation of the device the rolling shutter detector must be activated within 12 hours from the moment the device starts operation.



## Radio remote control for teleassistance

3448

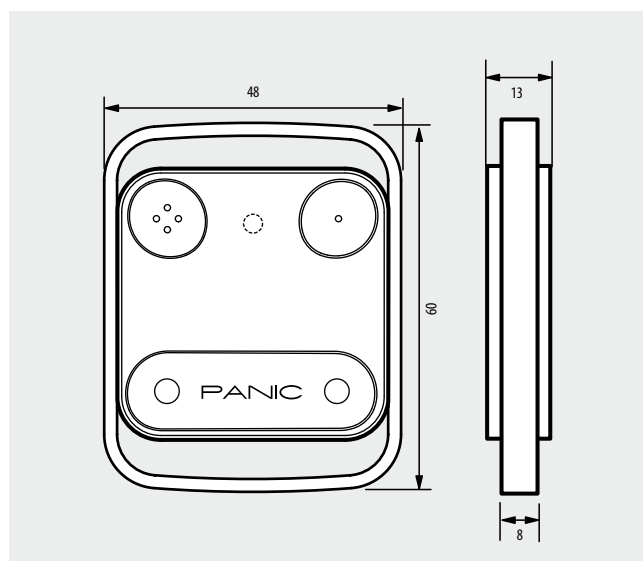
### Description

Radio device with three pushbuttons, for sending remote assistance requests. Pressing the larger pushbutton a radio signal is sent, which is transferred on the BUS of the Burglar-alarm system through the radio receiver item HC/HD/HS/L/N/NT4618. The two round pushbuttons are used to configure the device and for resetting (silencing) the current alarm.

### Technical data

- Power supply: 3 V lithium battery - type CR2032
- Operating temperature: 5 – 40°C
- Minimum battery duration: 2 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field  
(metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

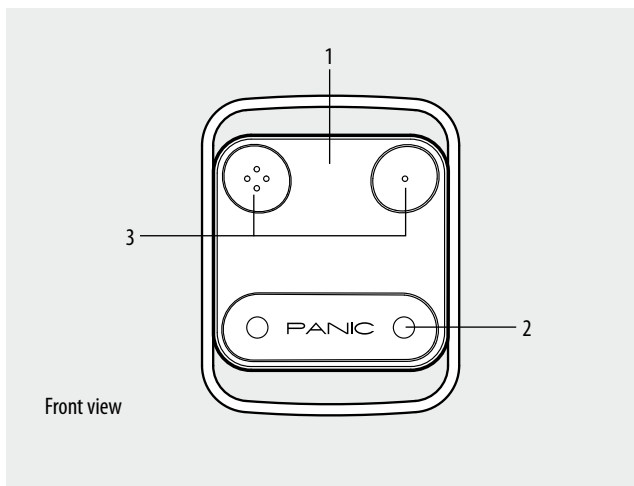
### Dimensional data



### Configuration

#### Pairing remote controls

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press one of the round pushbuttons for 5 seconds.
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.  
If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Perform self learning of the system from the central unit.
7. Program the remote controls on the central unit.
8. Exit "maintenance" mode.



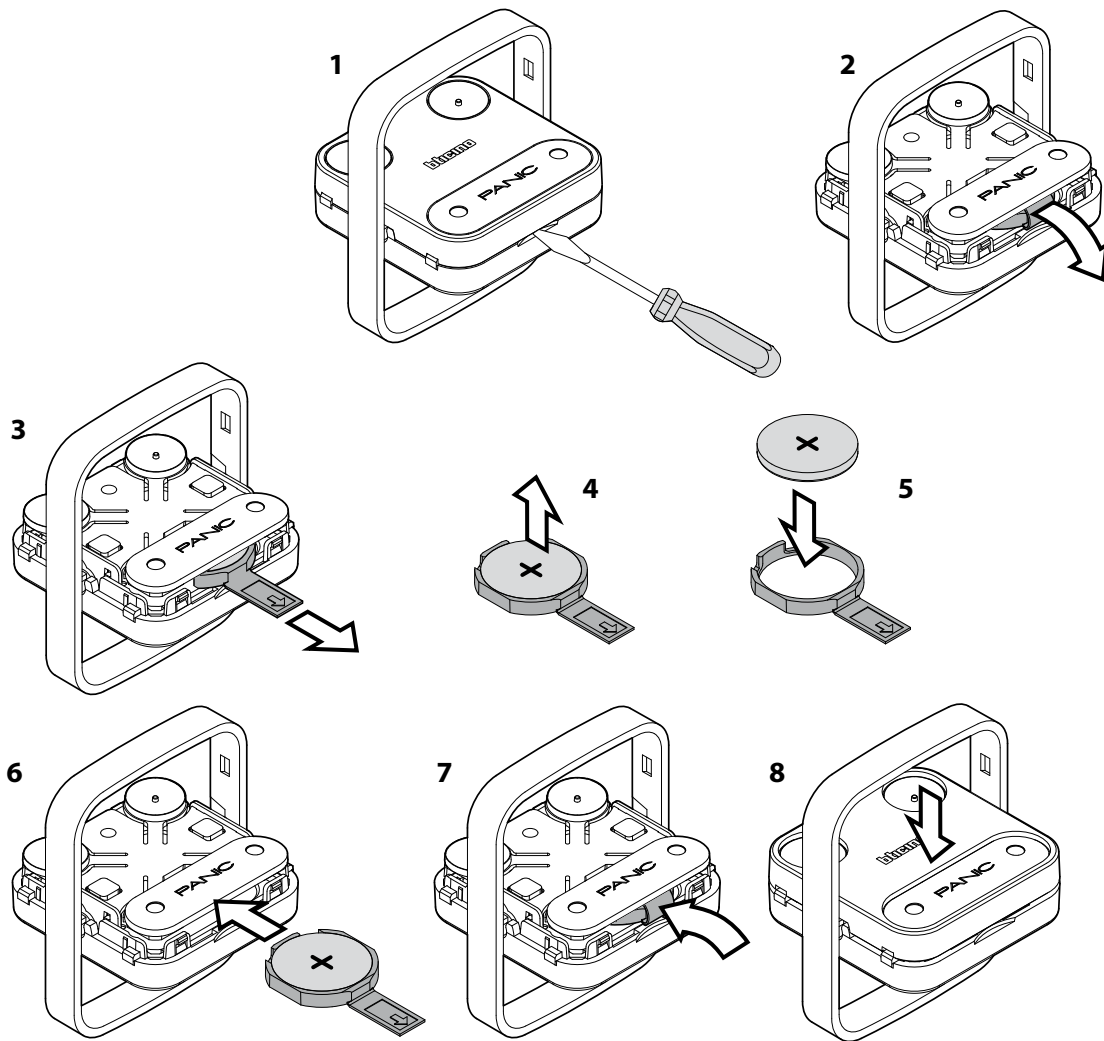
Front view

### Legend

- 1 - LED: when pressing one key:
- it flashes twice if the battery is charged;
  - it flashes once if the battery is exhausted;
- 2 - Generates an alarm;
- 3 - Alarm reset (press for 5 seconds for learning to be performed on the receiver).

#### Cancelling remote controls

1. Switch the system to maintenance mode.
2. Remove the power supply from the receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

**Battery replacement**



## Relay actuator

3479

### Description

This device allows to repeat various types of alarms by means of a relay voltage-free contacts, depending on its configuration.

It can be activated by a technical alarm interface, or by another signal through the auxiliary channel (AUX).

Normally used for the control of gas/water safety solenoid valves, or third party devices (telephone diallers, optical notifications, etc.).

The internal relay is in positive safety; this means that, in case of tampering, it switches over the contacts. By modifying the configuration, it is possible to change the safety mode of the internal relay.

### Related items

Technical alarm interfaces: 3841 and F483

### Technical data

Power supply from SCS BUS:	27 Vdc
Max. absorption:	20 mA
Contact output:	24 V 1 A cosφ 0.4
Operating temperature:	5 – 40 °C

### Configuration

The relay actuator requires the allocation of the progressive number within the group of auxiliary devices (relay actuator and auxiliary channels interface) installed within the system, of the auxiliary channel number, and the operating modes.

N°

This configurator assigns the progressive number inside the auxiliary unit.

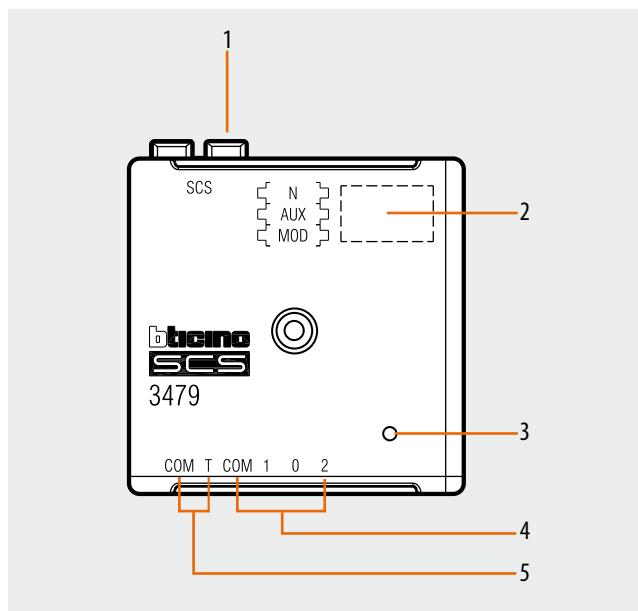
Configurator 1 identifies the first auxiliary, configurator 2 identifies the second and so on for a maximum of 9 auxiliaries.

### AUX and MOD

In combination the configurators in the AUX and MOD sockets assign the operating mode on the basis of the following table.

### Operating mode

Configurators		Description	It activates by...	It resets by...
AUX	MOD			
none	none	Repetition of the siren alarm	Siren activation	Silencing
none	1	System fault notification	Activators red LED notification	
none	2	System status notification	Activation	Deactivation



### Legend

1. Clamp for burglar alarm BUS
2. Configurator socket
3. LED indicating activated relay.
4. Relay contact
5. Tamper line

**“Auxiliary” operating mode**

Configurators		Description	It activates by...	It resets by...
AUX	MOD			
none	3	Signalling with memory of the activation of any auxiliary channel of the system. Typical example: signalling with memory of any technical alarm.	Any AUX device of the system	Pressure of the needle key on any technical alarm interface with AUX configurator from 1 to 9
1-9	3	Signalling with memory of the activation of the corresponding auxiliary channel. Typical example: signalling with memory of a specific technical alarm.	Technical alarm interface with corresponding AUX channel	pressure of the needle key on the interface of the active technical alarm
none	4	Signalling without memory of the activation of any auxiliary channel of the system. Typical example: signalling without memory of any technical alarm.	Any AUX device of the system	Pressure of the needle key on any technical alarm interface with AUX configurator from 1 to 9
1-9	4	Signalling with memory of the activation of the corresponding auxiliary channel. Typical example: signalling without memory of a specific technical alarm.	Technical alarm interface with corresponding AUX channel	pressure of the needle key on the interface of the active technical alarm
	5	As mode 3 but with relay normally not excited.		
	6	As mode 4 but with relay normally not excited.		

**NOTES**

- Modes 5 and 6 give the same operating results of modes 3 and 4. Their difference is that the relay is normally not excited. This enables an opposite behaviour in case of tampering (cutting of the wire or BUS short circuit). In fact in mode 3 and 4 a tampering excites the device (modes indicated in the case of actuation of alarms such as the siren, the telephone communicator, etc.); however, in mode 5 and 6 the same tampering does not cause any actuation (modes indicated in case of safety actuations such as electrical door locks etc.). The selection of the appropriate mode ensures total system safety.

- The “S” key of the 3 module flush-mounted central unit or the disabling of the central unit with display, which main function is that of silencing the sirens during a technical alarm, disables the relay if this has been activated by the technical alarm interface configured in mode “0” or “4” (technical alarm).

- In all modes there is an auxiliary activation also in case of pre-alarm (IR detector and contact interface with AUX configurators). Attention must therefore be paid when using the relay actuator (in modes with memory or with sensitivity to any auxiliary channel) to avoid unwanted activations.

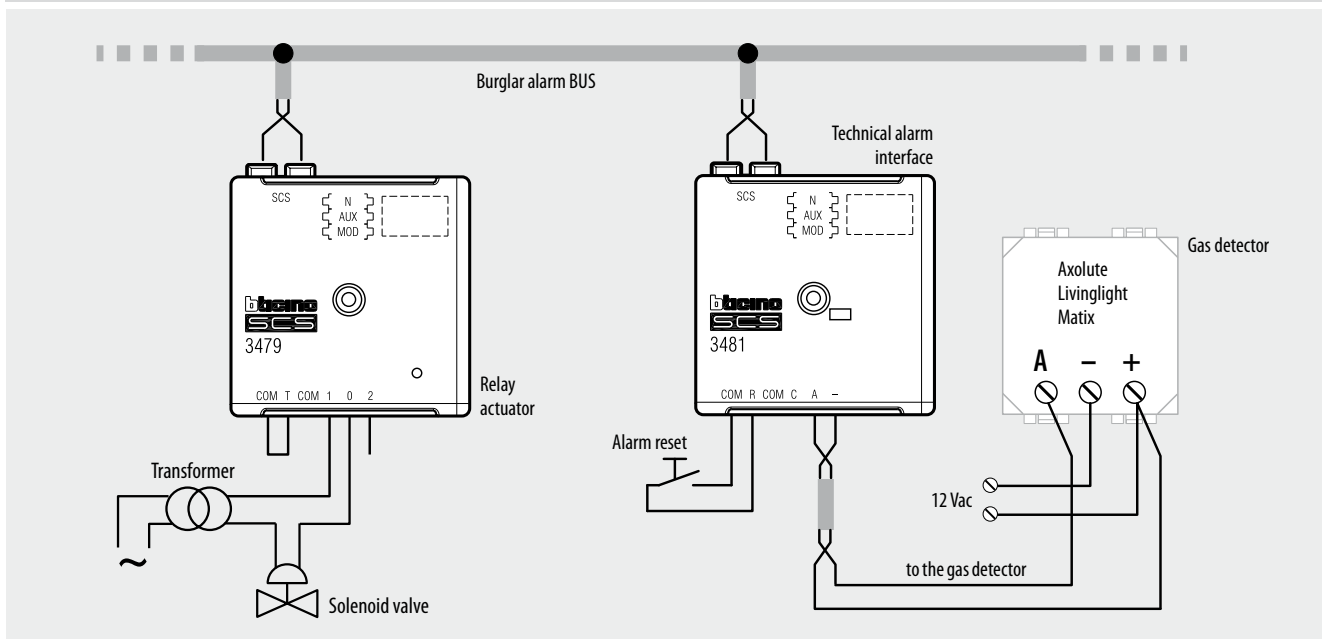
**EXAMPLE: Activation of the solenoid valve in case of gas leak**

Relay actuator configuration:

Configurator position	Value
N°	1
AUX	1
MOD	6

Technical alarm interface configuration

Configurator position	Value
N°	2
AUX	1
MOD	4

**Wiring diagram**



## Contact interface

3480

### Description

This interface is used to connect 2 independent contact lines that can be balanced by means of a resistance, and which tripping can be delayed, as well as one tampering protection line. It can be used to achieve centralisation of all interfaces inside junction boxes. A LED on the interface confirms appropriate operation of the device during the system test procedure, and the tripping of the burglar-alarm system, when the system is armed. This interface gives the possibility of connecting the alarm system to a sensor line (that can be balanced with resistance, and/or which intervention can be delayed) requiring 12VV power supply.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 5 mA
- Operating temperature: 5 – 40°C

### Dimensional data

- Size: 2 Basic modules

### Configuration

This interface module requires - for each of the two contact lines separate from each other - the allocation of the assigned zone Z, the progressive number N of the detectors situated in the same zone, the setup of the MOD protection mode of the contact line.

#### Z1

This configurator assigns the number of the assigned zone of the NC/NO magnetic contact connected to line 1.

Configurator 1 gives the contact the assignment to zone 1, configurator 2 gives the assignment to zone 2 and so forth, up to a maximum of 8 zones.

#### Z2

As above, for contacts connected to line 2.

#### N1

This configurator assigns the progressive number of the NC magnetic contact within the zone determined in position Z1.

Configurator 1 identifies the first detector, configurator 2 identifies the second, and so forth, up to a maximum of 9 contacts for each of the 8 zones.

#### N2

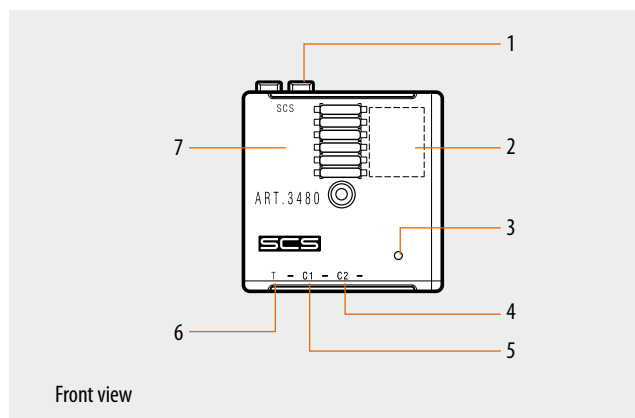
As above, for contacts connected to line 2 (zone Z2).

#### MOD1 and MOD2

In this position a configurator is inserted for selecting the operating mode of the interface according to the type of contact or detector connected to the two lines.

The interface can operate in two modes:

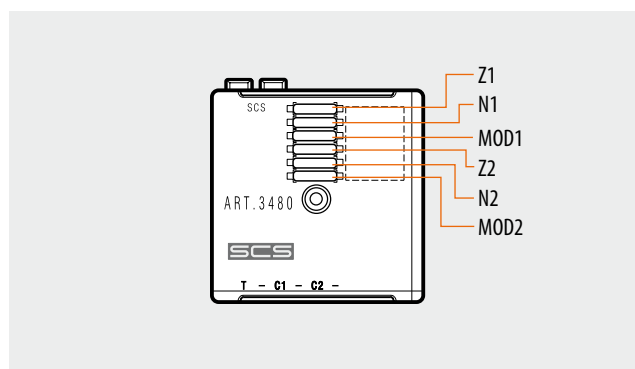
- as **interface for the management of alarm contacts**, system connection pushbutton, and auxiliary channel generation;
- as **interface for the management of technical alarms**.



Front view

### Legend

1. BUS;
2. Configurator socket;
3. Line activated LED;
4. Contact line 2;
5. Contact line 1;
6. Tamper line;
7. Anti-tamper device.



### Configuration

#### Managing alarms/system arming/auxiliary channel generation management

In this mode, two independent contact lines can be connected to the interface. The corresponding addresses must be specified in positions Z1, N1, and Z2, N2.

The configurator in position MOD1 and MOD2 specifies the type of contact for the generation of the alarm, as per the following table:

Configurator	Sensor connected
none	NC contact
1	NC contact - balanced
2	NC contact - delayed (1)
3	NC contact – delayed and balanced (1)
4	Contact NC and contact status forwarding
5	Contact NC balanced and contact status forwarding
6	Contact NC delayed and contact status forwarding
7	Contact NC delayed balanced and contact status forwarding
8	NO contact
9	NO contact for system arming from remote N.O. pushbutton (2)
AUX	NC contact – forwarding of contact status (3)

#### Notes:

- (1) Follows the delay set on the central unit:  
this function is only available with central units item 3486, 3485/B and item HC/HD/HS/L/N/NT4601. With central units item L/N/NT4600/1 the interface must be allocated to ZONE 1, with a time delay set (see the central unit configuration).
- (2) The system is activated when the pushbutton is pressed for a minimum period of 3 seconds.
- (3) This operating mode does not generate an alarm signal, but a contact status signal, useful for Automation and Temperature control applications (automatic switching off of the heating system when a window is open).

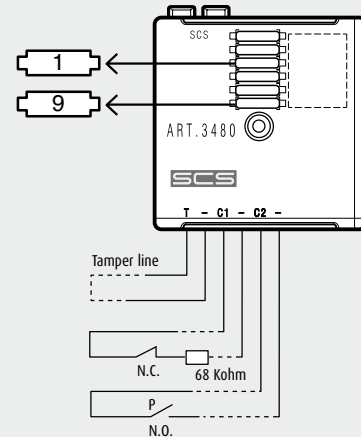
### Technical alarms management

In this mode, the interface can only manage one contact line connected to the C1 and clamp, to which the NC or NO contact for the generation of the technical alarm is connected. A NO pushbutton for resetting the generated technical alarm, can be connected to the - and C2 clamps of the second line. The Z and N address of the interface must only be specified in the positions Z1 and N1.

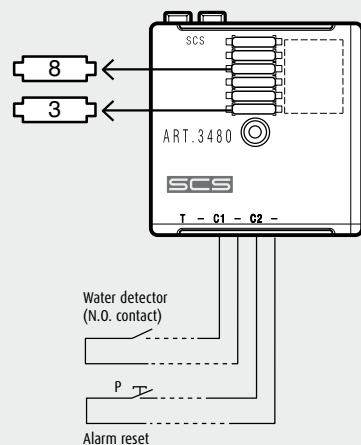
Selection of the alarm contact:

Configurator in MOD1 position	Type of contact
none	NC contact
8	NO contact

When a technical alarm with intermittent sound of the indoor siren is generated, it will also be possible to generate an Auxiliary signal. The channel of the Auxiliary signal is defined by the numeric value of configurator 1 to 9 entered in the position MOD2. If the OFF configurator is entered in this position, no auxiliary channel is generated (only the technical alarm with intermittent sound of the siren).



Alarm contacts mode: management of a balanced NC contact line with N.O. system arming pushbutton



Technical alarms mode: management of a water detection probe. If flooding occurs, a sound alarm will be generated by an internal siren, and a signal will be sent to auxiliary channel no. 3. To reset the alarm press the P pushbutton.

### Energy saving management with Temperature control

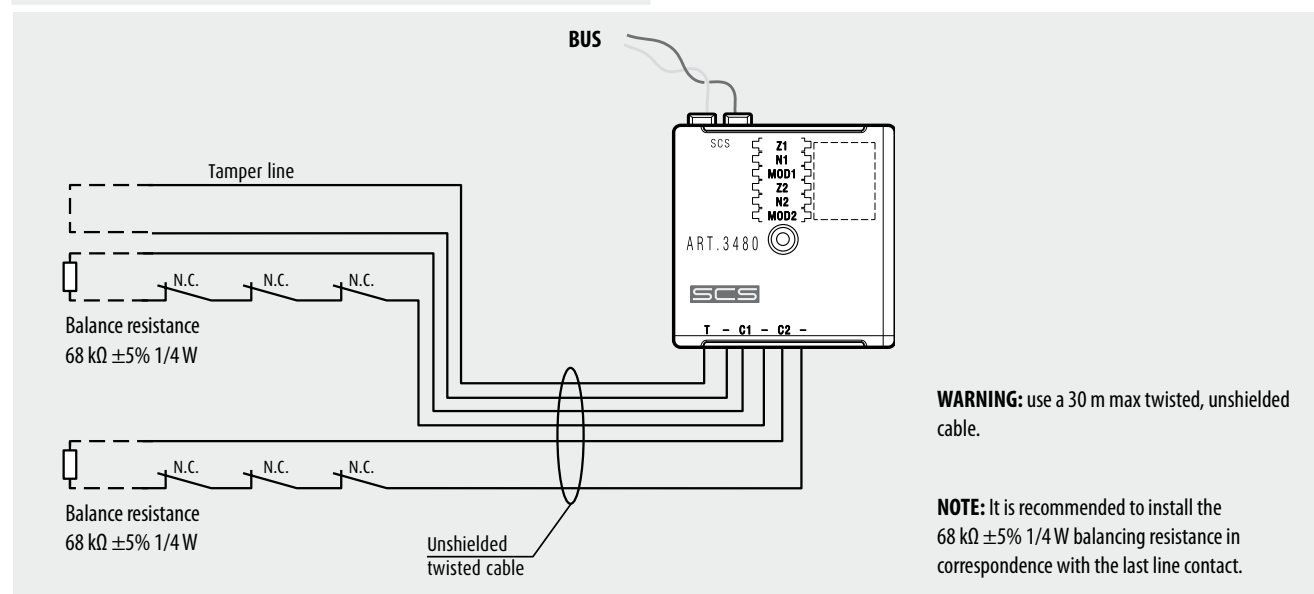
If the contact interface is used in conjunction with the temperature control system to optimise energy saving, two different types of configurations will be possible:

- **Use in the temperature control system only:** The contact interface is directly connected to the temperature control BUS. It autonomously and independently manages the two C1 and C2 lines. Only the line used must be configured, and not both of them. Follow by connecting the AUX configurator to the MOD1 and/or MOD2 sockets. Then configure the [Z1/2] and [N1/2] sockets, in order to assign the address from 1 to 99 to the device within the system. The coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

- **Use of a burglar-alarm system integrated with the Temperature control system:** in this case, the contact interface is connected to the burglar-alarm system BUS only, and communicates with the temperature control system BUS through the F422 interface.

The interface must be configured in Z1/2 and N1/2 following the requirements and features of the burglar-alarm system; only configurators with values 4 to 7 must be connected to the MOD1/2 position, corresponding to the management of NC contacts with generation of AUX event (see tables above). Also in this case, the actual coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

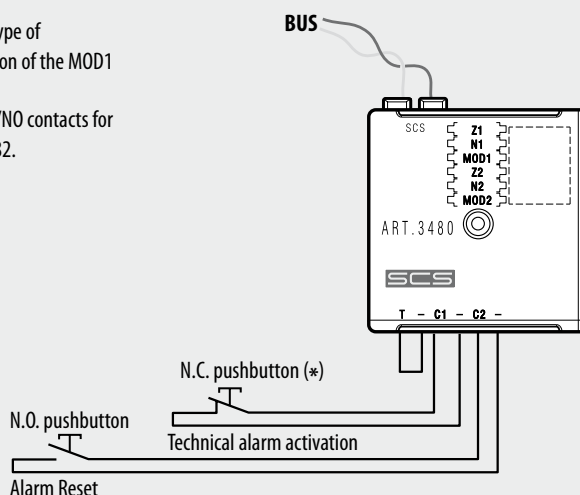
### Wiring diagram



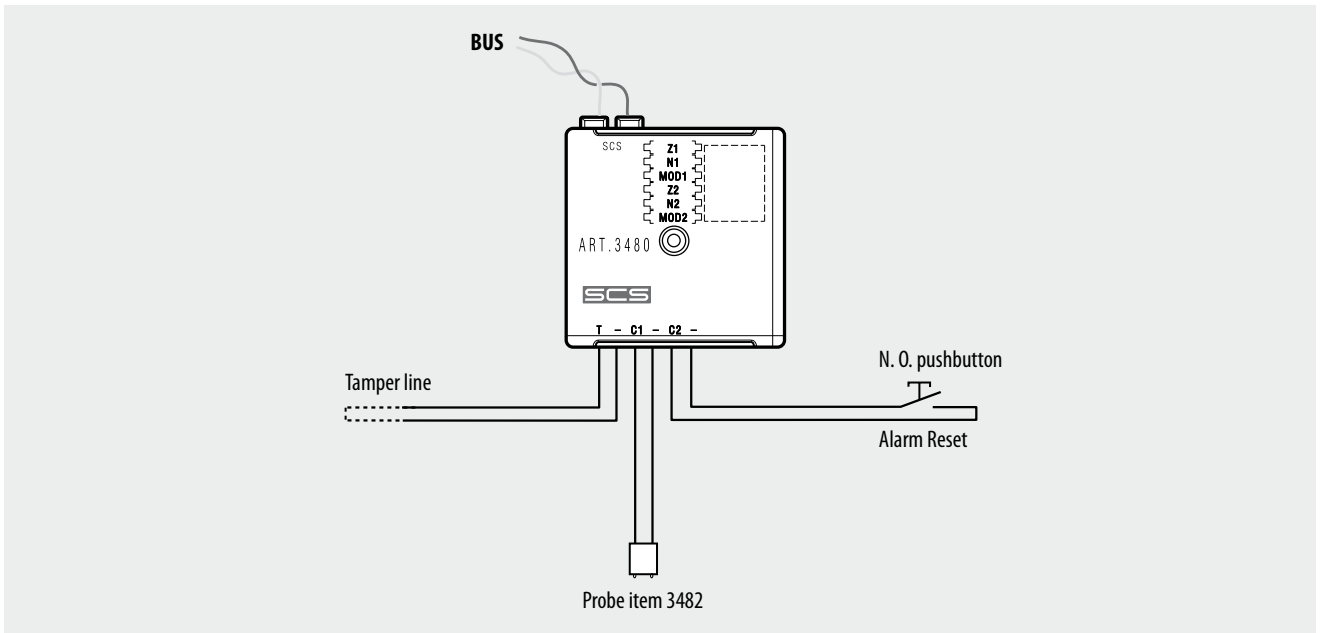
### Used for managing a technical alarm

(\*) The N.C. pushbutton can be replaced by a NO pushbutton. The type of pushbutton activating the alarm is defined through the configuration of the MOD1 position of the device.

It is possible to also connect a water detection probe, as well as NC/NO contacts for smoke or gas detectors. For the water detection probe use item 3482.



# Flooding alarm management





## 12 v contact interface

3480V12

### Description

This interface gives the possibility of connecting the alarm system to a sensor line (that can be balanced with resistance, and/or which intervention can be delayed) requiring 12 V power supply.

Produced in the basic modular version, the device can be used when centralizing all the interfaces in junction boxes. A LED on the device confirms the appropriate operation of the same during the system test procedure, and the tripping of the burglar-alarm system, when the system is armed.

### Technical data

Power supply from SCS BUS:	27 Vdc
Max. absorption:	5 mA to which the absorption of the sensor connected must be added
Operating temperature:	5 – 40 °C
Output:	12 V Max 50 mA

### Dimensional data

Size: 2 Basic modules

### Configuration

The interface requires the allocation of the zone Z it belongs to, of the N progressive number of the sensors within the same zone, and the setting of the MOD contact line protection mode.

#### Z1

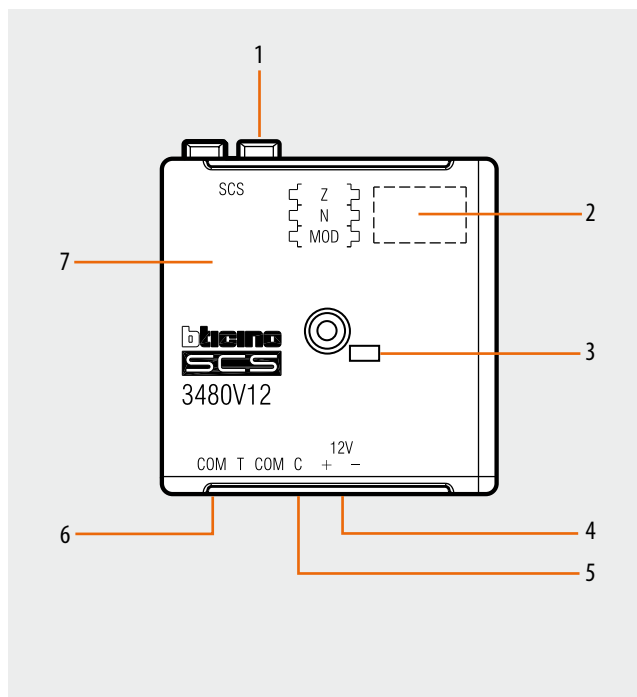
This configurator assigns the number of the assigned zone of the NC magnetic contact connected to line 1.

#### N1

This configurator assigns the progressive number of the NC magnetic contact within the zone determined in position Z1.

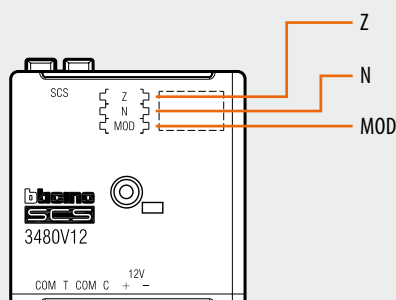
#### MOD

In this position a configurator is inserted for selecting the operating mode of the interface according to the type of contact or detector connected to the line. It is possible to create a balanced and unbalanced protection line, with the possibility of generating the alarm with a delay, as for zone 1. For the details of the various operating modes, refer to the table below.



### Legend

1. BUS;
2. Configurator socket;
3. Line activated LED;
4. 12 V power line;
5. C contact line;
6. Tamper line;
7. Device tamper protection against opening



### Configuration

Configurator	Sensor connected
none	NC contact
1	NC contact - balanced
2	NC contact - delayed *
3	NC contact - delayed * - balanced
4	NC contact and AUX event generation
5	Balanced NC contact and AUX event generation
6	Delayed NC contact and AUX event generation
7	Balanced delayed NC contact and AUX event generation

Specific mode for connection to wired rolling shutter sensors

Configurator	Sensor connected	Pulses (*)
8	Rolling shutter rope sensor - delayed*	12 (approx 20 cm)
9	Rolling shutter rope sensor - delayed*	25 (approx 45 cm)

Note (\*): Follows the delay set on the central unit:

this function is operative only with central units with display. With flush mounted 3 module central units, the interface must be allocated to ZONE 1, with a time delay set (see central unit configuration).

Note (\*\*): pulses generated by the sensor depending on the degree of opening of the window, in cm, before the alarm is generated.

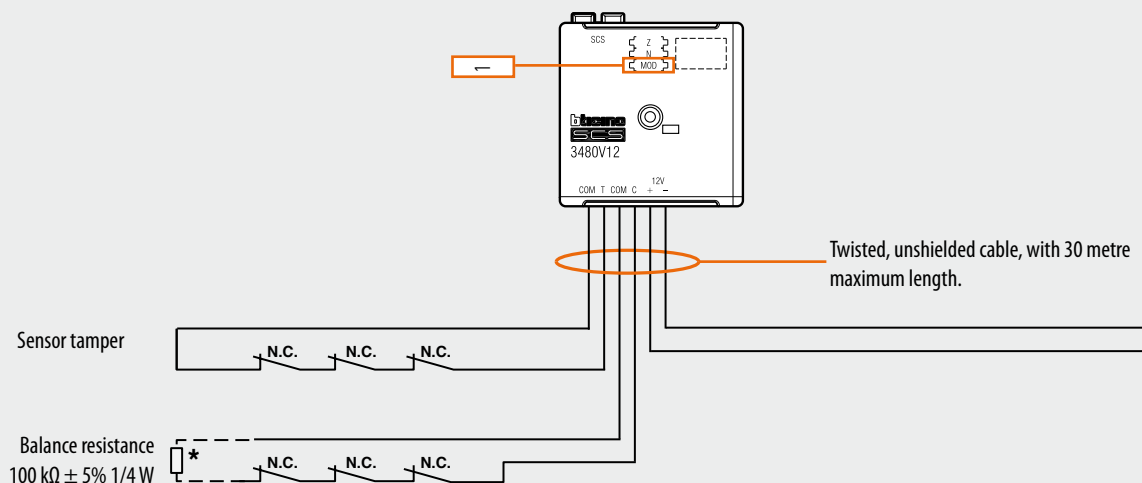
### Energy saving management with Temperature control

If the contact interface is used in conjunction with the temperature control system to optimise energy saving, two different types of configurations will be possible:

- Use in the temperature control system only: The contact interface is directly connected to the temperature control BUS. It autonomously and independently manages the contact line. Follow by connecting the AUX configurator to the MOD sockets. Then configure the Z and N sockets, in order to assign the address from 1 to 99 to the device within the system. The coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

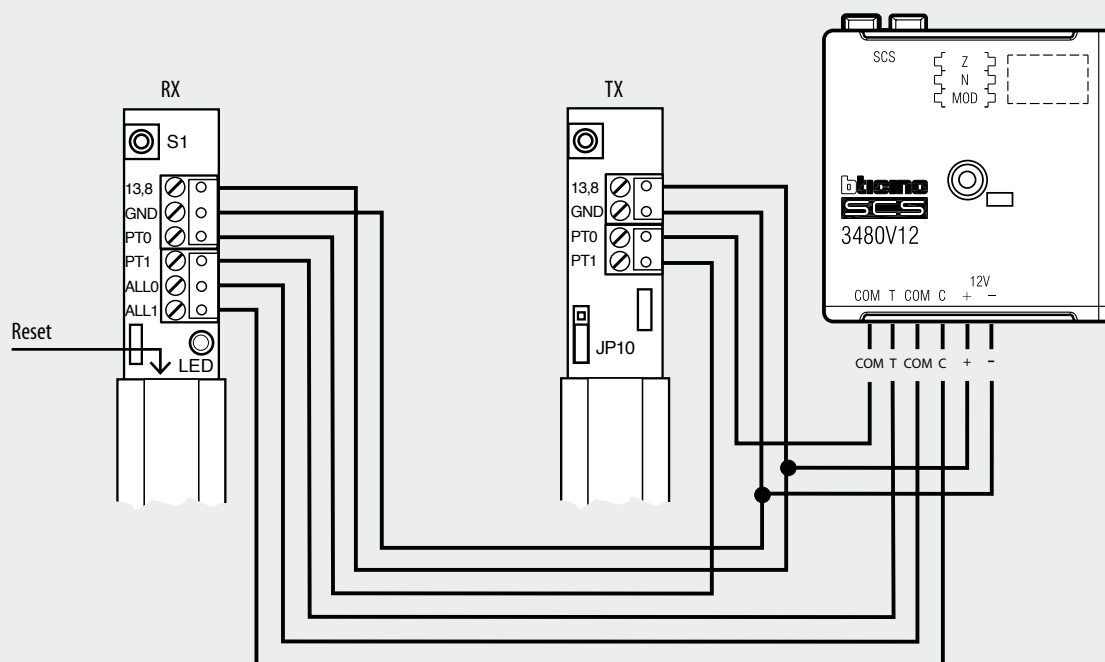
- Use of a burglar-alarm system integrated with the Temperature control system: in this case, the contact interface is connected to the burglar-alarm system BUS only, and communicates with the temperature control system BUS through the F422 interface. The interface must be configured in Z and N following the requirements and features of the burglar-alarm system; only configurators with values 4 to 7 must be connected to the MOD position, corresponding to the management of NC contacts with generation of AUX event (see tables above). Also in this case, the actual coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

### Wiring diagram



3480V12

Connection with IR 3518 - 3518/50 - 3518/150 - 3519 barriers

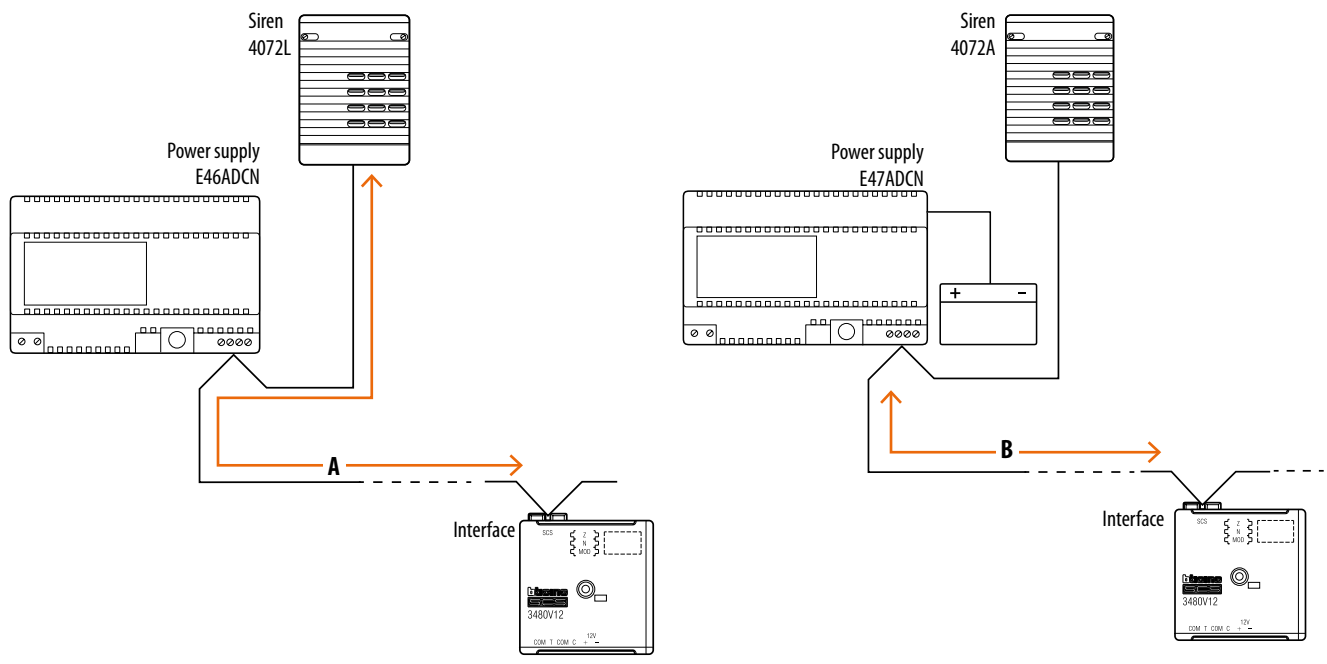


If the max absorption of the system allows it, it will be possible to directly connect the barrier to one interface only.

**WARNING:** use a 30 m max twisted, unshielded cable.

Installation

The maximum length of the interface connection line depends on the absorption of the connected loads, as for the following table



Absorption of the loads connected to the interfaces	Maximum distance	
	A	B
50 mA		
100 mA (2 interfaces with maximum load on the same line)	175 (*)	
150 mA (3 interfaces with maximum load on the same line)		175
200 mA (4 interfaces with maximum load on the same line)	150 (*)	

Note (\*): this configuration requires the use of 2 sirens, item 4072L.

In case of extension of an existing system (for which it is not possible to know the exact distances, and how many devices are connected to the BUS line the interface must be connected to), it is necessary to perform the following test, to check that it is suitable to install the interface:

- 1 Switch the system to maintenance mode
- 2 Connect the interface to the load to power
- 3 Measure the BUS voltage at the extremities of the interface
- 4 If the voltage exceeds 25 V, installation is possible
- 5 If the voltage is below 25 V, a dedicated cable must be connected to the interface.

BT00480-a-UK



## Technical alarm interface

3481

### Description

The technical alarm interface is used to receive signals from the outside (normally analogue signals, like the closing/opening of a contact), converting them into digital information for the BUS.

This information gives the possibility of differentiating between alarm notifications, like the activation of the siren, or the telephone dialler, or the closure of the gas/water solenoid valve.

The functions described can be obtained using a dedicated communication line between the devices of the burglar alarm system, called auxiliary channel.

Up to 9 auxiliary channels are available for each system.

They are assigned by configuration of the device(s).

### Related items

Relay actuator: F481 and 3479

### Technical data

Power supply from SCS BUS: 27 Vdc  
 Max. absorption: 6 mA  
 Operating temperature: 5 – 40 °C

### Dimensional data

Size: 2 Basic modules

### Configuration

The technical alarm interface module requires the allocation of the progressive number within the group of auxiliary devices (relay actuator and auxiliary channels interface), the auxiliary channel number, and the operating modes.

N°

This configurator assigns the progressive number inside the auxiliary unit.

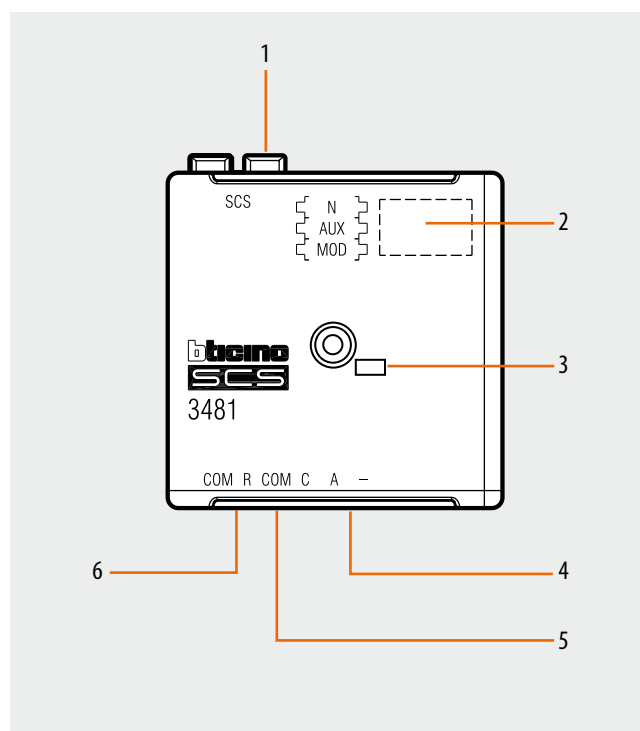
Configurator 1 identifies the first auxiliary, configurator 2 identifies the second and so on for a maximum of 9 auxiliaries.

### AUX and MOD

In combination the configurators in the AUX and MOD sockets assign the operating mode on the basis of the following table.

### Activation from the technical alarm interface

Configurators		Description
AUX	MOD	
none	none	<b>Technical alarm with normally closed (NC) contact</b> Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm b) pressure of "S" key on the 3 module flush mounted central unit, or deactivation from the central unit with display; c) pin key on the device itself pressed.
none	2	<b>Anti-panic alarm with normally closed (NC) contact</b> Generates a burglar-alarm even with the system switched off and in any division condition. Is silenced with the remote control.
none	4	<b>Technical alarm with normally open (NO) contact</b> Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm b) pressure of "S" key on the 3 module flush mounted central unit, or deactivation from the central unit with display; c) pin key on the device itself pressed.



### Legend

1. Clamp for burglar alarm BUS
2. Configurator socket
3. Line activated LED
4. External sensor connection clamp
5. Traditional external sensor connection clamp
6. Reset pushbutton connection

### Activation from the technical alarm interface

Configurators		Relay operating mode (description)
AUX	MOD	
1-9	none	<b>Technical alarm with NC contact and activation of the auxiliary channel</b> Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) pressure of "S" key on the 3 module flush mounted central unit, or deactivation from the central unit with display; It activates the corresponding auxiliary channel.
1-9	1	<b>Anti-burglary automation with NC contact</b> It activates the corresponding auxiliary channel without interfering with the status of the burglar-alarm system, therefore without generating signals or alarms.
1-9	2	<b>Anti-panic alarm with NC contact and activation of the auxiliary channel</b> Generates a burglar-alarm even with the system switched off and in any division condition. Is silenced with the remote control. It activates the corresponding auxiliary channel.
1-9	3	<b>Connection between burglar-alarm and auxiliary channels (LINK)</b> It generates and activation of the corresponding auxiliary channel following a burglary/tampering alarm.
1-9	4	<b>Technical alarm with NO contact and activation of the auxiliary channel</b> Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) pressure of "S" key on the 3 module flush mounted central unit, or deactivation from the central unit with display; It activates the corresponding auxiliary channel.

### EXAMPLE: Activation of the solenoid valve in case of gas leak

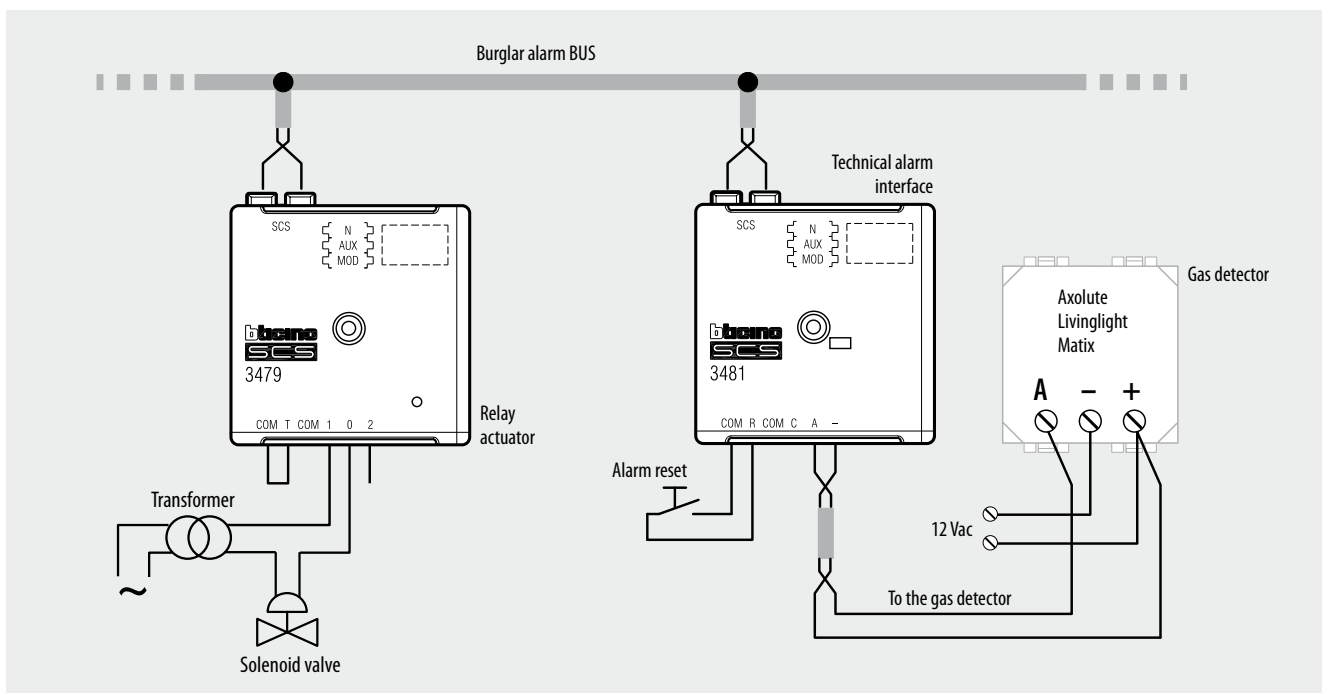
Relay actuator configuration:

Configurator position	Value
N°	1
AUX	1
MOD	6

Technical alarm interface configuration

Configurator position	Value
N°	2
AUX	1
MOD	4

### Wiring diagram





## Advanced central unit with telephone communicator

3485

### Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another.

It is possible to save up to 16 activation scenarios and use them based on actual the needs. It's fitted with built-in telephone communicator for sending a telephone message in case of alarm, or to check the status of the system using a fixed or mobile phone, when away from home. Thanks to the integration with rolling shutter and light switching on movement devices, it is possible to program automations that activate in case of alarm, to confuse the intruder.

The central unit is also capable of communicating with vigilance bodies through an appropriate protocol, further increasing the level of protection of the property (for this service consult the installer).

### Main functions

- Burglar-alarm central unit with combined telephone communicator;
- system self-learning and configuration on-screen display;
- can be controlled by transponder and keypad;
- independent management of each sensor;
- can be programmed by PC;
- detailed event memory and alarm only memory;
- customisation of alarm messages;
- phone book for sending alarms;
- connection with surveillance central unit using the "Ademco Contact ID" protocol, with the possibility of remote setting of Ademco parameters;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times (from keypad or transponder);
- association of a set user name to scenarios, sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- possibility of sending a test call, with programmable delay, to the MY HOME Portal, or to the surveillance central unit;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
- division of the zones directly from the Central unit keypad.

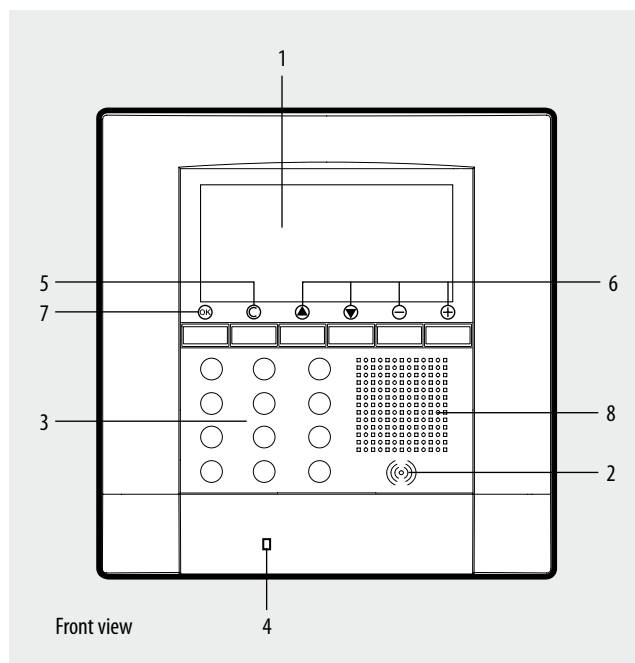
### Management of burglar-alarm functions

The central unit manages a total of 10 zones:

- zone 0 is reserved for the activators (max. 9);
- zones from 1 to 8 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/ auxiliaries (gas detector etc.).

It performs the following functions:

- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 8 can be separated as the user requires;
- up to 16 division scenarios can be created and activated depending on needs;
- a specific division can be coupled to each key (max. 50). It is also possible to limit the use of the key to certain days of the week, and to a specific time band;
- automatic devices can be operated as the user requires, if the burglar-alarm system has recorded an event (e.g. switch on the lights in the zone where there is an intrusion alarm);
- all the customising phases are guided and shown by means of the display.



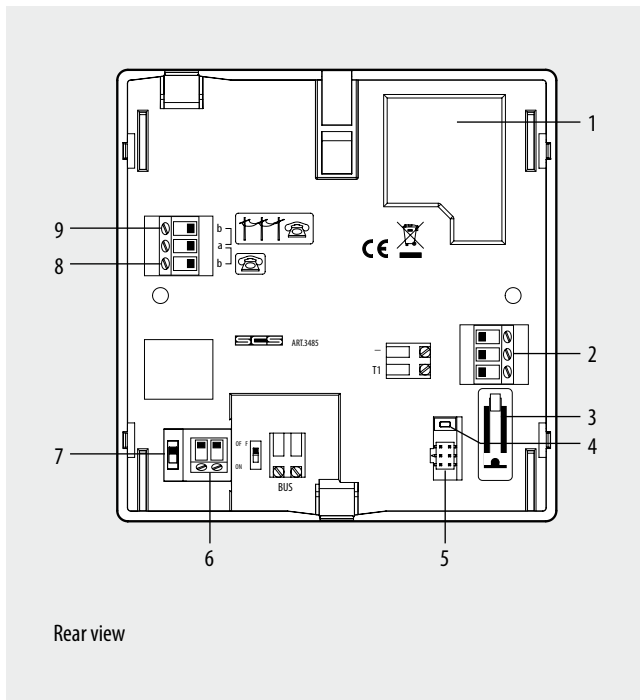
### Legend

- 1 - Graphic display:** displays the messages which guide the programming operations and the events which have occurred (more information on the following page).
- 2 - Transponder reader:** receives the burglar-alarm system switching on and off commands directly from the transponder keys.
- 3 - Alphanumeric keypad:** allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.
- 4 - Microphone:** used to record the messages and listen to the room remotely by means of telephone.
- 5 - C key:** exit the current menu and the programming.
- 6 - Navigation keypad:** navigate inside the menu, confirms or cancels the programming operations.
- 7 - OK key:** to confirm the programming operations.
- 8 - Loudspeaker:** can listen to the recorded messages.

### Telephone communicator

- Allows two-way communication between the user and the My Home home automation system;
- if the burglar-alarm system has detected an alarm, it automatically dials the telephone numbers previously programmed by the user and gives a voice message to say what type of event has happened;
- it can be called by the user who, by means of predefined codes, can send commands to the automation system and to the burglar-alarm system;
- the user can find out the state of the burglar-alarm and automation system by telephone;
- it lets you connect to the My Home portal and makes the My Home web service available, for example the remote assistance service as well as the possibility to download the history of events;
- it enables automatic forwarding of alarm and event signalings to surveillance units, using the Contact ID protocol, as well as the request and setting of its parameters.

BT00022-b-UK



Rear view

### Legend

- 1 - Battery housing;
- 2 - Tamper line (see note);
- 3 - T1 local tamper;
- 4 - Reset key;
- 5 - Serial connector for PC programming;
- 6 - Burglar alarm BUS;
- 7 - ON/OFF slide switch;
- 8 - Telephone line OUT;
- 9 - Telephone line IN.

**NOTE:** The central unit is supplied with the clamps (-/T1) of the Tamper line shorted for the use of the T1 local tamper (wall mounted installation on metal base).

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 55 (stand by) – 90 mA
- Operating temperature: 5 – 40°C
- Installation: wall mounted

### Dimensional data

Size (H,L,D): 128x125x25 mm

### Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software, TiSecurity POLYX. For detailed information refer to the corresponding manuals supplied with the products.

### Software configuration

The program can be used to easily customise all parameters of the Central unit. It is possible to receive the current configuration from the Central unit, change it and send any changes made to the Central unit, save the configuration to a file for subsequent modification, or save it as a backup copy.

For further information refer to the software manual supplied with the central unit.

### Ademco Contact ID functionality

Ademco contact ID is a particular communication protocol operating on a telephone line with DTMF touch tone. Using this protocol, it is possible to set a one-way communication between the burglar-alarm central units and the vigilance bodies. In this way, vigilance bodies can receive information concerning the type of event/alarm generated and, if available, the details of the peripheral from where it generated.

### Events that can be managed using the Ademco Contact ID

The Ademco Contact ID events managed by the central unit are the following:

Relating to the burglar-alarm system:

- Anti-panic alarm
- Anti-burglary alarm
- General intrusion alarm
- Tamptest (device interconnection alarm)
- Device tampering alarm
- No power supply
- System battery faulty
- Activation / deactivation / cancellation\*
- Sensor deactivation
- Periodical functionality test (routine check of the telephone line and the installation)

**NOTE\*:** cancellation is the silencing of an alarm following the disarming of the system itself. In this case the event is sent to the vigilance body, which can therefore check if it's been caused by a tampering attempt.

Relating to the technical alarms:

- Fire alarm (AUX=8)
- Gas leak alarm (AUX=1)
- Freezer alarm (AUX=2)
- Flooding alarm (AUX=3)
- Remote assistance alarm (AUX=9)
- Auxiliary device tampering (Z=9)

For every event, where required, the origin of the alarm is also forwarded, in terms of zone and device.

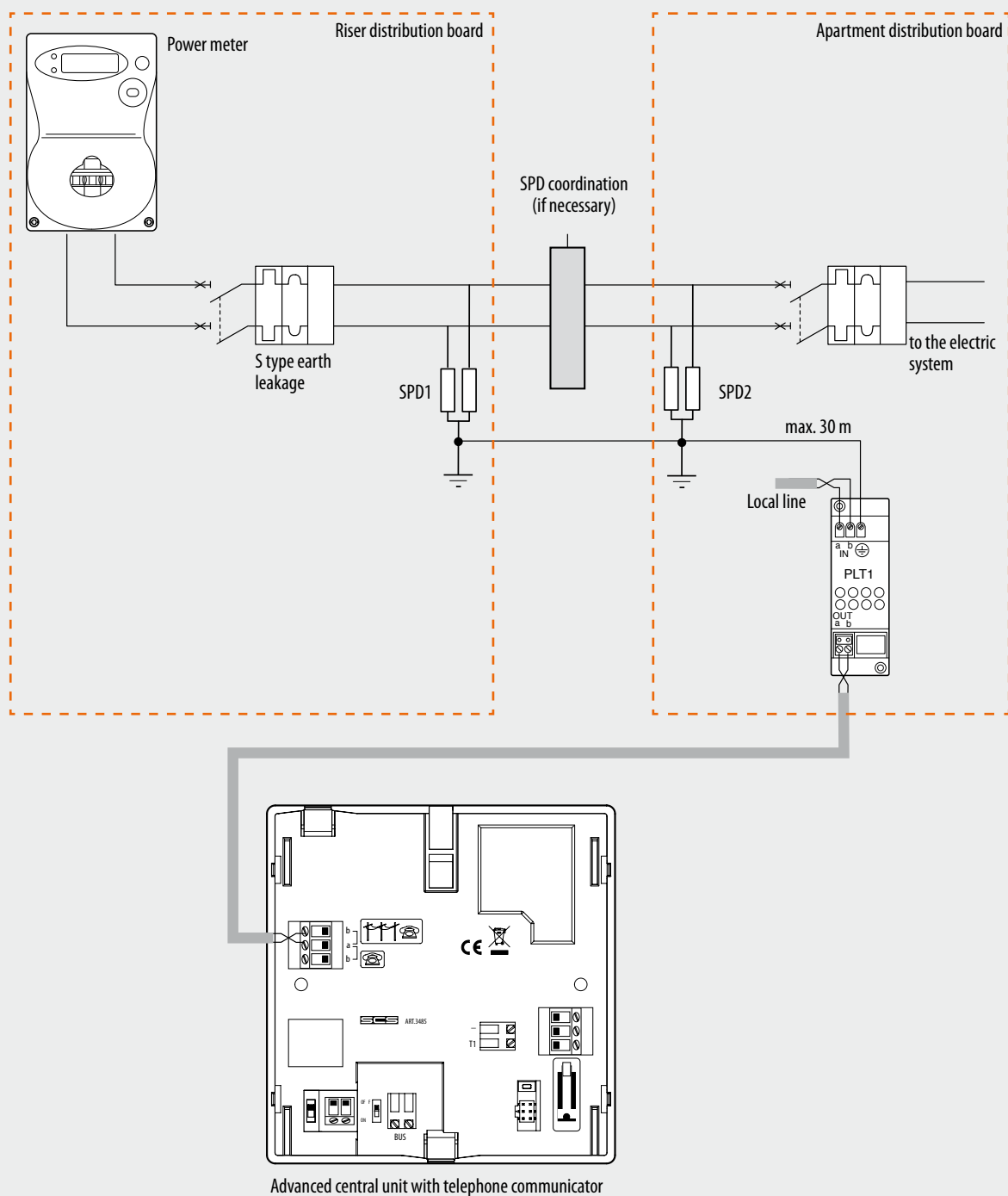


## Wiring diagram

It is good practice to protect the system from lightning by using surge protective devices, SPD, belonging to class II, as per the diagram shown.

In particular, to protect the burglar-alarm central unit from overvoltage from the telephone line, the use of the appropriate PLT1 device is recommended, taking care to

connect the corresponding earth clamp with the "earth" reference of the SPD discharger installed in the apartment distribution board (see diagram). The connection shall have as low an impedance as possible, and will be performed using a conductor with minimum section of 2.5 mm<sup>2</sup>, and maximum length of 30 metres.





## Base central unit

3485B

### Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another.

It is possible to save up to 4 activation scenarios and use them based on actual needs.

The device can manage up to 10 automations split as follows:

- 1 actuated using an internal relay and coupled with intrusion events, technical alarms, or system status;
- 9 coupled with arming, disarming, date and time events, to generate separation scenarios.

### Main functions

- System self-learning and configuration on-screen display;
- can be controlled by transponder and keypad (20 keys maximum);
- independent management of each sensor;
- local contact in addition to those already present on the system (configurable);
- possibility of updating the firmware using the PC;
- detailed event memory and alarm only memory;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times;
- association of a user set name to scenarios (max. 4), sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
- division of the zones directly from the central unit keypad;
- presence of a local automation and signalling relay.

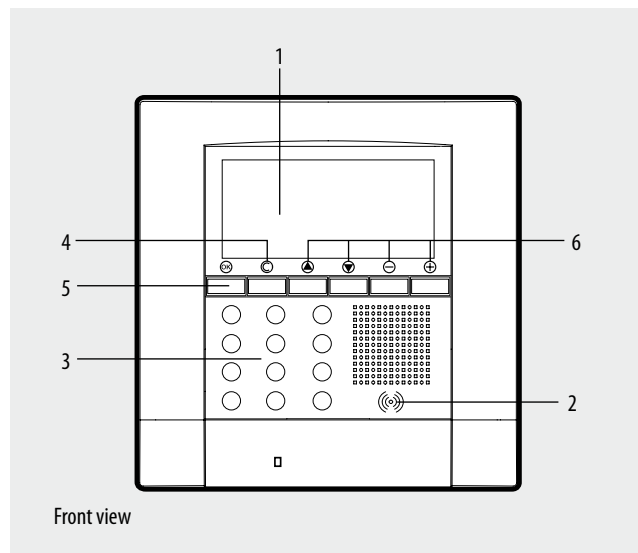
### Management of burglar-alarm functions

The central unit manages a total of 6 zones;

- zone 0 is reserved for the activators (max. 9);
- zones from 1 to 4 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/ auxiliaries (gas detector etc.).

Performs the following functions:

- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 4 can be separated as the user requires;
- up to 4 division scenarios can be created and activated depending on needs;
- all the customising phases are guided and shown by means of the display;
- an automation can be coupled to the detection of a certain alarm, using the local relay: for example, the switching on of a light, to confuse the intruder.



### Legend

**1 - Graphic display:** displays the messages which guide the programming operations and the events which have occurred (more information on the following page).

**2 - Transponder reader:** receives the burglar-alarm system switching on and off commands directly from the transponder keys.

**3 - Alphanumeric keypad:** allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.

**4 - C key:** exit the current menu and the programming.

**5 - OK key:** to confirm the programming operations.

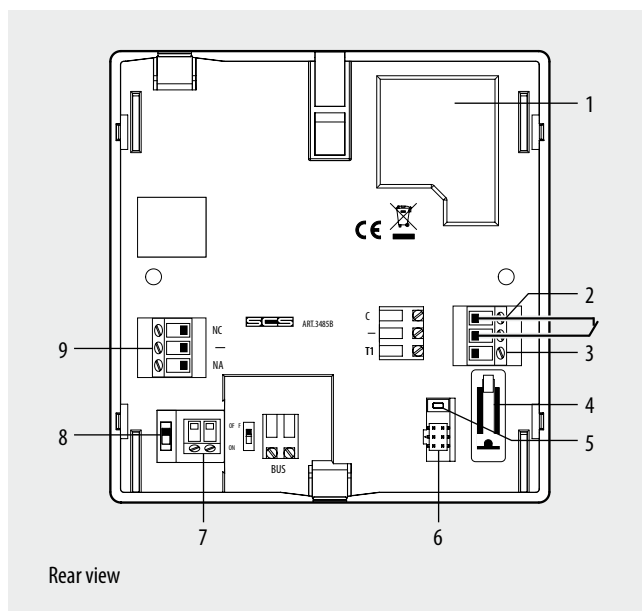
**6 - Navigation keypad:** navigate the menu.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 50 mA
- Operating temperature: 5 – 40°C
- Load of local relay contacts: 12/24 V – 1 A
- Installation: wall mounted

### Dimensional data

Size (H,L,D): 128x125x25 mm



Rear view

### Legend

- 1 - Battery housing;
- 2 - Local contact;
- 3 - Tamper line (see note);
- 4 - T1 local tamper;
- 5 - Reset key;
- 6 - Firmware update serial connector;
- 7 - Burglar alarm BUS;
- 8 - ON/OFF slide switch;
- 9 - Relay for automation in case of alarm.

**NOTE:** The central unit is supplied with the clamps (-/T1) of the Tamper line shorted for the use of the T1 local tamper (wall mounted installation on metal base).

### Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software, either TiSecurity Basic.

For detailed information refer to the corresponding manuals supplied with the products.

#### Software configuration

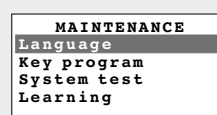
The program enables acquiring the configuration on the central unit, saving it in a file to be used to reinstate the configuration of the same, or to configure other central units. It is also possible to update the permanent software of the central unit using new versions published by BTicino.



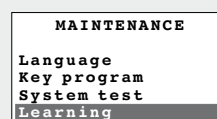
### Example

Example of configuration performed on the central unit.

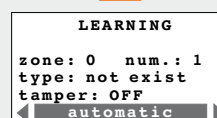
- Detection of devices



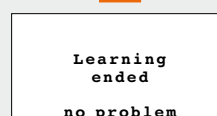
Select  
**Learning**



Press **OK** to confirm



Press **OK** to start learning



NEXT

(See the manual of the central unit)



# Advanced central unit with telephone communicator

3486

## Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another. It is possible to save up to 16 activation scenarios and use them based on actual the needs. It's fitted with built-in telephone communicator for sending a telephone message in case of alarm, or to check the status of the system when away from home, using a fixed or mobile phone.

Thanks to the integration with rolling shutter and light switching on movement devices, it is possible to program automations that activate in case of alarm, to confuse the intruder.

The central unit is also capable of communicating with vigilance bodies through an appropriate protocol, further increasing the level of protection of the property (for this service consult the installer).

## Main functions

- Burglar-alarm central unit with combined telephone communicator (on GSM and PSTN line);
- system self-learning and configuration on-screen display;
- can be controlled by IR remote control, transponder and keypad;
- independent management of each sensor;
- can be programmed by PC;
- detailed event memory and alarm only memory;
- customisation of alarm messages;
- phone book for sending alarms;
- connection with surveillance central unit using the "Ademco Contact ID" protocol, with the possibility of remote setting of Ademco parameters;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times (from keypad or transponder);
- association of a set user name to scenarios, sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- possibility of sending a test call, with programmable delay, to the MY HOME Portal, or to the surveillance central unit;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
- division of the zones directly from the Central unit keypad.

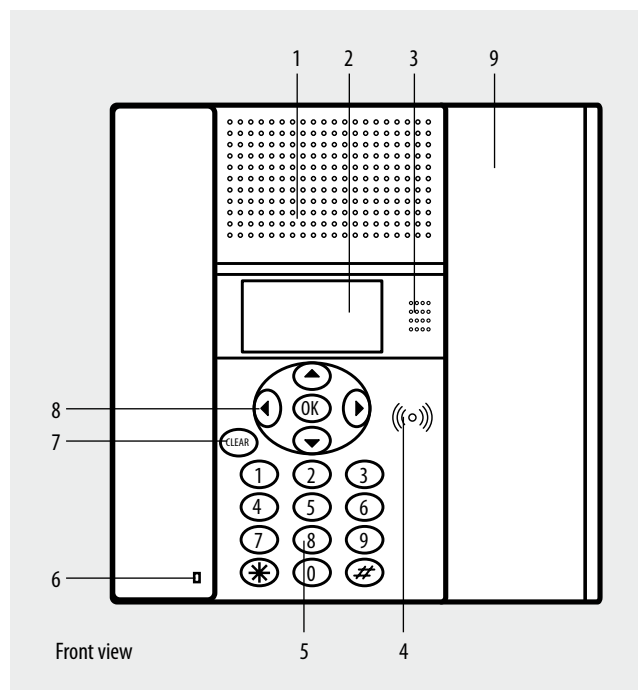
## Management of burglar-alarm functions

The central unit manages a total of 10 zones:

- Zone 0 is reserved for the activators (max. 9);
- zones from 1 to 8 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/auxiliaries (gas detector etc.);

Performs the following functions:

- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 8 can be separated as the user requires;
- up to 16 division scenarios can be created and activated depending on needs;
- a specific division can be coupled to each key (max. 50). It is also possible to limit the use of the key to certain days of the week, and to a specific time band;
- automatic devices can be operated as the user requires, if the burglar-alarm system has recorded an event (e.g. switch on the lights in the zone where there is an intrusion alarm);
- all the customising phases are guided and shown by means of the display.

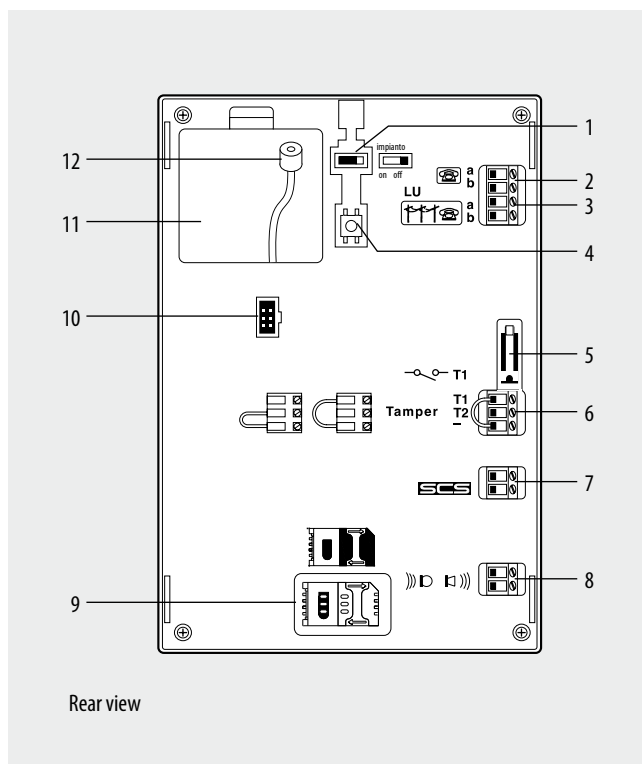


## Legend

- 1 - Loudspeaker:** can listen to the recorded messages and play voice messages in the room by means of the telephone;
- 2 - Graphic display:** displays the messages which guide the programming operations and the events which have occurred;
- 3 - IR receiver:** receives the switching on and off commands sent by the burglar-alarm system remote control;
- 4 - Transponder reader:** receives the burglar-alarm system switching on and off commands directly from the transponder keys;
- 5 - Alphanumeric keypad:** allows the manual switching on of all those programming operations which require the use of numbers and/or symbols;
- 6 - Microphone:** used to record the messages and listen to the room remotely by means of telephone;
- 7 - CLEAR key:** exit the current menu and the programming;
- 8 - Navigation keypad:** navigate inside the menu, confirms or cancels the programming operations;
- 9 - GSM antenna with cable L = 1.5 metres:** to be positioned upon verification of GSM signal reception.

## Telephone communicator

- Allows two-way communication between the user and the My Home home automation system;
- if the burglar-alarm system has detected an alarm, it automatically dials the telephone numbers previously programmed by the user and gives a voice message to say what type of event has happened;
- it can be called by the user who, by means of predefined codes, can send commands to the automation system and to the burglar-alarm system;
- the user can find out the state of the burglar-alarm and automation system by telephone;
- it lets you connect to the My Home portal and makes the My Home web service available, for example the remote assistance service as well as the possibility to download the history of events;
- it enables automatic forwarding of alarm and event signalings to surveillance units, using the Contact ID protocol, as well as the request and setting of its parameters.



Rear view

### Legend

- 1 - ON/OFF slide switch;
- 2 - Telephone line OUT;
- 3 - Telephone line IN;
- 4 - Reset key;
- 5 - T1 local tamper;
- 6 - Tamper line (see note);
- 7 - Burglar alarm BUS;
- 8 - MY HOME sound system BUS;
- 9 - SIM card housing;
- 10 - Serial connector for PC programming (with cable item 335919 or item 3559);
- 11 - Battery housing (item 3507/6);
- 12 - GSM antenna connector.

**NOTE:** The central unit is supplied with the clamps (-/T1) of the Tamper line shorted for the use of the local tamper T1 (wall mounted installation on metal base); For installations inside MULTIBOX boxes ensure the connection of a NC circuit breaker to the -/T1 clamps for the tamper function; alternatively, short clamps -/T2. In this case the central unit will not be protected from tampering.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 50 (stand by) – 120 mA
- Operating temperature: 5 – 40°C
- Installation: wall mounted or Multibox switchboard

### Dimensional data

Size (H,L,D): 210x210x30 mm

### Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software, either TISecurity GSM. For detailed information refer to the corresponding manuals supplied with the products.

#### Software configuration

The program can be used to easily customise all parameters of the Central unit. It is possible to receive the current configuration from the Central unit, change it and send any changes made to the Central unit, save the configuration to a file for subsequent modification, or save it as a backup copy.

For further information refer to the software manual supplied with the central unit.



#### Ademco Contact ID functionality

Ademco contact ID is a particular communication protocol operating on a telephone line with DTMF touch tone. Using this protocol, it is possible to set a one-way communication between the burglar-alarm central units and the vigilance bodies. In this way, vigilance bodies can receive information concerning the type of event/alarm generated and, if available, the details of the peripheral from where it generated.

#### Events that can be managed using the Ademco Contact ID

The Ademco Contact ID events managed by the central unit are the following:

Relating to the burglar-alarm system:

- Anti-panic alarm
- Anti-burglary alarm
- General intrusion alarm
- Tamptest (device interconnection alarm)
- Device tampering alarm
- No power supply
- System battery faulty
- Activation / deactivation / cancellation\*
- Sensor deactivation
- Periodical functionality test (routine check of the telephone line and the installation)

**NOTE\*:** cancellation is the silencing of an alarm following the disarming of the system itself. In this case the event is sent to the vigilance body, which can therefore check if it's been caused by a tampering attempt.

Relating to the technical alarms:

- Fire alarm (AUX=8)
- Gas leak alarm (AUX=1)
- Freezer alarm (AUX=2)
- Flooding alarm (AUX=3)
- Remote assistance alarm (AUX=9)
- Auxiliary device tampering (Z=9)

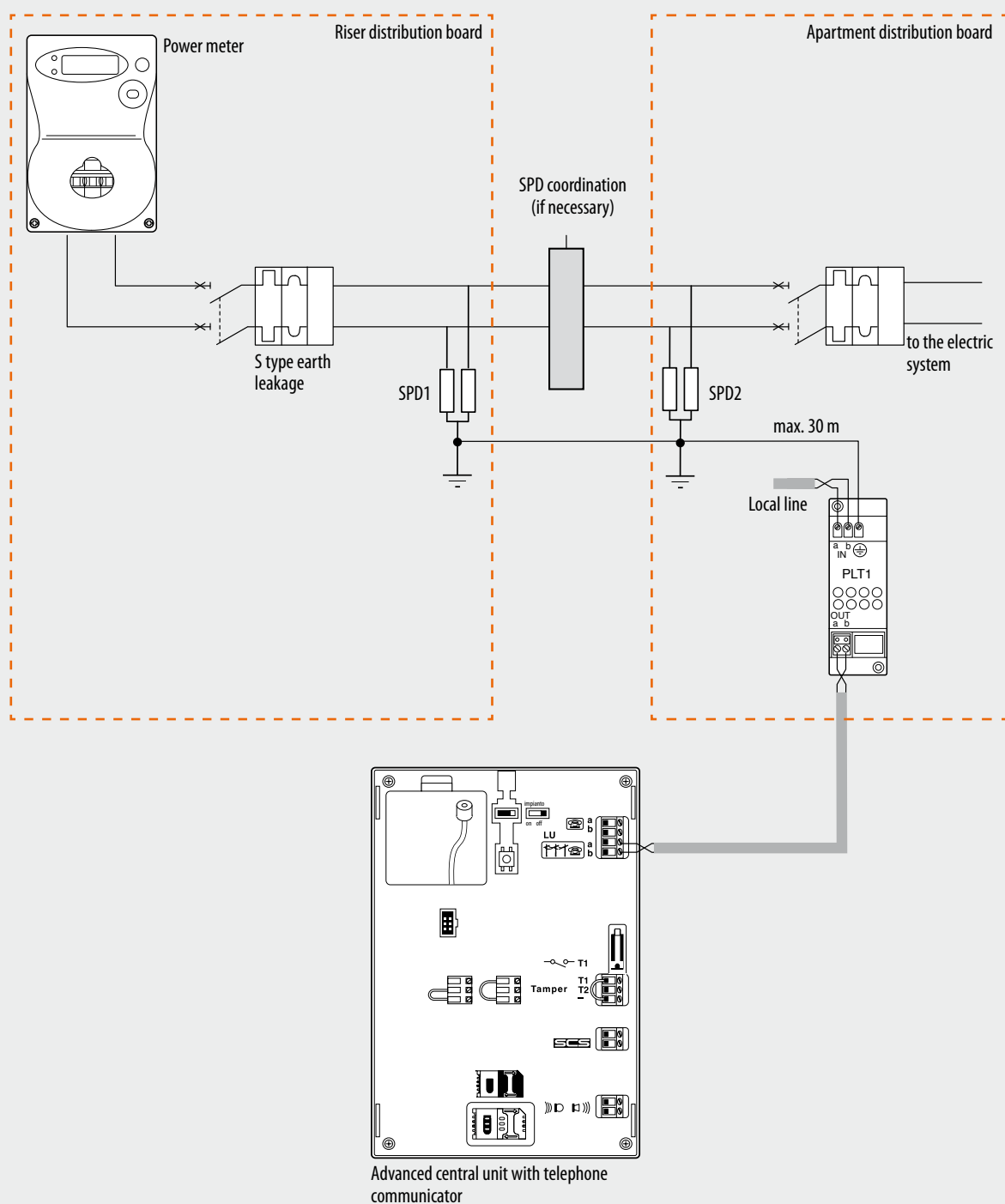
For every event, where required, the origin of the alarm is also forwarded, in terms of zone and device.

### Wiring diagram

It is good practice to protect the system from lightning by using surge protective devices, SPD, belonging to class II, as per the diagram shown.

In particular, to protect the burglar-alarm central unit from overvoltage from the telephone line, the use of the appropriate PLT1 device is recommended, taking care to

connect the corresponding earth clamp with the "earth" reference of the SPD discharger installed in the apartment distribution board (see diagram). The connection shall have as low an impedance as possible, and will be performed using a conductor with minimum section of 2.5 mm<sup>2</sup>, and maximum length of 30 metres.





# Magnetic contacts

3510/M/PB - 3511 - 3512 - 3513

## Description

Magnetic sensors are normally installed on the top side of windows or doors, opposite to the hinges, so that even with small forced openings, the distance created between the two components (magnet and reed contact) will be enough to cause an alarm. The electromagnetic sensors included in the offer are of the NC contact and protection line type.

### Flush mounted installation sensor, item 3510 and item 3510M

These cylindrical sensors have been purposely designed for Flush mounted installation, as shown in the figure, for doors and windows with small sections. Sensor item 3510 is suitable for wooden doors and windows; sensor item 3510M is made of brass, has high mechanical resistance, and is suitable of all types of non ferromagnetic doors and windows (wood, PVC, aluminium).

### Flush mounted installation sensor, item 3510PB

These cylindrical sensors of large diameter (20 mm) have an enhanced magnet, and have been purposely designed for Flush mounted installation in reinforced doors, doors, and large entrance doors, of any material.

### Sensor for exposed installation, item 3511

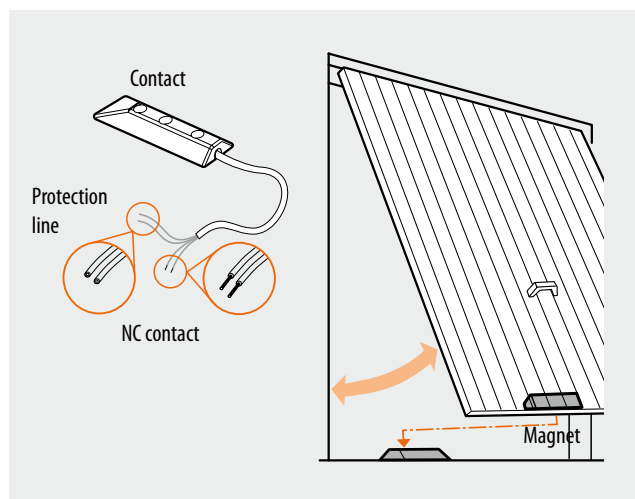
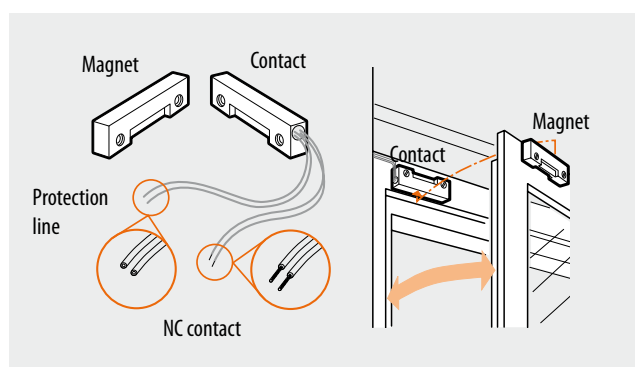
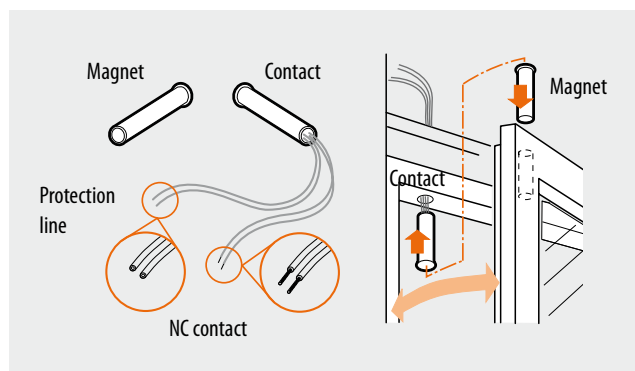
When Flush mounted installation is not possible, this type of sensor may be used. White in colour, and very small in size, it is designed for exposed installation. It can be used both on wood and plastic, but also on non ferrous metal doors and windows, such as aluminium ones. This magnetic sensor has a NC contact and protection line.

### Sensors for doors made of ferrous metal, item 3512 and 3513

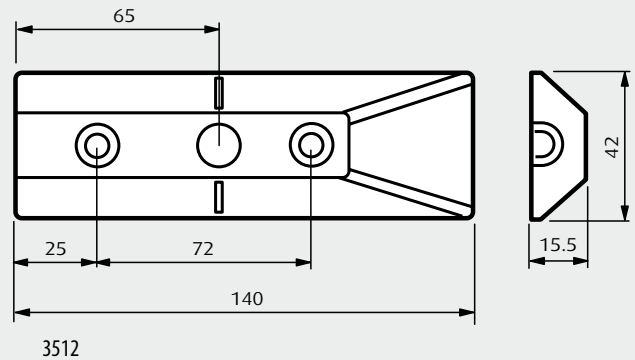
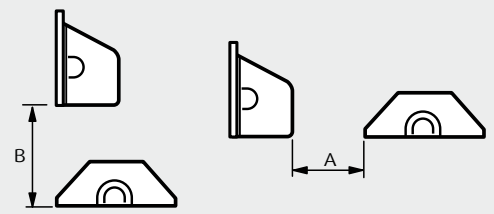
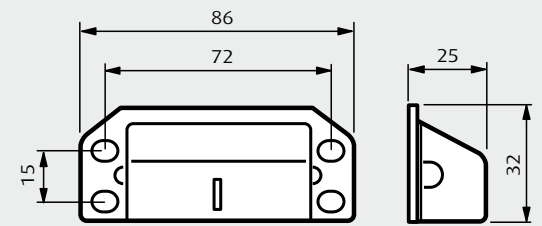
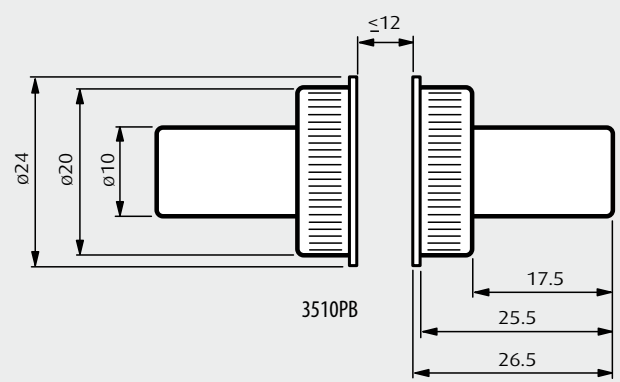
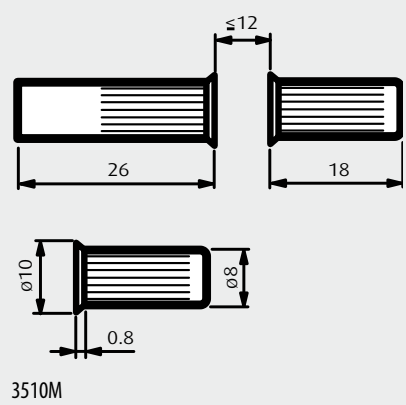
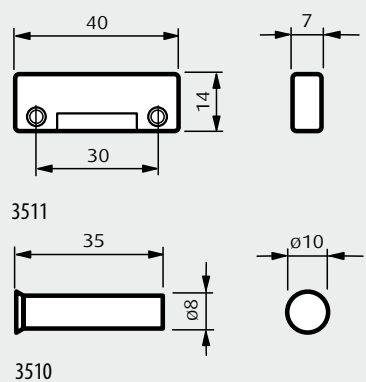
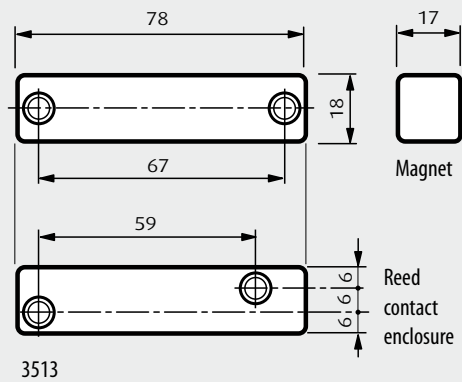
Made of metal, and intended for installation on ferrous metal doors and windows. The item 3512 sensor is suitable for the protection of sliding or tilting garage doors. thanks to its die-cast aluminium structure capable of withstanding the passage of vehicles, it can be set on the floor. The connection cables are protected by steel sheathing. item 3513 sensor can be used on sheet steel doors, such as those of cellars and warehouses, and on ferrous metal doors and windows.

## Configuration

Sensors do not require configuration.



Dimensional data



Maximum distances from the magnet and the contact		
	Steel door	Other doors
A	40	40
B	35	50



# Rolling shutter detector

3514

## Description

This device can protect rolling shutters, or similar winding devices, and is made up of a reel-type cable detector to be positioned in the shutter box.

The end of the cable, which can be extended up to 3.1 metres, is fastened to the base of the rolling shutter. The device features a "movement/time excursion" cycle designed to avoid false alarms due to accidental movements of the rolling shutter due to vibrations, slow sliding and blasts of wind.

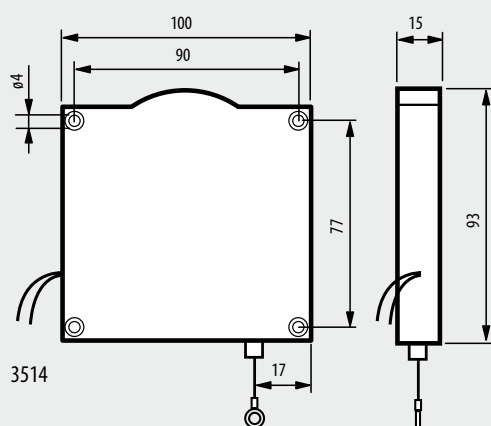
This detector is recommended to provide perimeter protection because it offers the advantage of giving the alarm when the thief tries to lift the rolling shutter and thus before he enters the home.

In order to use the detector, use the contact interface item HC/HS/HD/L/N/NT4612/12 or item F482, which can control the impulses generated by the detector itself in case the rolling shutter is forced open.

## Configuration

The sensor does not require configuration.

## Dimensional data

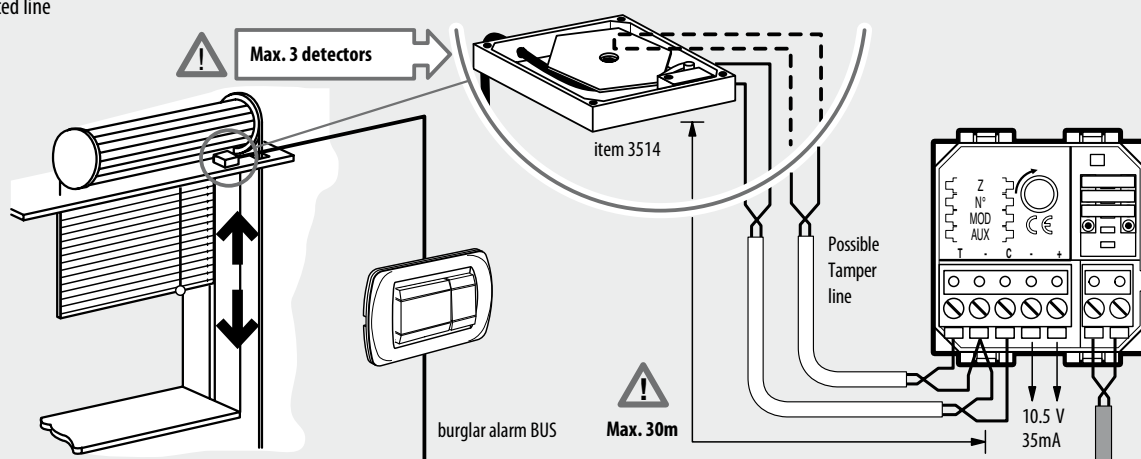


## Legend

- 1 - Cable detector;
- 2 - BUS;
- 3 - Cable to be fastened to the rolling shutter.

## Wiring diagram

Balanced line





# Glass-breaking detector

3516

## Description

This glass breaking detector is positioned on the window to be protected using the double-sided adhesive tape supplied. The break, or even a strong shock against the glass, causes the emission of a noise with characteristic frequency which the piezoelectric detector captures. A specific electronic circuit generates the alarm signal which is interpreted by the contact interface (any for flush mounted installation or 3480 or F482) to which the detector must be connected.

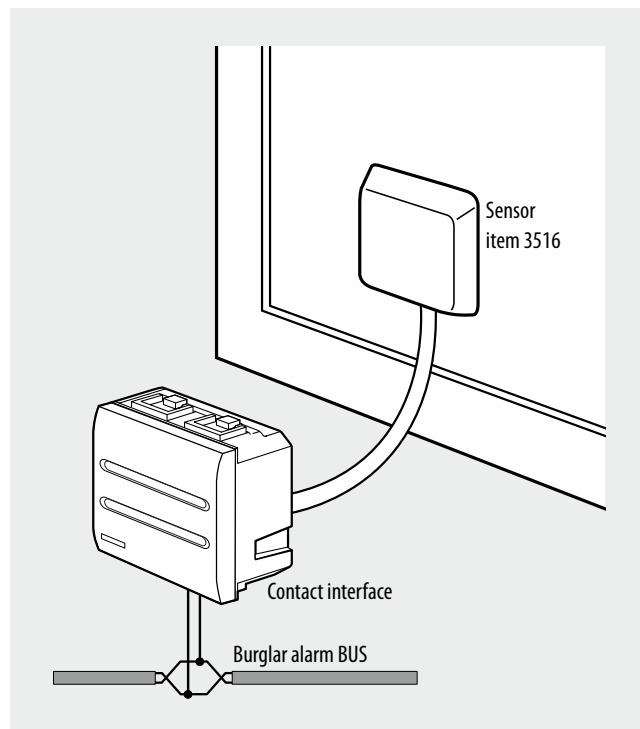
For proper operation, do not connect more than three detectors in series to the clamps of the interface.

## Technical data

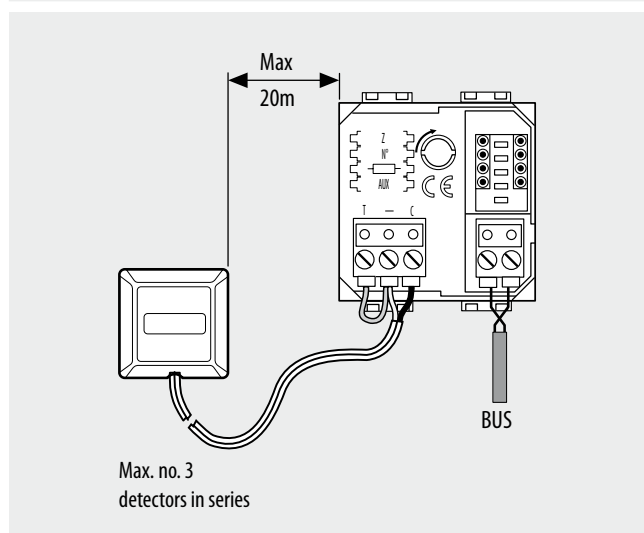
- Resistance: typical (normally closed): 14  $\Omega$  (max. 24  $\Omega$ )  
in alarm (open): min. 1 M $\Omega$
- Opening in alarm: 1-10 sec.
- Max. circuit voltage: 15 Vcc
- Max. circuit current: 15 mA
- Lightning suppression: 400 W per 1 m/sec.
- Operating temperature: (-18) – (50)°C
- Sensitivity: factory-set
- Fastening method: High adherence acrylic tape

## Configuration

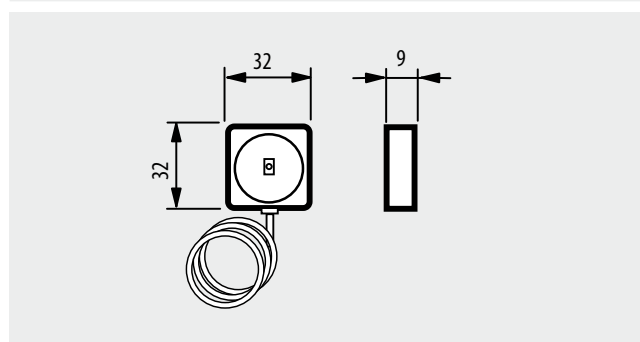
The sensor does not require configuration.



## Wiring diagram



## Dimensional data





## IR barriers for windows

3518-3518/50-3518/150-3519

### Description

The device consists of 2 columns, one operating as a TRANSMITTER (TX), and the other as a RECEIVER (RX). Both have a microprocessor for the management of the alarm and the synchronisation of the infrared beams. The table that follows shows the alarm tripping times based on the rays broken:

OR: alarm with at least one ray broken (maximum sensitivity) AND: alarm with at least two rays broken (minimum sensitivity).

Rays broken	Tripping time	Microswitch setting			
		OR		AND	
		100	200	100	200
only 1		2 sec.	2 sec.	-	-
2 not adjoining		1 sec.	1 sec.	1 sec.	1 sec.
2 adjoining or all		100 ms	200 ms	100 ms	200 ms

### Anti insetti

Per installazioni con distanza tra RX e TX maggiori di 1 m, l'oscuramento di un solo raggio se avviene direttamente su una delle barriere (per esempio a causa della presenza di un insetto), non provoca allarme. L'allarme è però immediato se vengono interrotti altri raggi.

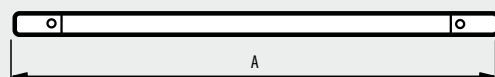
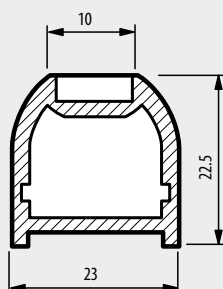
### Range and connection

The barriers have a maximum range of 12 m indoors and 6 m outdoors. They are connected to the rest of the burglar-alarm system by contact interfaces. If the maximum absorption of the burglar-alarm allows it, it is possible to connect one or more barriers using interface 3480V12 o F482V12 (one interface per barrier, and only for item 3518/50 and 3518). In alternative, due to absorption limitation or when barriers 3518/150 and 3519 are installed, contact interfaces 3480 or F482 must be used for the connection to the burglar-alarm system, as well as a power supply E47/12 for powering the barriers. In this way up to a maximum of seven barriers 3518 or six barriers 3519 can be installed.

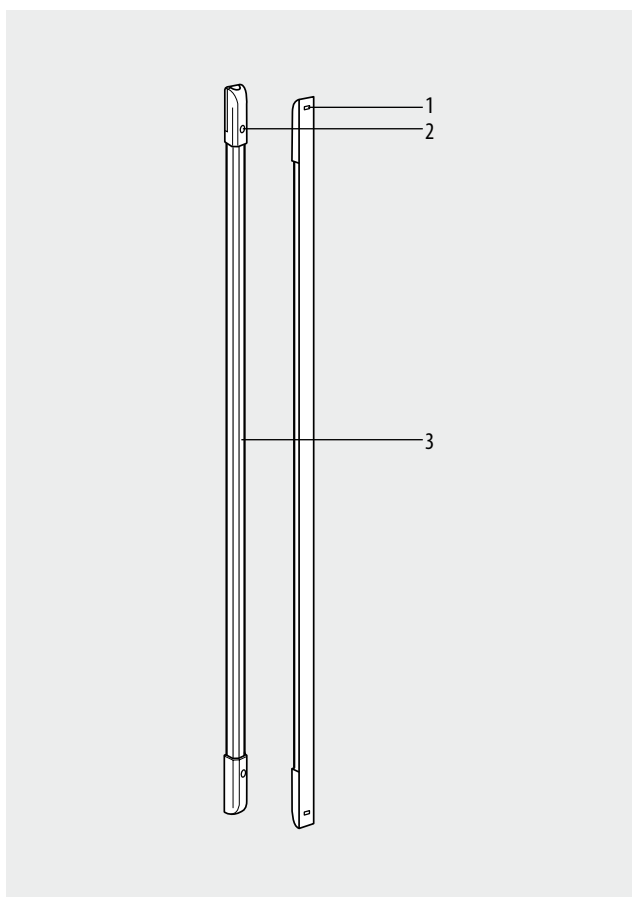
### Technical data

- Range:	12 m high power indoors and 6 m outdoors, 3 m low power both indoors and outdoors.
- Power supply:	12 Vdc +/- 2 Vdc
- Max. absorption:	50 mA
- Operating temperature:	(-25) – (+55)°C
- Protection index:	IP44

### Dimensional data



Item	Length A (mm)
3518	1080
3518/50	580
3518/150	1580
3519	2080

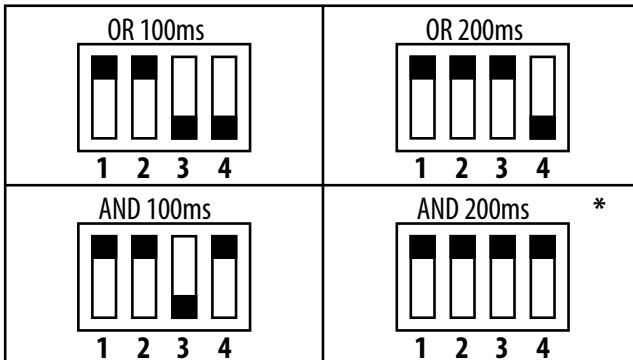


### Legend

- 1 - Receiver;
- 2 - Transmitter;
- 3 - IR emission zone.

### Configuration

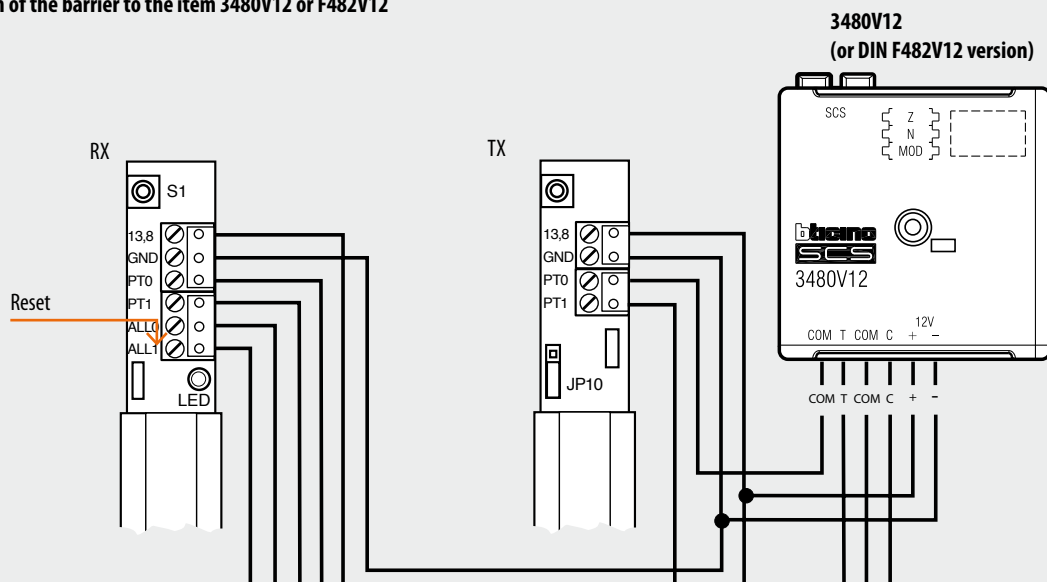
The barriers are sold configured for operation in "AND" mode, with tripping time: 200ms.  
To change the mode use the internal microswitch as shown in the following table:



\* default

### Wiring diagram

Connection of the barrier to the item 3480V12 or F482V12



If the max. consumption of the system allows it, it is possible to connect the 3518 or 3518/50 barrier directly to only one interface item 3480V12 or F482V12.

**WARNING:** use a 30 m max twisted, unshielded cable.

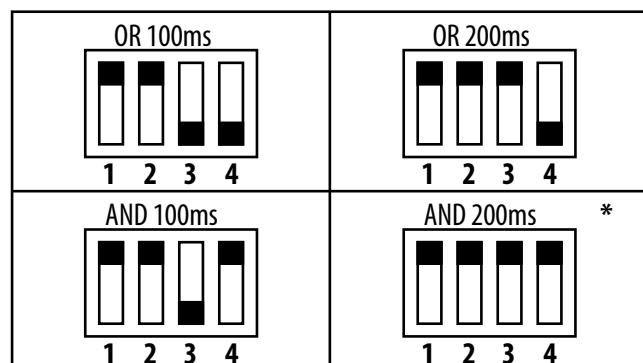
Connection table

MS1	Receiver (RX)	MS1	Transmitter (TX)
1	+13.8V	1	+13.8V
2	GND	2	GND
3	PT0 Tamper C	3	PT0 Tamper C
4	PT1 Tamper N.C.	4	PT1 Tamper N.C.
5	ALL0 Alarm C		
6	ALL1 Alarm N.C.		

3518-3518/50-3518/150-3519

### Configuration

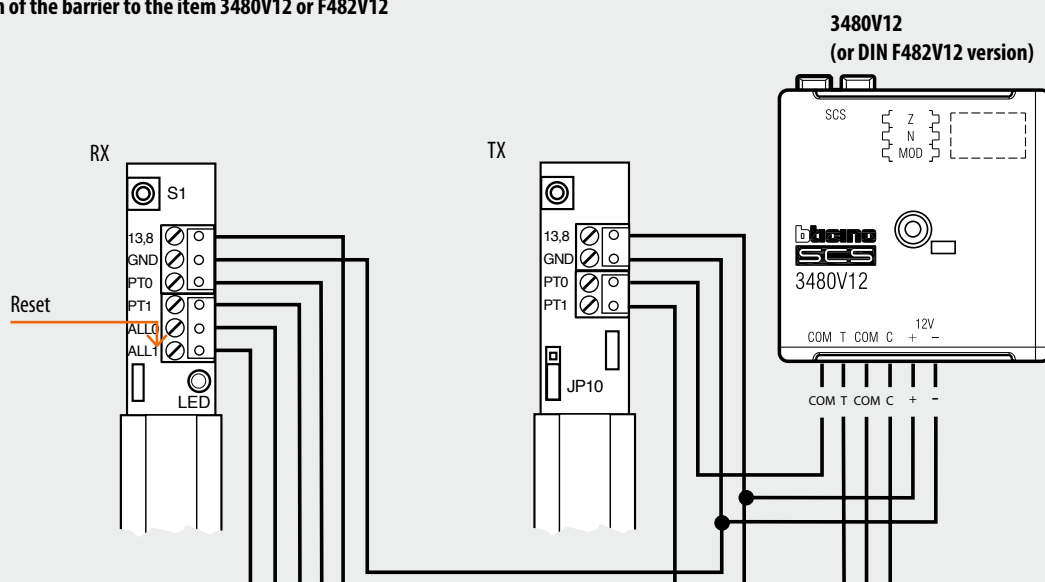
The barriers are sold configured for operation in "AND" mode, with tripping time: 200ms.  
To change the mode use the internal microswitch as shown in the following table:



\* default

### Wiring diagram

#### Connection of the barrier to the item 3480V12 or F482V12



If the max. consumption of the system allows it, it is possible to connect the 3518 or 3518/50 barrier directly to only one interface item 3480V12 or F482V12.

**WARNING:** use a 30 m max twisted, unshielded cable.

Connection table

MS1	Receiver (RX)
1	+13.8V
2	GND
3	PT0 Tamper C
4	PT1 Tamper N.C.
5	Allo Alarm C
6	All1 Alarm N.C.

MS1	Transmitter (TX)
1	+13.8V
2	GND
3	PT0 Tamper C
4	PT1 Tamper N.C.



# Alarm IR remote control

4050

## Description

This easy to use IR remote control enables performing all the system arming and disarming operations, and to confirm the settings. It's coded automatically by the control unit and has 4,000,000 code combinations. The specific programming procedure makes it impossible to detect the code, thus assuring full safety. In any case, the user can easily modify this code. Every system can recognise up to 30 remote controls when item L/N/NT4600/4 control unit is installed, or up to 50 remote controls with control unit item 3486. The remote controls can be programmed to work with several installations, thus permitting, for instance, to control both the home and the office systems with a single remote control.

With systems with control units item 3485/B and item HC/HD/HS/L/N/NT4601, the remote control does not operate.

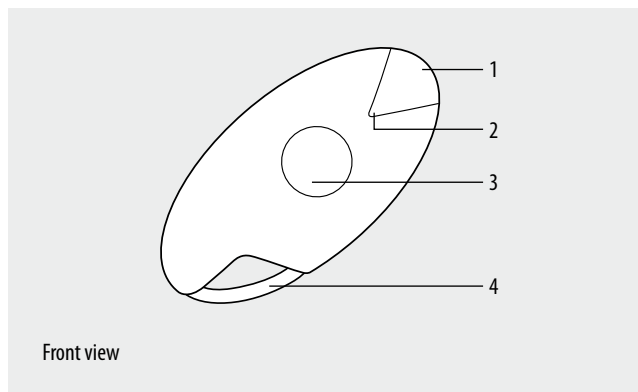
## Technical data

- Power supply: 3 Vdc (2 CR1616 battery)
- Max. no. of manoeuvres: 50.000

## Battery replacement

To replace the 2 remote control batteries proceed as shown in the following figures.

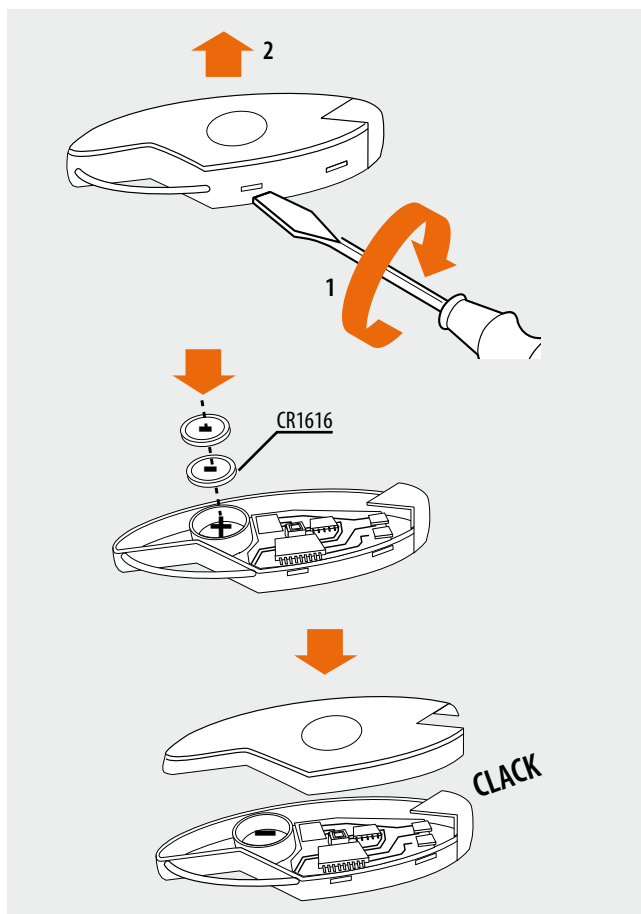
Note: dispose of exhausted batteries following current regulations. Do not insert a fully charged battery and a partly charged battery inside the same remote control.



Front view

## Legend

- 1 - IR transmission zone;
- 2 - LED for transmission confirmation;
- 3 - Control pushbutton;
- 4 - Key-ring.





# Outdoor siren

4072L-4072A

## Description

These sirens have been designed so that they can be installed easily, are tamper resistant and withstand atmospheric agents.

A tamper screw protects the sirens against pulling off/opening; when installing make sure that the tamper screw is correctly positioned.

### Outdoor siren item 4072L

If there is a power cut the battery inside the siren gives the whole system a minimum life of 24 hours (as required by standard CEI 79-2).

This solution means that only one battery need to be used instead of the two of traditional systems, thus reducing maintenance and increasing system reliability. The central unit can be miniaturised with no effect on safety.

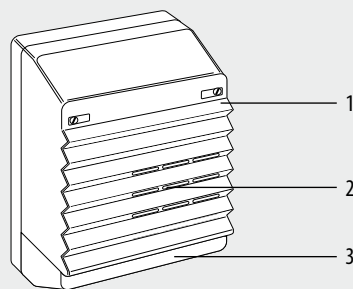
### Outdoor siren item 4072A

This siren is a system optional and can only be installed in combination with power supply item E47ADC.

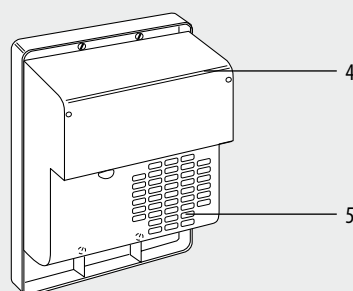
It is useful for identifying which room the alarm is coming from but is not obligatory because the system back-up battery will be connected to the power supply. The housing inside the siren holds the self-power supply 12V 7Ah battery.

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 5 mA (item 4072A)
- Operating temperature: (-25) – (+55)°C
- Level of the signal emitted: 105 dB(A) at 3 metres
- Frequency: 1500 Hz.
- Alarm autonomy: 15 min.
- Flashes per minute: 30 - 60
- Weight (without battery): 2.5 kg
- Protection index: IP34
- Self-protected from removal and opening
- Battery protection fuse: F1: F5AL



Front view

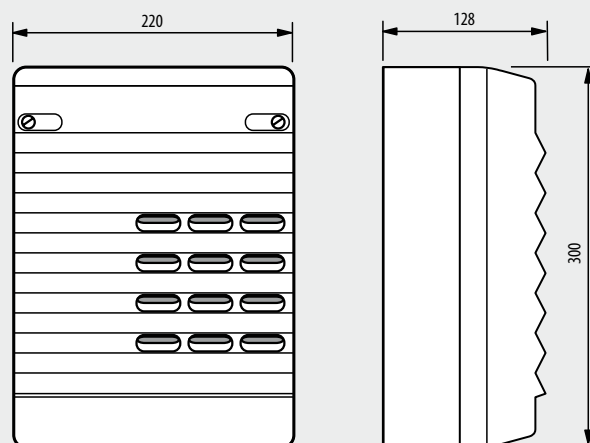


Front view of the siren without external cover

## Legend

- 1 - Plastic external cover;
- 2 - Sound signaller;
- 3 - Sight signaller;
- 4 - Internal metal protection;
- 5 - Anti-foam grid to prevent penetration inside the casing.

## Dimensional data



### Configuration

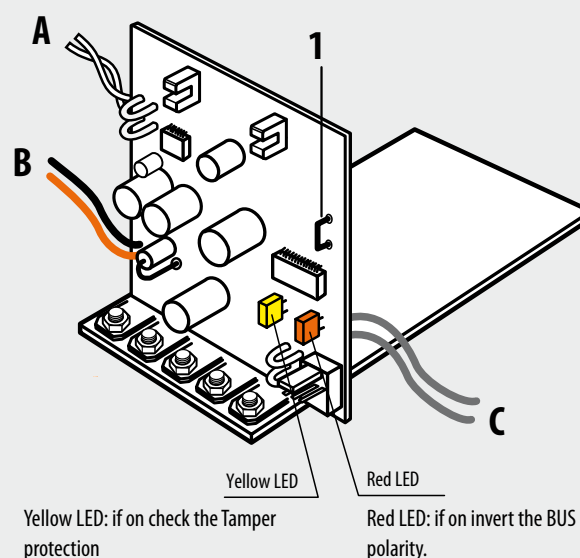
The external siren requires configuration of the progressive number. This is done by means of the jumper (1) of the internal control card.

If the system has 2 external sirens the jumper (1) of the second siren must be cut.

### Internal siren card - connections

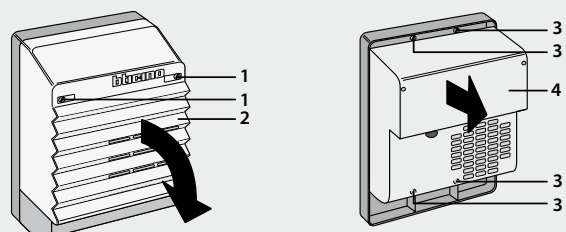
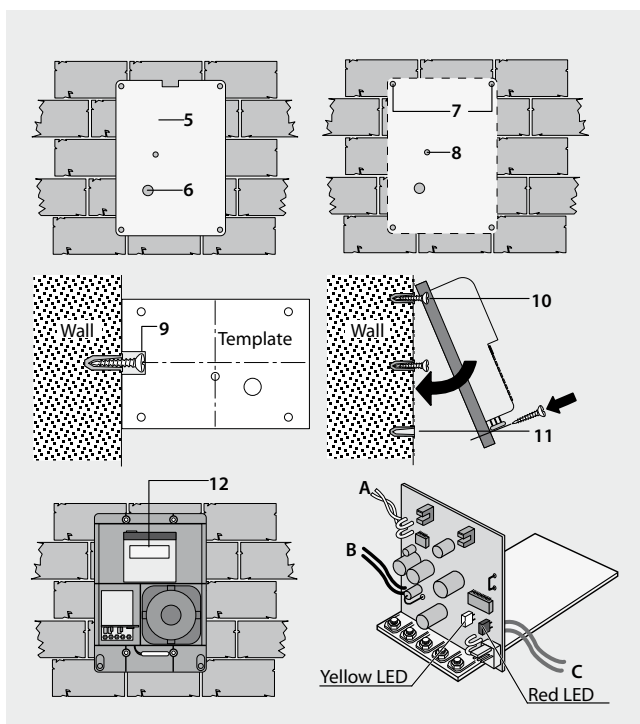
A	Power supply-BUS twisted pair- (WHITE CABLE)
B	battery: battery positive (RED cable) battery negative (BLACK cable)
C	loudspeaker (GREY cable)

Control card internal view



### Installation procedure

- 1 - Remove the two screws (1) and take off the external cover (2).
  - 2 - Remove the four screws (3) and pull out the internal protection cover (4).
  - 3 - By using the drilling template (5), position the hole (6) near the wire-outlet pipe and mark the position of the 5 holes.
- NOTE: use a Ø 6 mm bit for drilling the holes.



- 4 - Insert the screw plastic plugs into the holes and partly tighten the top screws (7) and the "tamper" screw (8).

- 5 - Adjust the "tamper" screw by using the notch (9) on the drilling template, as shown in the picture.

⚠ If the installation or the adjustment of the tamper screw is carried out incorrectly, the system will not work.

- 6 - Attach the siren to the two top screws (10). Tighten the two bottom screws (11). Tighten the four screws completely.
- 7 - Place the battery (12) 12V - 6.5-7.2 Ah (for item 4072A and 77673) or 12V - 12 Ah (for item 4072L) into the special housing without connecting the Faston clamps.

- 8 - On the siren internal board, connect the power supply pair (BUS) to the white wires (A), the battery to the Red and Black wires (B) and the siren to the Grey wires (C).

⚠ If the red LED lights up, reverse the polarity of the BUS

⚠ Before performing any operations on the siren, switch the system to maintenance mode.

⚠ High voltage present near the flasher lamp.

Connections to the wires of the electronic card

Colour	Connection
White	Telephone pair (BUS)
White	Telephone pair (BUS)
Red	+ Battery positive
Black	+ Battery negative
Grey	Sound signaller
Grey	Sound signaller



# Alarm radio remote control

348220

## Description

Radio wave control device recommended for all those installations where an exposed control device is not desired.

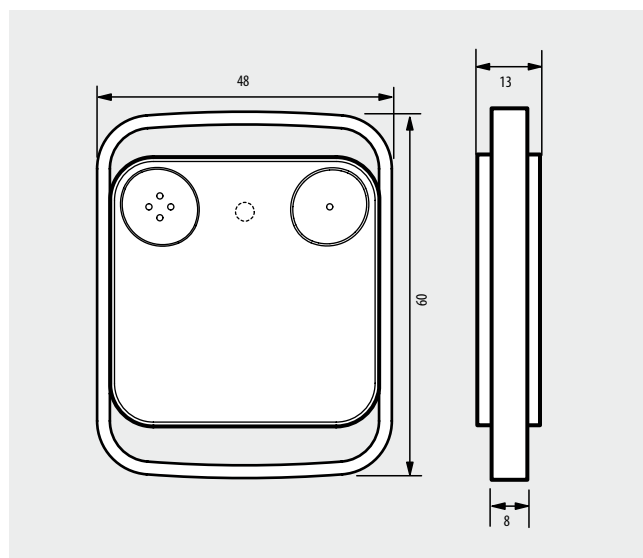
It can also be used with the video door entry system, to control accesses.

The remote control must be used with the radio receiver item HC/HD/HS/L/N/NT4618.

## Technical data

- Power supply: 3 V lithium battery - type CR2032
- Operating temperature: 5 – 40°C
- Minimum battery duration: 2 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field  
(metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

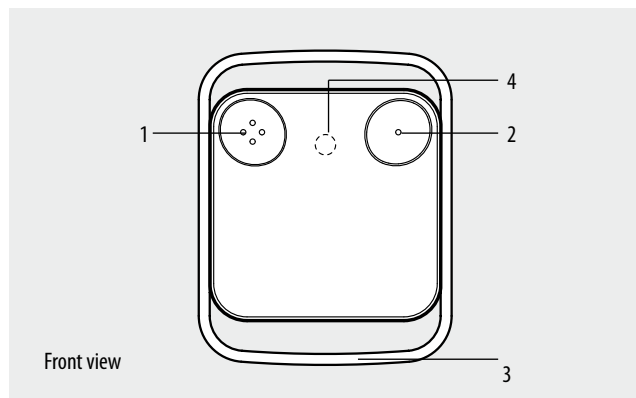
## Dimensional data



## Configuration

### Pairing remote controls

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the arming pushbutton for 5 seconds.
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.  
If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Perform self learning of the system from the central unit.
7. Program the remote controls on the central unit.
8. Exit "maintenance" mode.

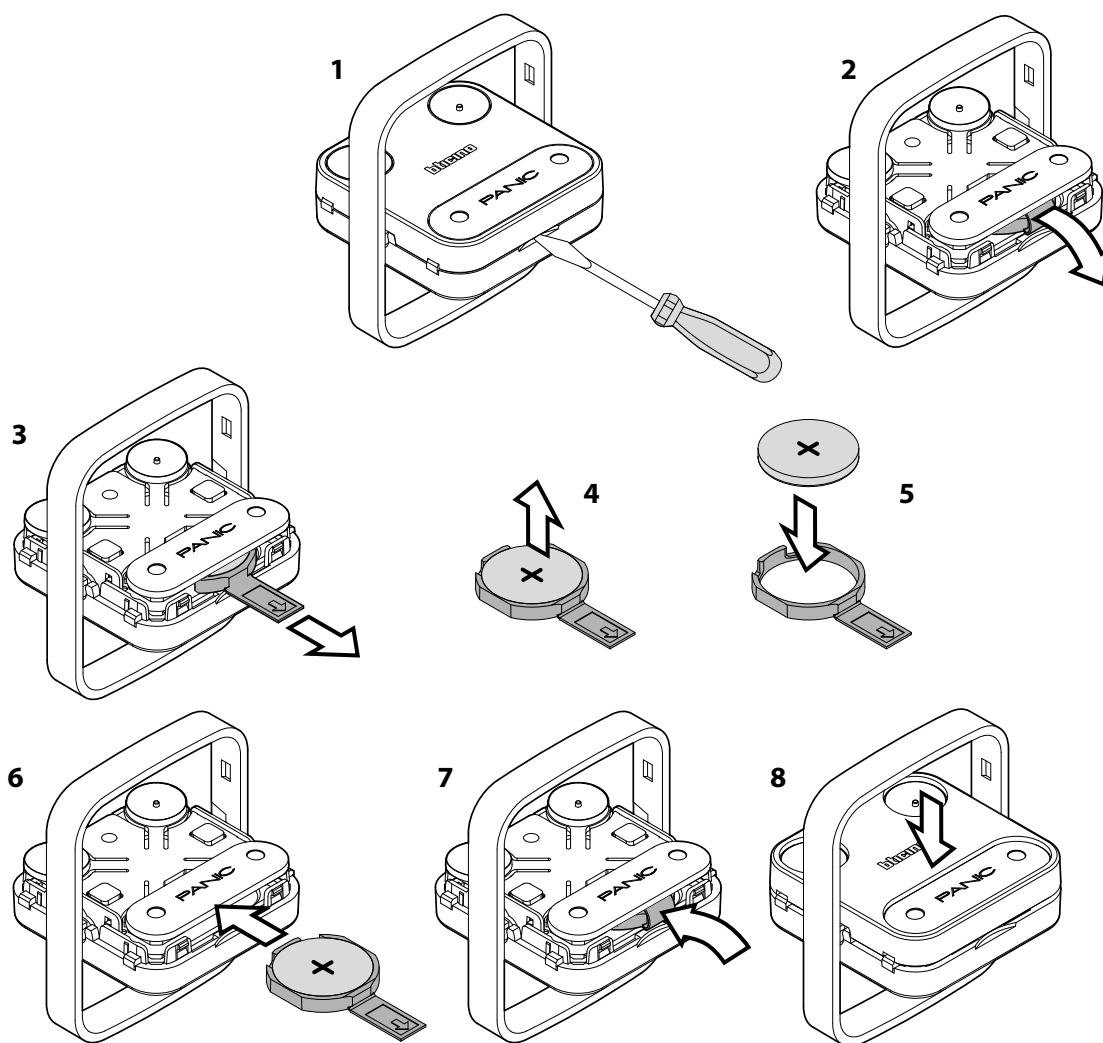


### Legend

- 1 - Arming pushbutton;
- 2 - Disarming pushbutton;
- 3 - Key-ring;
- 4 - Control forwarding notification LED.

### Cancelling remote controls

1. Switch the system to maintenance mode.
2. Remove the power supply from the receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

**Battery replacement**



# 12 V output power supply

E47/12

## Description

Device for the power supply of 12 V devices (e.g. IR barriers), designed for connection to a 12 V - 6.5 - 24 Ah back-up battery.

The power supply can be installed in flush mounted switchboards item F115/8A, or in suitable electric switchboards, with opening protected using the appropriate anti-tampering device L4630.

For the 7.2 Ah battery it is recommended that the item F115/8B container is used, preset for opening protection.

The twisted pair of the burglar-alarm system can be connected to the BUS clamps, enabling the status of the battery to be read from the control unit display.

The power supply is a double insulation safety device in accordance with CEI EN 60065, which creates a SELV system (Safety Extra – Low Voltage) as described in the CEI 64-8 standard (ref. CEI 64-8-4 part 411.1.2.5).

The installation must be performed in accordance with current local regulations.

In general, the following rules must be followed:

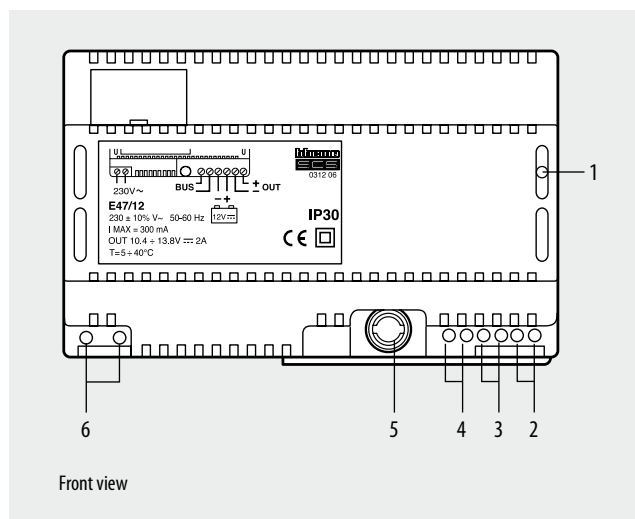
- The power supply must always be installed in appropriate enclosures;
- The device must be kept away from water drips and sprays;
- Care must be taken not to obstruct the air vents;
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.

## Technical data

- Power supply: 230 Vac +/- 10% 50/60 Hz
- Max. absorption: 300 mA
- Output voltage: 10.4-13.8 Vdc
- Maximum current supplied: 2 A
- Battery charging current: 400 mA
- Operating temperature: 5 – 40°C
- Protection index: IP30

## Dimensional data

Size: 8 DIN modules



## Legend

- 1 - Battery status LED;
- 2 - 12 V device power supply connection clamps;
- 3 - Back-up battery connection clamps;
- 4 - SCS BUS connection clamps (optional);
- 5 - Tamper protection device socket;
- 6 - Network voltage connection clamps.

## Maximum current delivered by the devices

		type of battery installed		
		7.2 Ah	12 Ah	24 Ah
duration in case of power line failure	24 h	300 mA(*)	500 mA(*)	1 A
	15 h	480 mA	800 mA	1.6 A
	8 h	900 mA	1.5 A	2 A

(\*) In these cases the system complies with level 1 of CEI 79-2 standard.



# Alarm power supply 230 V

E47ADCN

## Description

The power supply must be used to power the burglar-alarm system.

It supplies continuous 27 Vdc low voltage with a maximum current of 1 A, and is electronically protected (without fuse) against short circuit and overload.

It's a double insulation safety device in accordance with CEI EN 60065, which provides power supply to all the system devices connected to the system using the twisted 2-wire SCS/BUS cable, creating a SELV system (Safety Extra - Low Voltage) as described in the CEI 64-8 standards (ref CEI 64-8-4 par 411.1.2.5).

The power supply must be connected to the 12 Vdc 7.2 to 24 Ah battery to ensure the operation of the system in case of power cut, to be installed inside an item F115/8B enclosure, protected against unwanted opening.

To guarantee physical protection, the power supply unit must be installed in appropriate electric switchboards, with opening protected using the appropriate Tamper device, item L4630.

The device is enclosed in an 8 module DIN rail container, and its installation must be in accordance with the regulations of the country of use.

In general, the following requirements must be met:

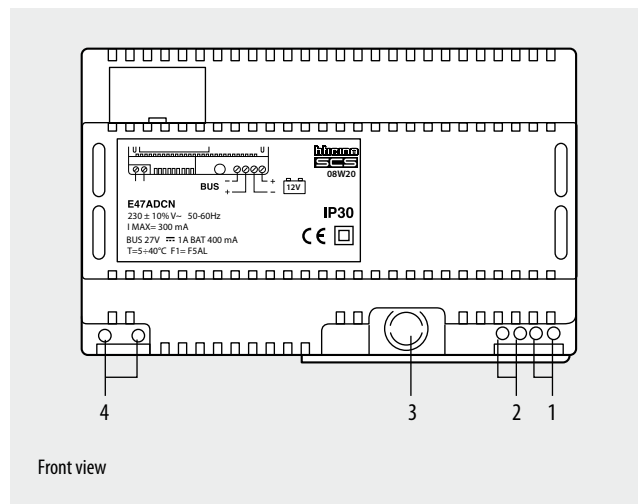
- The power supply must always be installed in appropriate enclosures, item F115/8A;
- The device must be kept away from water drips and sprays;
- Care must be taken not to obstruct the air vents;
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.

## Technical data

- SELV double insulation safety device in accordance with CEI EN 60065 standard
- Power supply: 230 Vac +/- 10% 50/60 Hz
- Max. absorption: 300 mA
- Maximum current supplied: 1 A
- Battery charging current: 400 mA
- Dissipated power: 15 W
- Operating temperature: 5 – 40°C
- Protection index: IP30

## Dimensional data

Size: 8 DIN modules



## Legend

- 1 - Back-up battery connection clamps;
- 2 - Clamps for the connection of the SCS BUS;
- 3 - Tamper protection device socket;
- 4 - Network voltage connection clamps.

## Maximum current delivered by the devices

	type of battery installed			
		7.2 Ah	12 Ah	24 Ah
	Duration in case of power line failure	24 h	15 h	8 h
		110 mA(*)	180 mA	340 mA
		190 mA(*)	300 mA	560 mA
		380 mA	600 mA	700 mA

(\*) In these cases the system complies with level 2 of CEI 79-2 standard.



## Relay actuator

F481

### Description

This device allows to repeat various types of alarms by means of a relay voltage-free contacts, depending on its configuration.

It can be activated by a technical alarm interface, or by another signal through the auxiliary channel (AUX).

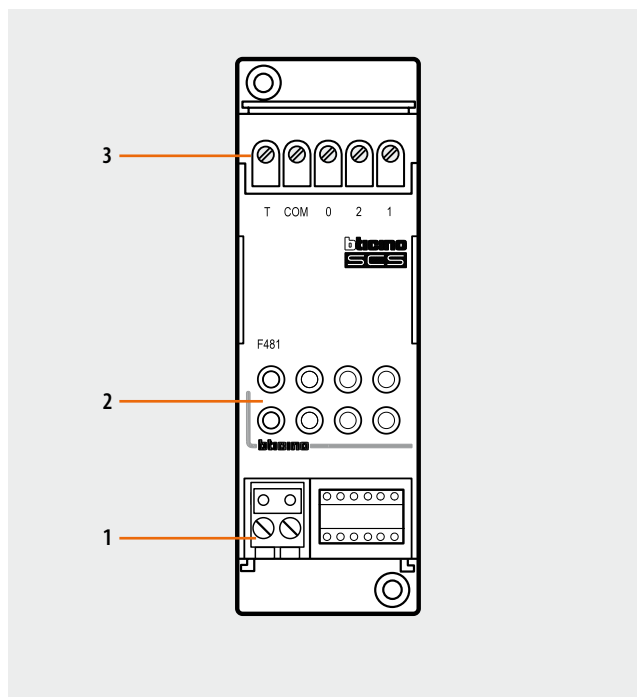
Normally used for the control of gas/water safety solenoid valves, or third party devices (telephone diallers, optical notifications, etc.).

The internal relay is in positive safety; this means that, in case of tampering, it switches over the contacts.

By modifying the configuration, it is possible to change the safety mode of the internal relay.

### Related items

Technical alarm interfaces: 3841 and F483



### Technical data

Power supply from SCS BUS: 27 Vdc  
 Max. absorption: 20 mA  
 Contact output: 24 V 1 A cosφ 0.4  
 Operating temperature: 5 – 40 °C

### Legend

1. Clamp for burglar alarm BUS
2. Relay active notification LED
3. Clamp for the connection of alarm devices

### Configuration

The relay actuator requires the allocation of the progressive number within the group of auxiliary devices (relay actuator and auxiliary channels interface) installed within the system, of the auxiliary channel number, and the operating modes.

N°

This configurator assigns the progressive number inside the auxiliary unit.

Configurator 1 identifies the first auxiliary, configurator 2 identifies the second and so on for a maximum of 9 auxiliaries.

### AUX and MOD

In combination the configurators in the AUX and MOD sockets assign the operating mode on the basis of the following table.

### Operating mode

Configurators		Description	It activates by...	It resets by...
AUX	MOD			
none	none	Repetition of the siren alarm	Siren activation	Silencing
none	1	System fault notification	Activators flashing red LED notification	
none	2	System status notification	Activation	Deactivation

**“Auxiliary” operating mode**

Configurators		Description	It activates by...	It resets by...
AUX	MOD			
none	3	Signalling with memory of the activation of any auxiliary channel of the system. Typical example: signalling with memory of any technical alarm.	Any AUX device of the system	Pressure of the needle key on any technical alarm interface with AUX configurator from 1 to 9
1-9	3	Signalling with memory of the activation of the corresponding auxiliary channel. Typical example: signalling with memory of a specific technical alarm.	Technical alarm interface with corresponding AUX channel	pressure of the needle key on the interface of the active technical alarm
none	4	Signalling without memory of the activation of any auxiliary channel of the system. Typical example: signalling without memory of any technical alarm.	Any AUX device of the system	Pressure of the needle key on any technical alarm interface with AUX configurator from 1 to 9
1-9	4	Signalling with memory of the activation of the corresponding auxiliary channel. Typical example: signalling without memory of a specific technical alarm.	Technical alarm interface with corresponding AUX channel	pressure of the needle key on the interface of the active technical alarm
	5	As mode 3 but with relay normally not excited.		
	6	Come modo 4 con relé normalmente non eccitato		

**NOTES**

- Modes 5 and 6 give the same operating results of modes 3 and 4. Their difference is that the relay is normally not excited. This enables an opposite behaviour in case of tampering (cutting of the wire or BUS short circuit). In fact in mode 3 and 4 a tampering excites the device (modes indicated in the case of actuation of alarms such as the siren, the telephone communicator, etc.); however, in mode 5 and 6 the same tampering does not cause any actuation (modes indicated in case of safety actuations such as electrical door locks etc.). The selection of the appropriate mode ensures total system safety.

- The “S” key of the 3 module flush-mounted central unit or the disabling of the central unit with display, which main function is that of silencing the sirens during a technical alarm, disables the relay if this has been activated by the technical alarm interface configured in mode “0” or “4” (technical alarm).

- In all modes there is an auxiliary activation also in case of pre-alarm (IR detector and contact interface with AUX configurators). Attention must therefore be paid when using the relay actuator (in modes with memory or with sensitivity to any auxiliary channel) to avoid unwanted activations.

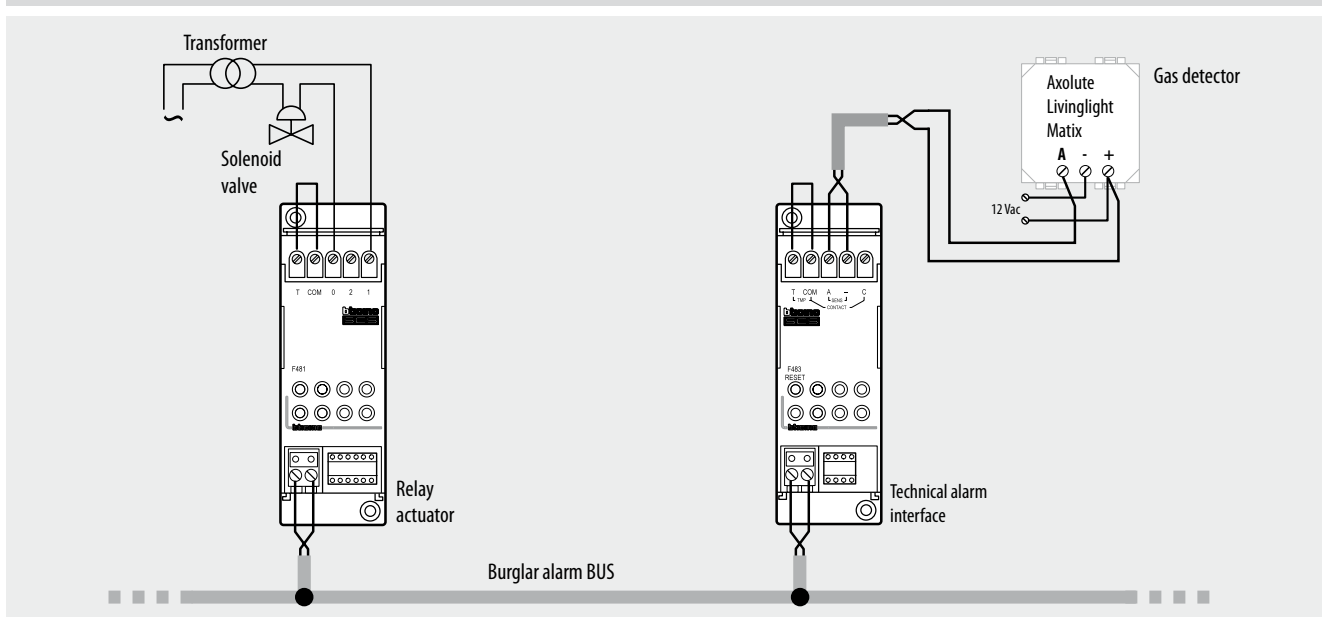
**EXAMPLE: Activation of the solenoid valve in case of gas leak**

Relay actuator configuration:

Configurator position	Value
N°	1
AUX	1
MOD	6

Technical alarm interface configuration

Configurator position	Value
N°	2
AUX	1
MOD	4

**Wiring diagram**



# Contact interface

F482

## Description

These interfaces are used for connecting 2 independent contact lines - which can be balanced with a resistance, delayed on operation - and a protection Tamper line. Made in the modular version with 2 DIN modules these devices can be used as an alternative to interfaces item L/N/NT4612 and item AM5792 in case it is necessary to centralise all interfaces in a board or in junction boxes.

LED indicators inside the devices indicate proper operation of the interface when testing the system and when the burglar-alarm starts operating while the system is on.

In order to install the interface item F482 safely, it is recommended to use protected DIN switchboards on the opening of a tamper contact to be connected to the appropriate clamps on the interface.

For level 2 systems (CEI 79-2) the central unit must also be protected from removal (tearing protection).

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 6 mA
- Operating temperature: 5 – 40°C

## Dimensional data

- Size: 2 DIN modules

## Configuration

This interface module requires - for each of the two contact lines separate from each other - the allocation of the assigned zone Z, the progressive number N of the detectors situated in the same zone, the setup of the MOD protection mode of the contact line. You will not need to configure both lines if one is not used.

### Z1

This configurator assigns the number of the assigned zone of the NC/NO magnetic contact connected to line 1.

Configurator 1 gives the contact the assignment to zone 1, configurator 2 gives the assignment to zone 2 and so forth, up to a maximum of 8 zones.

### Z2

As above, for contacts connected to line 2.

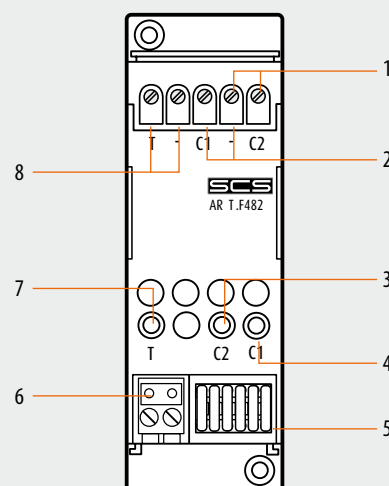
### N1

This configurator assigns the progressive number of the NC magnetic contact within the zone determined in position Z1.

Configurator 1 identifies the first detector, configurator 2 identifies the second, and so forth, up to a maximum of 9 contacts for each of the 8 zones.

### N2

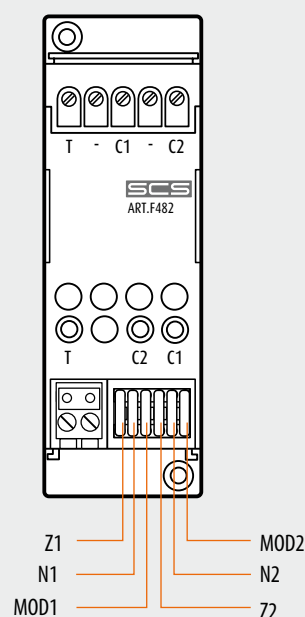
As above, for contacts connected to line 2 (zone Z2).



Front view

## Legend

1. Contact line 2;
2. Contact line 1;
3. Line 2 activated LED;
4. Line 1 activated LED;
5. Configurator socket;
6. Clamp for burglar alarm BUS;
7. Tamper active LED;
8. Tamper line.



## Configuration

### MOD1 and MOD2

A configurator is connected to this position for selecting the operating mode of the interface according to the type of contact or detector connected to the two lines. It is possible to have balanced and unbalanced protection lines with the possibility to produce the alarm with a delay as with zone 1. For details concerning the different operating modes, please refer to the table below.

Configurator	Sensor connected
none	NC contacts
1	NC contacts - balanced
2	NC contacts - delayed *
3	NC contacts - delayed * - balanced
4	NC contact and AUX event generation
5	NC contacts - balanced and AUX event generation
6	NC contacts - delayed and AUX event generation
7	NC contacts - balanced delayed and AUX event generation

\* Follows the delay set up in the central unit:

this function operates only on central units item 3486, 3485/B and item HC/HD/HS/L/N/NT4601. With central unit item L/N/NT4600/1 the interface must be allocated to ZONE 1 with a time delay set (see central configuration).

## Energy saving management with Temperature control

If the contact interface is used in conjunction with the temperature control system to optimise energy saving, two different types of configurations will be possible:

- **Use in the temperature control system only:** The contact interface is directly connected to the temperature control BUS. It autonomously and independently manages the two C1 and C2 lines. Only the line used must be configured, and not both of them. Follow by connecting the AUX configurator to the MOD1 and/or MOD2 sockets. Then configure the [Z1/2] and [N1/2] sockets, in order to assign the address from 1 to 99 to the device within the system. The coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application.

For more information refer to the MY HOME Temperature control guide.

Specific mode for connection to wired rolling shutter sensors

Configurator	Sensor connected	Pulses (*)
8	Flush detector for rolling shutters - delayed**	12 (about 20 cm)
9	Flush detector for rolling shutters - delayed**	25 (about 45 cm)

**Note (\*)**: impulses generated by the detector according to the opening range, in cm, of the window before producing the alarm.

\*\* Follows the delay set up in the central unit:

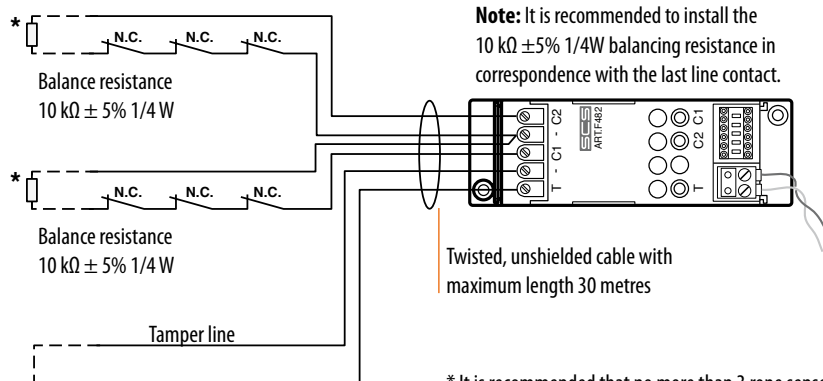
this function operates only on central units item 3486, 3485/B and item HC/HD/HS/L/N/NT4601. With central unit item L/N/NT4600/1 the interface must be allocated to ZONE 1 with a time delay set (see central configuration).

- **Use of a burglar-alarm system integrated with the Temperature control system:** in this case, the contact interface is connected to the burglar-alarm system BUS only, and communicates with the temperature control system BUS through the F422 interface.

The interface must be configured in Z1/2 and N1/2 following the requirements and features of the burglar alarm system; only configurators with values 4 to 7 must be connected to the MOD1/2 position, corresponding to the management of NC contacts with generation of AUX event (see tables above). Also in this case, the actual coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application.

For more information refer to the MY HOME Temperature control guide.

## Wiring diagram





## 12 V contact interface

F482V12

### Description

This interface gives the possibility of connecting the alarm system to two sensor lines (that can be balanced with resistance, and/or which intervention can be delayed) requiring 12 V power supply.

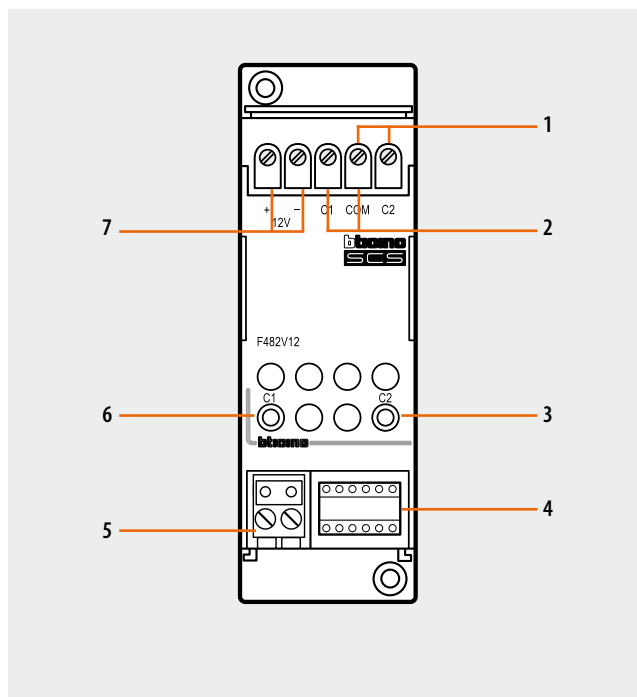
Produced in the DIN modular version, the device can be used for centralizing all the interfaces inside a cabinet. Two LEDs confirm the correct operation of the interface during system testing, and the tripping of the burglar-alarm system, when the system is armed. To ensure that the interface is installed safely the use of DIN switchboards is recommended, with their opening protected by a tamper contact connected to another interface.

### Technical data

Power supply:	27 Vdc from the BUS
Max. absorption:	6 mA to which the absorption of the sensor connected must be added
Operating temperature:	5 – 40 °C
Output:	12 V Max 100 mA

### Dimensional data

Size: 2 Basic modules



### Legend

1. Contact line 2 or tamper;
2. Contact line 1;
3. Line 2 activated LED;
4. Configurator socket;
5. Clamp for burglar alarm BUS;
6. Line 1 activated LED;
7. Output 12 V

### Configuration

For each of the two contact lines, independent from each other, the interface requires the assigning of the Z zone it belong to, the N progressive number of the sensors present within the same zone, and the setting of the MOD protection mode of the contact line.

- If the address of contact 2 is not configured, a Tamper line can be connected to clamps C2 and COM; If not required, the C2 clamp must be shorted at the COM contact.

#### Z1

This configurator assigns the number of the assigned zone of the NC magnetic contact connected to line 1.

#### Z2

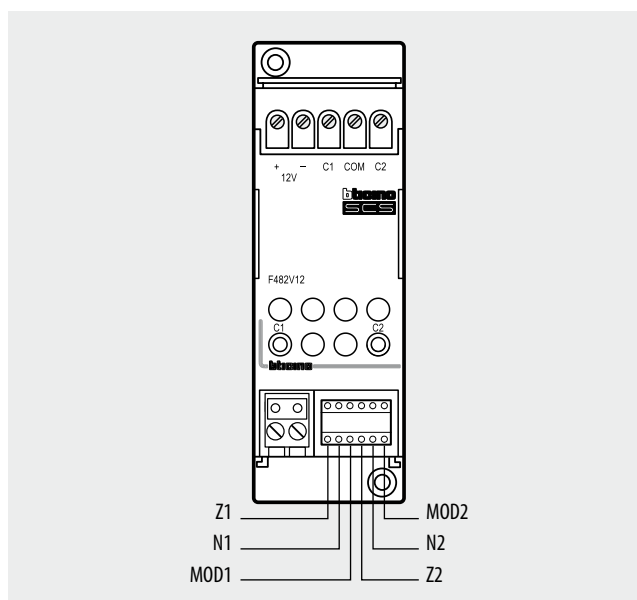
As above, for contacts connected to line 2.

#### N1

This configurator assigns the progressive number of the NC magnetic contact within the zone determined in position Z1.

#### N2

As above, for contacts connected to line 2 (zone Z2).



## Configuration

### MOD1 and MOD2

In this position a configurator is inserted for selecting the operating mode of the interface according to the type of contact or detector connected to the two lines.

It will be possible to create both balanced and non balanced protection lines, with the possibility of generating a delayed alarm as for zone 1. For the details of the various operating modes, refer to the table below.

Configurator	Sensor connected
none	NC contact
1	NC contact - balanced
2	NC contact - delayed *
3	NC contact - delayed * - balanced
4	NC contact and AUX event generation
5	Balanced NC contact and AUX event generation
6	Delayed NC contact and AUX event generation
7	Balanced delayed NC contact and AUX event generation

Specific mode for connection to wired rolling shutter sensors

Configurator	Sensor connected	Pulses (**)
8	Rolling shutter rope sensor - delayed*	12 (approx 20 cm)
9	Rolling shutter rope sensor - delayed*	25 (approx 45 cm)

Note (\*): Follows the delay set on the central unit:

this function is operative only with central units with display. With flush mounted 3 module central units, the interface must be allocated to ZONE 1, with a time delay set (see central unit configuration).

Note (\*\*): pulses generated by the sensor depending on the degree of opening of the window, in cm, before the alarm is generated.

## Energy saving management with Temperature control

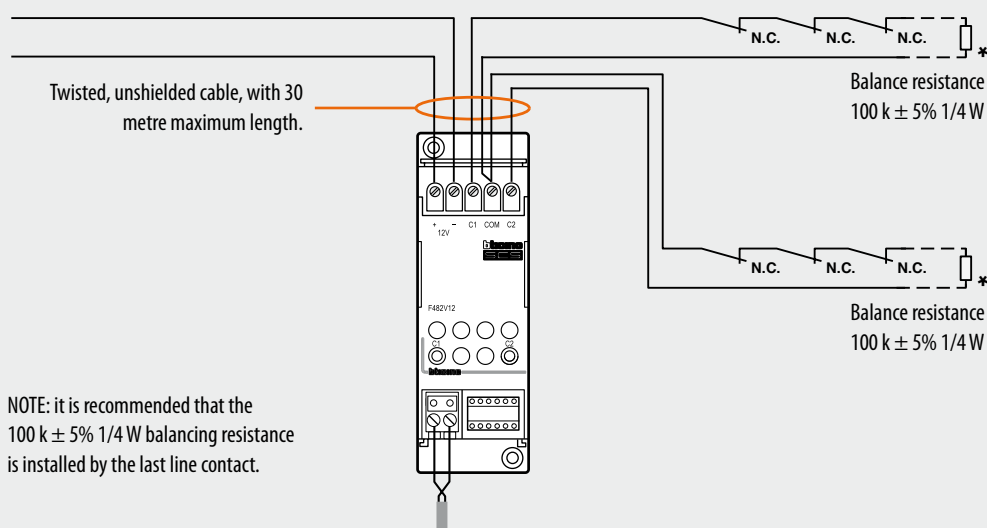
If the contact interface is used in conjunction with the temperature control system to optimise energy saving, two different types of configurations will be possible:

- Use in the temperature control system only: The contact interface is directly connected to the temperature control BUS e gestisce in modo autonomo ed indipendente le due linee C1 e C2. Non è obbligatorio configurare entrambe le linee ma solo quella utilizzata. Inserire poi nella sede MOD1 e/o MOD2 il configuratore AUX. Then configure sockets [Z1/2] and [N1/2] to assign the address 1 to 99 of the device within the system. The coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

- Use of a burglar-alarm system integrated with the Temperature control system: in this case, the contact interface is connected to the burglar-alarm system BUS only, and communicates with the temperature control system BUS through the F422 interface.

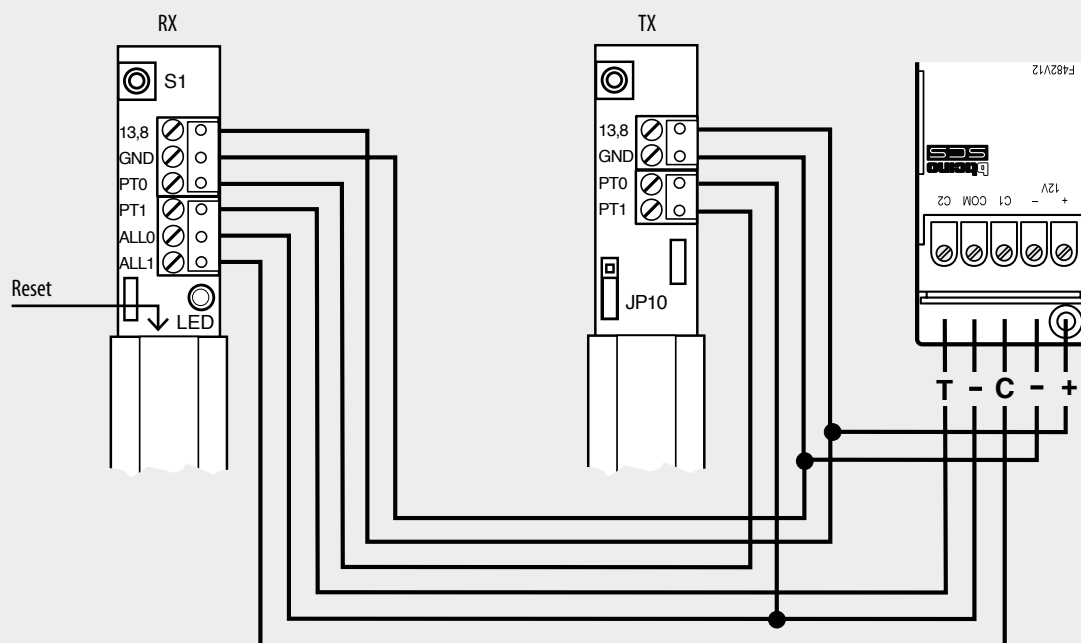
The interface must be configured in Z1/2 and N1/2 following the requirements and features of the burglar-alarm system; only configurators with values 4 to 7 must be connected to the MOD1/2 position, corresponding to the management of NC contacts with generation of AUX event (see tables above). Also in this case, the actual coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

## Wiring diagram



F482V12

Connection with IR 3518 - 3518/50 - 3518/150 - 3519 barriers



If the max absorption of the system allows it, it will be possible to directly connect the barrier to the interface only.

**NOTE:** If Z1 and N1 are configured, while leaving sockets Z2 and N2 empty, contact C2 will operate as a tamper line.

**WARNING:** use a 30 m max twisted, unshielded cable.



## Technical alarm interface

F483

### Description

The technical alarm interface is used to receive signals from the outside (normally analogue signals, like the closing/opening of a contact), converting them into digital information for the BUS.

This information gives the possibility of differentiating between alarm notifications, like the activation of the siren, or the telephone dialler, or the closure of the gas/water solenoid valve.

The functions described can be obtained using a dedicated communication line between the devices of the burglar alarm system, called auxiliary channel.

Up to 9 auxiliary channels are available for each system. They are assigned by configuration of the device(s).

### Related items

Relay actuator: F481 and 3479

### Technical data

Power supply from SCS BUS: 27 Vdc  
Max. absorption: 6 mA  
Operating temperature: 5 – 40 °C

### Dimensional data

Size: 2 DIN modules

### Configuration

The technical alarm interface module requires the allocation of the progressive number within the group of auxiliary devices (relay actuator and auxiliary channels interface), the auxiliary channel number, and the operating modes.

N°

This configurator assigns the progressive number inside the auxiliary unit.

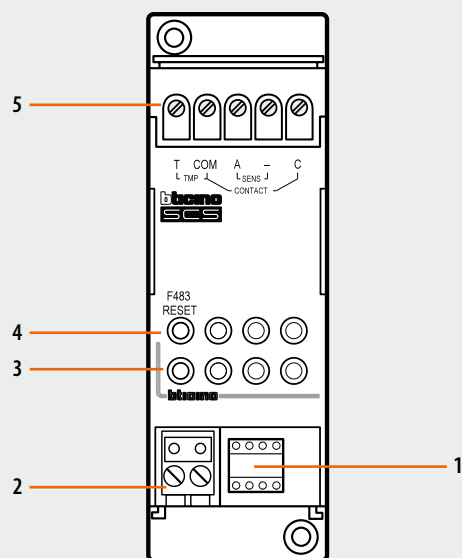
Configurator 1 identifies the first auxiliary, configurator 2 identifies the second and so on for a maximum of 9 auxiliaries.

### AUX and MOD

In combination the configurators in the AUX and MOD sockets assign the operating mode on the basis of the following table.

### Activation from the technical alarm interface

Configurators		Description
AUX	MOD	
none	none	<b>Technical alarm with normally closed (NC) contact</b> Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm b) pressure of "S" key on the 3 module flush mounted central unit, or deactivation from the central unit with display; c) Reset key on the device itself pressed.
none	2	<b>Anti-panic alarm with normally closed (NC) contact</b> Generates a burglar-alarm even with the system switched off and in any division condition. Is silenced with the remote control.
none	4	<b>Technical alarm with normally open (NO) contact</b> Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm b) pressure of "S" key on the 3 module flush mounted central unit, or deactivation from the central unit with display; c) Reset key on the device itself pressed.



### Legend

1. Configurator socket
2. Clamp for burglar alarm BUS
3. Operation indication LED
4. Reset key
5. Clamp for the connection of external devices

## Activation from the technical alarm interface

Configurators		Relay operating mode (description)
AUX	MOD	
1-9	none	<b>Technical alarm with NC contact and activation of the auxiliary channel</b> Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm, b) pressure of "S" key on the 3 module flush mounted central unit, or deactivation from the central unit with display; c) pin key on the device itself pressed. It activates the corresponding auxiliary channel.
1-9	1	<b>Anti-burglary automation with NC contact</b> It activates the corresponding auxiliary channel without interfering with the status of the burglar-alarm system, therefore without generating signals or alarms.
1-9	2	<b>Anti-panic alarm with NC contact and activation of the auxiliary channel</b> Generates a burglar-alarm even with the system switched off and in any division condition. Is silenced with the remote control. It activates the corresponding auxiliary channel.
1-9	3	<b>Connection between burglar-alarm and auxiliary channels (LINK)</b> It generates and activation of the corresponding auxiliary channel following a burglary/tampering alarm.
1-9	4	<b>Technical alarm with NO contact and activation of the auxiliary channel</b> Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm, b) pressure of "S" key on the 3 module flush mounted central unit, or deactivation from the central unit with display; c) pin key on the device itself pressed. It activates the corresponding auxiliary channel.

## EXAMPLE: Activation of the solenoid valve in case of gas leak

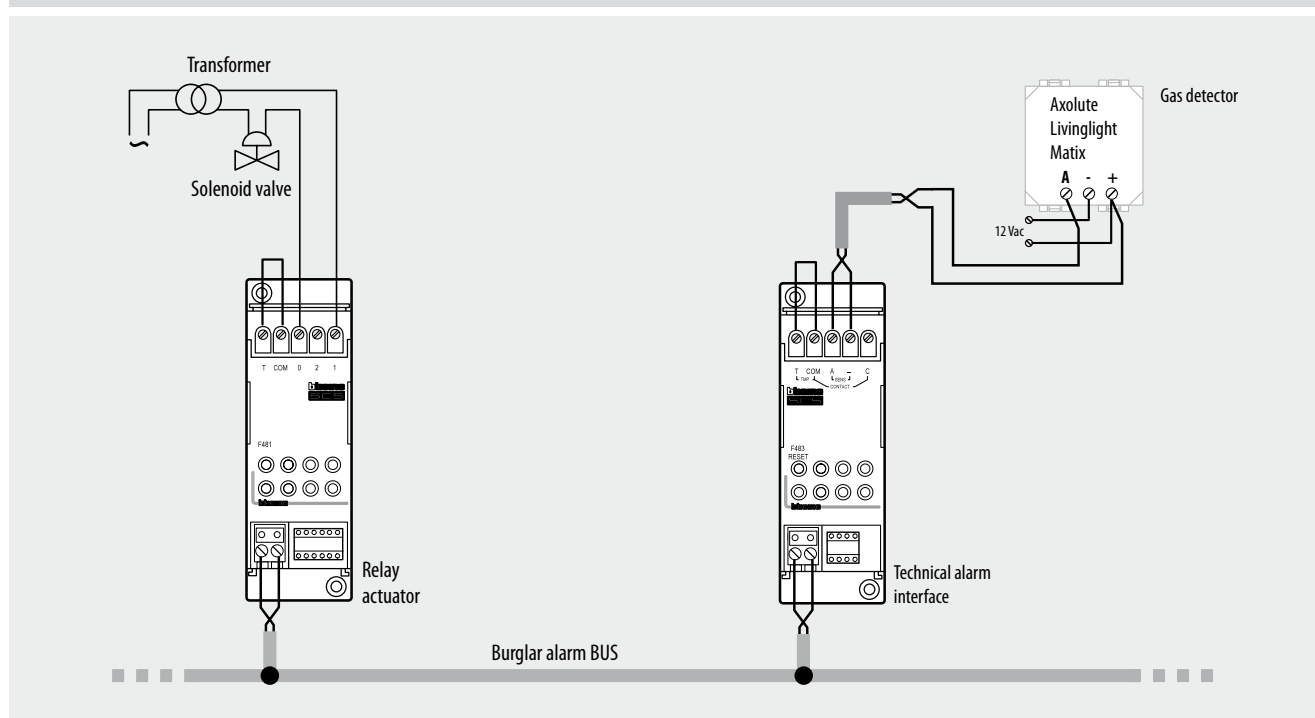
Relay actuator configuration:

Configurator position	Value
N°	1
AUX	1
MOD	6

Technical alarm interface configuration

Configurator position	Value
N°	2
AUX	1
MOD	4

## Wiring diagram





# Signalling interface

F80CMD

## Description

Item F80CMD is a signalling and control interface for the associated device, for example the Stop&Go device item F80/SG. It consists of two signalling relays, two contacts for the connection of two pushbuttons, and one mode selector.

## Technical data

- Power supply: from the associated device
- Operating temperature: 5 – 40°C

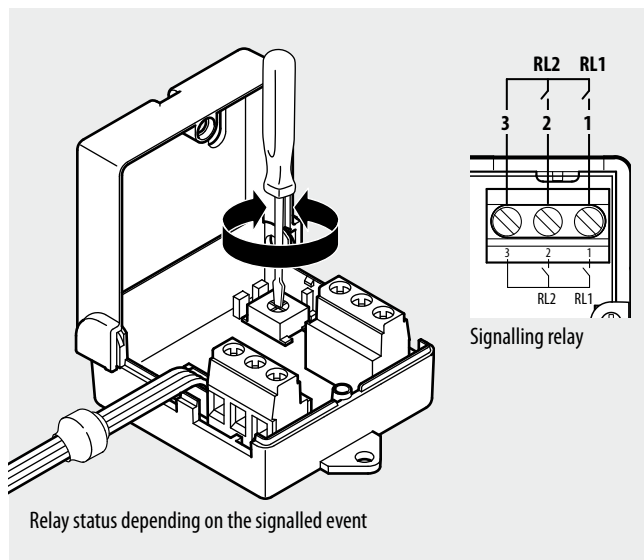
## Dimensional data

Size: 2 Basic modules

## Configuration

**Warning:** All the configuration operations must be performed with item F80CMD disconnected.

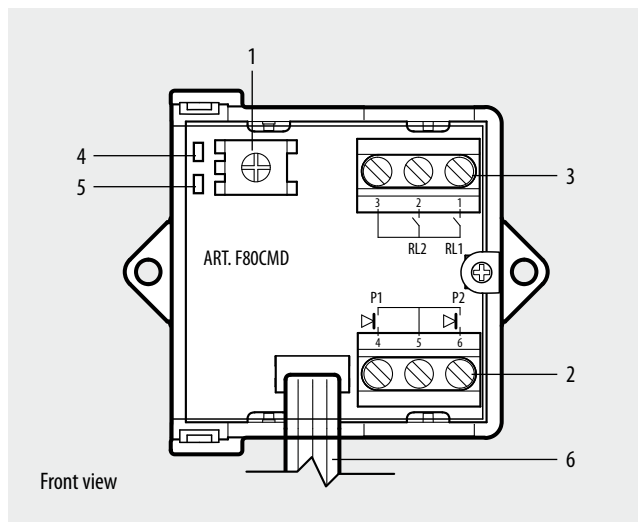
- 1 - Open item F80CMD.
- 2 - Select the desired mode using a flat screwdriver.



Mode	Relay 1	Relay 2
0	Faulty	Blocked
1	Faulty	Not faulty
2	Blocked	Not blocked
3	Open	Closed

**NOTE:** if the set configuration mode is different from the expected ones, Stop&Go enters mode =0

- 3 - Close item F80CMD.
- 4 - Wire the relays and the pushbuttons.
- 5 - Connect item F80CMD to the associated device.



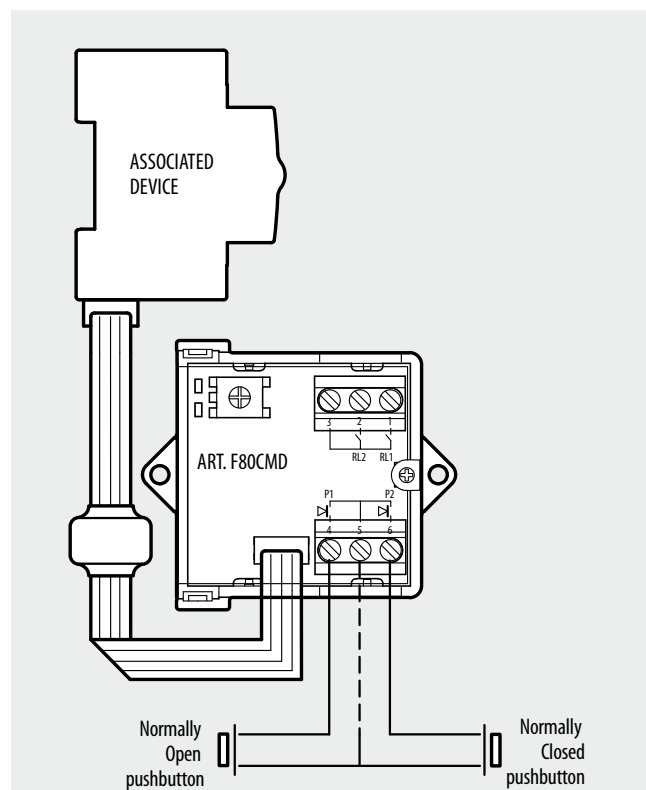
## Configuration

- 1 - Mode selector, from 0 to 9;
- 2 - Contacts of pushbuttons P1 and P2;
- 3 - Contacts of signalling relays RL1 and RL2 (A1 load; maximum voltage 230 Vac);
- 4 - Signalling LED flashing red: data transfer;
- 5 - Signalling LED green: interface ON.
- 6 - Stop&Go connector.

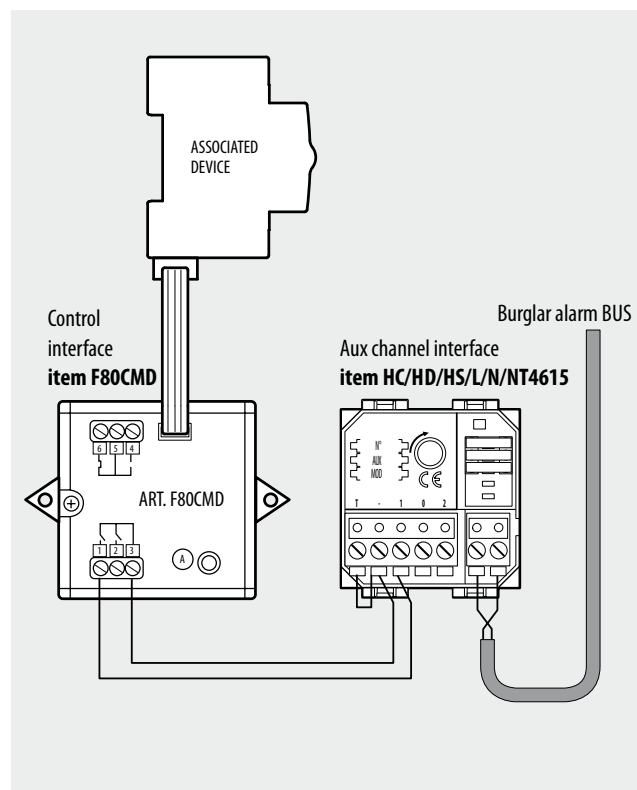
## F80CMD

## Wiring diagram

1 - Connection for use with Stop&Go device, item F80/SG;



2 - Connection for use with Stop&Go device, item F80/SG and alarm event signalling through the burglar-alarm system.





# Base central unit

L/N/NT/HD/HC/HS4601

## Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another. It is possible to save up to 16 activation scenarios and use them based on actual the needs.

The device can manage up to 10 automations split as follows:

- 1 actuated using an internal relay and coupled with intrusion events, technical alarms, or system status;
- 9 coupled with arming, disarming, date and time events to generate separation scenarios.

## Main functions

- System self-learning and configuration on-screen display;
- can be controlled by transponder and keypad (20 keys maximum);
- independent management of each sensor;
- local contact in addition to those already present on the system (configurable);
- possibility of updating the firmware using the PC;
- detailed event memory and alarm only memory;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times;
- association of a set user name to scenarios (max. 4), sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
- division of the zones directly from the central unit keypad;
- presence of a local automation and signalling relay.

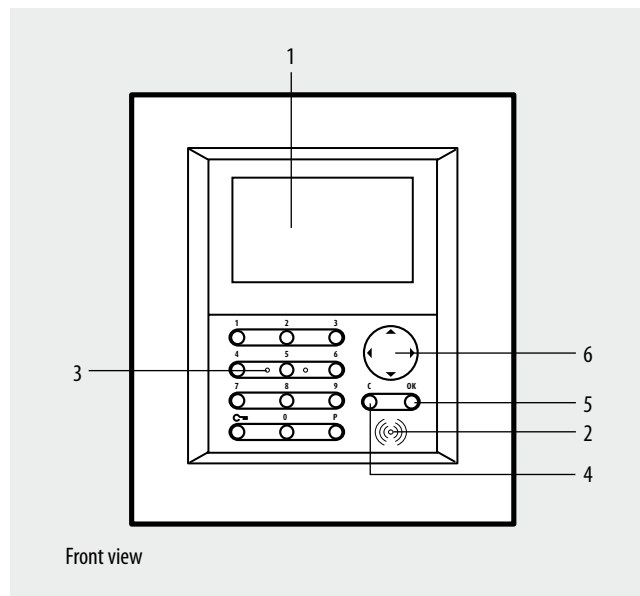
## Management of burglar-alarm functions

The central unit manages a total of 6 zones:

- zone 0 is reserved for the activators (max. 9);
- zones from 1 to 4 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/ auxiliaries (gas detector etc.).

Performs the following functions:

- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 4 can be separated as the user requires;
- up to 4 division scenarios can be created and activated depending on needs;
- all the customising phases are guided and shown by means of the display;
- an automation can be coupled to the detection of a certain alarm, using the local relay: for example, the switching on of a light, to confuse the intruder.



## Legend

- 1 - Graphic display:** displays the messages which guide the programming operations and the events which have occurred (more information on the following page).
- 2 - Transponder reader:** receives the burglar-alarm system switching on and off commands directly from the transponder keys.
- 3 - Alphanumeric keypad:** allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.
- 4 - C key:** exit the current menu and the programming.
- 5 - OK key:** to confirm the programming operations.
- 6 - Navigation keypad:** navigate the menu.

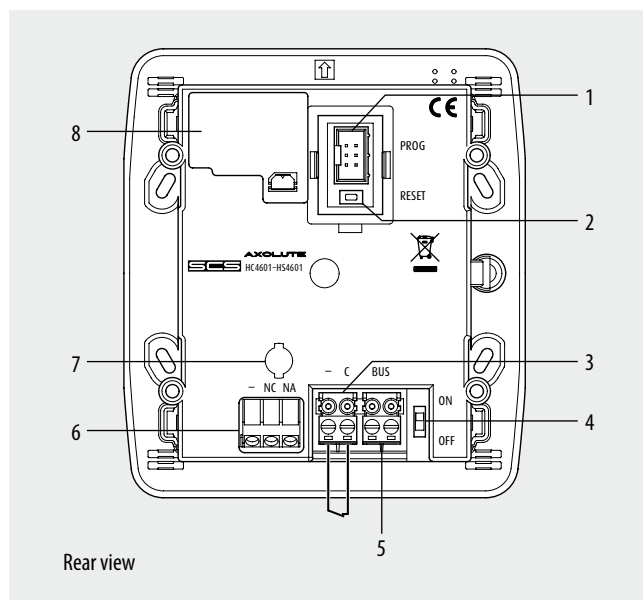
## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 50 mA
- Operating temperature: 5 – 40°C
- Installation: wall mounted

## Dimensional data

Size: 3+3 modules

L/N/NT/HD/HC/HS4601



### Legend

- 1 - Serial connector for the update of the firmware using a PC;
- 2 - Reset key;
- 3 - Local contact;
- 4 - ON/OFF slide switch;
- 5 - Burglar alarm BUS;
- 6 - Relay for automation in case of alarm;
- 7 - Socket for tamper device item L4630;
- 8 - Battery housing.

## Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software TISecurity Basic. For detailed information refer to the corresponding manuals supplied with the products.

### Software configuration

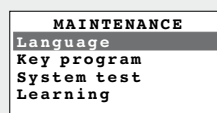
The program enables acquiring the configuration on the central unit, saving it in a file to be used to reinstate the configuration of the same, or to configure other central units. It is also possible to update the permanent software of the central unit using new versions published by BTicino.



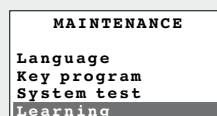
### Example

Example of configuration performed on the central unit.

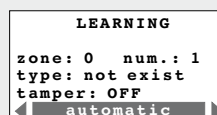
- Detection of devices



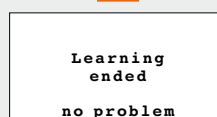
Select  
Learning



Press **OK** to confirm



Press **OK** to start learning



NEXT

(See the manual of the central unit)



# Radio flooding detector

HA/HB/L4619

## Description

This device generates an alarm signal when the contacts of the corresponding sensor make contact with water.

The signal is then processed by the alarm central unit, which activates the siren and the Telephone communicator (if installed), for sending a telephone message.

Better protection can be ensured by installing a relay actuator within the Burglar-Alarm system, which will order an electrovalve to shut off the main water supply in case of flooding.

Two front pushbuttons can be used to interrupt the alarm signalling and to test the operation of the sensor.

## Technical data

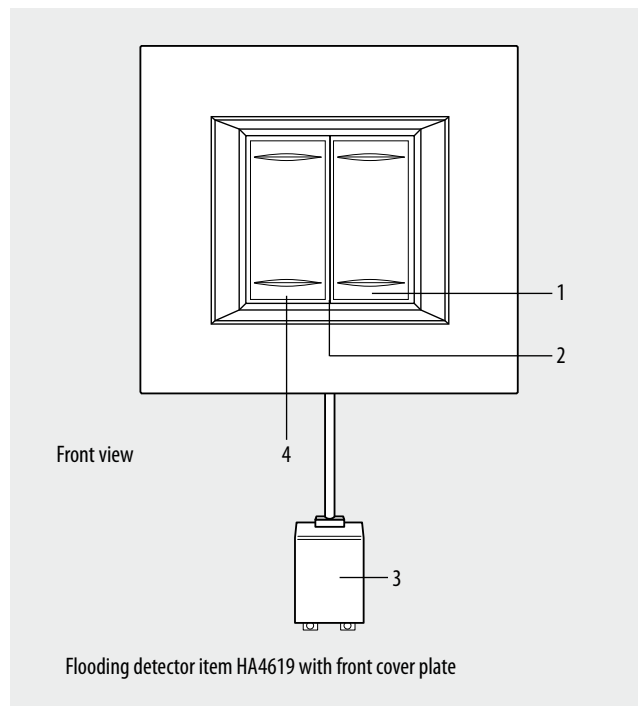
- Power supply: Battery 3 V type CR2032
- Operating temperature: 5 – 40°C
- Minimum battery duration: 2 years
- Radio frequency: 868 MHz
- Range: 100 metres free field  
(metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

## CONFORMITY DECLARATION

Items HA/HB4619 and L4619 comply with the essential requirement of directive 1999/5/CE as they meet the following standards:

- ETSI EN301 489-3
- ETSI EN300 220-3

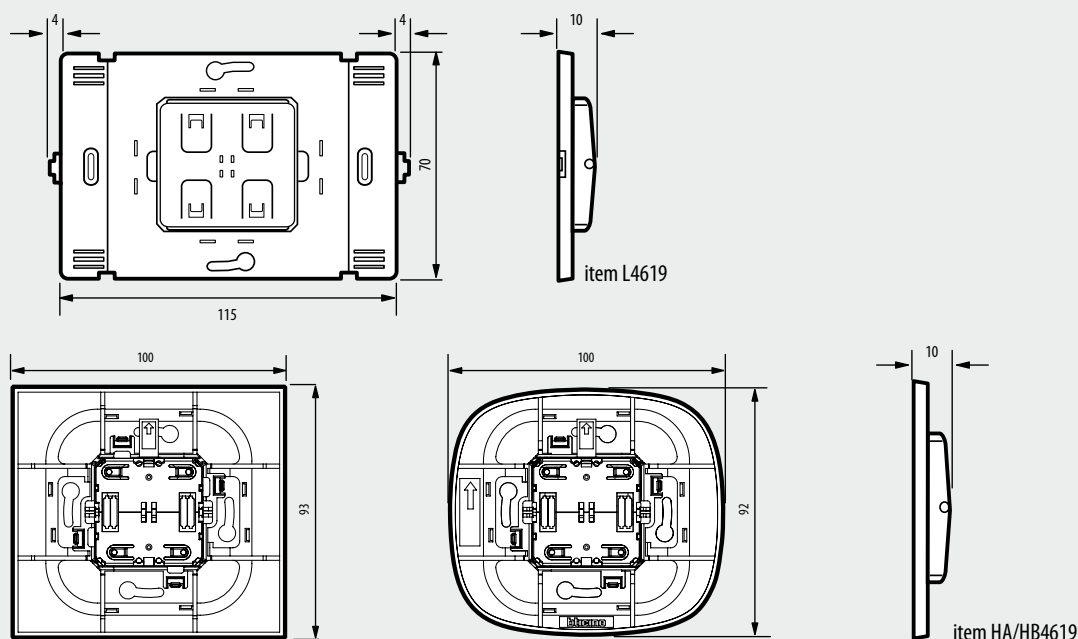
Year of approval of the CE mark in accordance with the above directive: 2007



## Legend

- 1 - Reset key;
- 2 - LED: If the TEST or RESET pushbutton is press for 1 second, the LED will normally flash twice; if the battery is exhausted the LED will only flash once;
- 3 - Flooding probe;
- 4 - TEST pushbutton.

## Dimensional data



## Configuration

The device requires allocation of the zone it belongs to, the progressive number of the sensors within the same zone, and the setting of the detection mode, as well as the possible allocation of an auxiliary prealarm channel.

**WARNING:** The configuration operations must be performed with the battery disconnected

### Z

This configurator assigns the number of the appropriate zone to the detector.

Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones. Configurator 9 assigns the device to the group of auxiliary devices.

### N

This configurator assigns the progressive number of the detector inside the appropriate zone.

Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

Note: to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

### MOD

Do not configure.

### AUX

The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

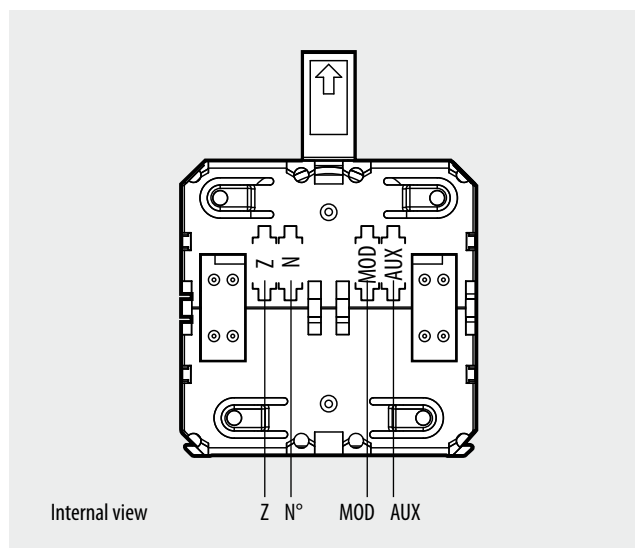
Note: to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

## Pairing remote controls

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the RESET key for 5 seconds.
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.  
If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Perform self learning of the system from the central unit.
7. Program the remote controls on the central unit.
8. Exit "maintenance" mode.

## Cancelling remote controls

1. Switch the system to maintenance mode.
2. Remove the power supply from the receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.



Internal view

Z N° MOD AUX



# BUS cable

L4669S

## Description

The red SCS-BUS cable has been purposely designed and produced for the installation of burglar-alarm systems. This cable is used for the distribution of the power supplies and the operating signals to all system devices.

The cable consists of a red external sheath and two twisted flexible conductors, with a section of 0.35 mm<sup>2</sup>, one yellow and one red.

The cable has 300/500 V insulation. Using the clear clamp protections included in all the devices, the systems can also be installed in the same boxes and conduits as the power lines (110 Vac, 127 Vac and 230 Vac).

### WARNING

Although the construction of the cable ensures 300/500 V category electric insulation, correct system operation is not guaranteed in the following cases, when installed together with the power cables:

- in industrial environments;
- in residential/service sector environments, when the power cables provide power supply to one of the following:
  - lifts
  - inverter
  - pumps
  - motors and controlled motors
  - metal iodine lamps.

The SCS-BUS cable is not suitable for underground installation.

## Technical data

- Insulation voltage: 300/500 V
- Can be buried: NO;
- Reference standards: it complies with the tests required by the following regulations:  
EN60811, EN50289, EN50290, EN60228, 50265-2-1,  
EN50395, EN50396 as described in the document  
IMQ CPT 062;
- External sheath colour: red;
- External sheath diameter: 5.5 +/- 0.1 mm;
- External sheath thickness: 0.8 mm;
- External sheath material: PVC (RZ);
- Number of internal conductors: 2 unshielded twisted flexible conductors with sheath;
- Colour of internal conductors: white and blue;
- Sheath thickness of internal conductors: 0.60 mm;
- Sheath diameter of internal conductors: PVC (R2);
- Conductor materials: red electrolytic copper;
- Conductor section: 0.35 mmq (12 x 0.20 mmq);
- Operating temperature: 15 - 70°C;
- Maximum short circuit temperature: 150°C;
- Coil length: 100 m.



# Passive IR detector

N4640-N4640B

## Description

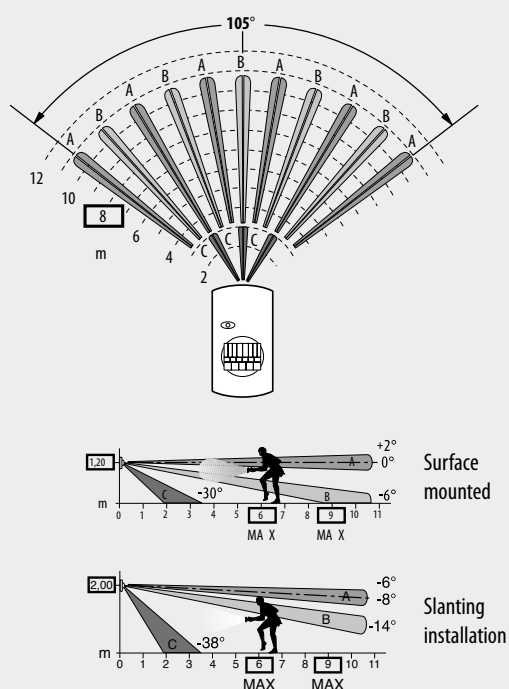
The passive IR detector is of volumetric type and sensible to movement of warm bodies. The volume of the protected zone is divided into 14 beams distributed on 3 levels. The detector works in two different ways: instantaneous or with impulse calculation, in order to reduce the possibility of false alarms.

It's available in the version with reduced sizes and is suitable for wall mounted installation in systems preset or not preset for traditional sensors. For the sensor item N4640 the covering range can be adjusted on three levels (3, 6, or 9 metres), while the sensor item N4640B has a fixed sensitivity level (6 metres).

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 4.5 mA
- Operating temperature: 5 – 40°C

## Covering range

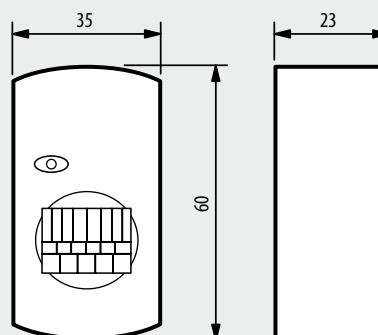


Front view

## Legend

- 1 - Alarm warning LED;
- 2 - Fresnel lens.

## Dimensional data



### Configuration N4640

Infrared ray detectors require assignment of the appropriate zones and the progressive number of the sensors in the zone, setting of the detection mode and possibly assignment of an auxiliary prealarm channel.

#### Z

This configurator assigns the number of the appropriate zone to the detector.

Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

#### N°

This configurator assigns the progressive number of the detector inside the appropriate zone.

Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

#### MOD

This configurator sets the sensor detection mode.

It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1 <sup>st</sup> level of sensitivity (1 high sensitivity impulse)
1	1 <sup>st</sup> level of sensitivity (2 high sensitivity impulses)
2	2 <sup>nd</sup> level of sensitivity (1 medium sensitivity impulse)
3	3 <sup>rd</sup> level of sensitivity (1 low sensitivity impulse)
4	1 <sup>st</sup> level of sensitivity (1 high sensitivity impulse), but with delay.
5	1 <sup>st</sup> level of sensitivity (2 high sensitivity impulses), but with delay.
6	2 <sup>nd</sup> level of sensitivity (1 medium sensitivity impulse), but with delay.
7	3 <sup>rd</sup> level of sensitivity (1 low sensitivity impulse), but with delay.
AUX	Auxiliary function activation. The device, in any system status (enabled or disabled), sends an auxiliary alarm to the channel specified in the AUX position. If the assigned zone is divided, the auxiliary command will be disabled.

High sensitivity = maximum coverage 9 metres

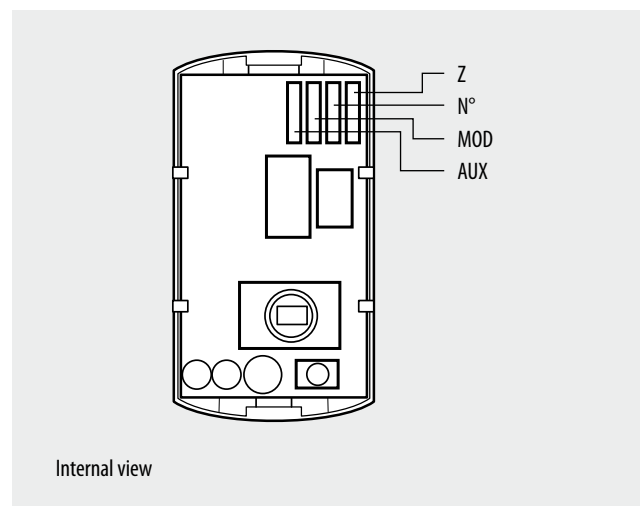
Medium sensitivity = maximum coverage 6 metres

Low sensitivity = maximum coverage 3 metres

#### AUX

If the AUX configurator has been connected to the MOD position, the 1 to 9 value of the configurator in this position activates the auxiliary function assigned to the 1 to 9 number of the auxiliary channel.

If no configurator, or one of the configurators from 1 to 7 is connected to the MOD position, the device only activates the auxiliary function when the system is disarmed.



**Configuration N4640****AUTOMATION mode – TIMED CONTROL:**

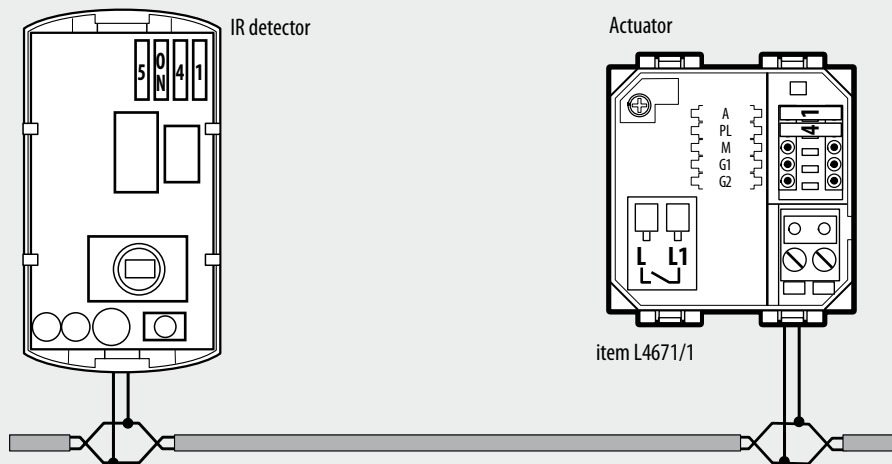
Passive IR detectors can generate and send an ON timed control directly to one or more actuators.

For this mode, configure in the Z and N positions of the detector the addresses A and PL of the actuator to control respectively.

To the MOD position connect the ON configurator to enable the time delay function.

The switching ON period is set by connecting numerical configurators 1 to 9 to the AUX position as shown in the following table:

AUX	1	2	3	4	5	6	7	8	9
Time	1 min.	2 min.	3 min.	4 min.	5 min.	15 min.	30 sec.	0.5 sec.	2 sec.

**Example of configuration****AUTOMATION mode – GENERIC CONTROL****USING AUXILIARY CHANNELS:**

In this case, the actuator is managed by a control device, item H/L4651M2 or AM5831M2, which, based on its own operating mode, set in its own M position, activates the actuator with address set in A and PL.

The communication between the detector and the associated control device item H/L4651M2 or AM5831M2 is established by defining an auxiliary channel that has been configured in the IR detector by connecting the AUX configurator to the MOD position, and specifying, with numeric configurators 1-9 in the AUX position, the number of the auxiliary channel. Obviously, in order to univocally establish the auxiliary channel, also the AUX position of the control must have the same configurator as the IR detector.

### Configuration item N4640B

This device is the model with preset sensor sensitivity level, item N4640 and **it only performs burglar-alarm** system functions as it does not manage auxiliary channels or **AUTOMATION** modes; it requires allocation of the zone it belongs to, the progressive number of the sensors within the zone, and the setting of the detection mode.

#### Z

This configurator assigns the number of the appropriate zone to the detector.

Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

#### N°

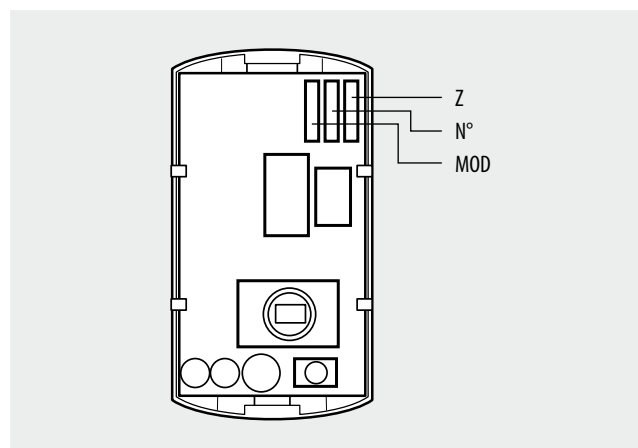
This configurator assigns the progressive number of the detector inside the appropriate zone.

Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

#### MOD

This configurator sets the sensor detection mode.

It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.



Configurator	Mode
0	1 pulse
1	pulse counter <sup>(1)</sup>
2	1 pulse with delay
3	pulse counter with delay

<sup>(1)</sup> The sensor generates an alarm signal based on the detection performed during a period of 30 seconds.



# Indoor siren

HC/HD/HS/N/NT4070

## Description

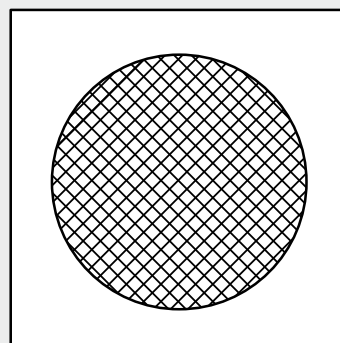
This siren is fitted with battery (item 3507/6); up to a maximum of 3 indoor sirens can be installed inside the protected area.

It can be installed in flush mounted boxes, item 506E. The indoor siren can be programmed for signalling intrusion alarms through a continuous sound (frequency 1880Hz) and/or auxiliary alarms through a modulated sound.

This siren is self-protected against opening and rip-off by means of a self-adjusting tampering device. Do not use batteries different from the ones indicated.

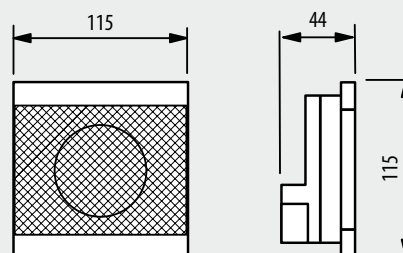
## Technical data

- Power supply from SCS BUS: 27 Vdc
- Self powering battery: item 3507/6
- Max. absorption: 8 mA
- Operating temperature: 5 – 40°C
- Level of the signal emitted: 105 dB(A) at 3 metres
- Frequency: 1880 Hz.



Front view

## Dimensional data



## Configuration

The indoor siren requires assignment of the progressive number and the operating mode. It gives an intermittent sound to signal the activation of any one of the auxiliary channels generated by an auxiliary channel interface in mode 0 and 4 (technical alarm).

### N°

This configurator assigns the progressive number in the internal siren unit.

No configurator or configurator 1 identifies the first siren, configurator 2 the second and configurator 3 the third.

### NOTE: Systems with external siren 4072A:

If the system has an external siren 4072A, it must be considered as siren No. 1; if there are two, they must be considered as No. 1 and No. 2.

The internal sirens will be counted in sequence. There must be a maximum of 3 sirens (internal and external).

### MOD

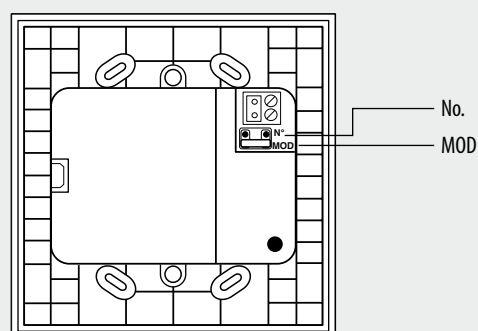
This configurator assigns the signalling mode based on the type of alarm received.

**No configurator:** anti-intrusion alarm and technical alarm enabled.

**Configurator 1:** anti-intrusion alarm enabled and technical alarm disabled.

**Configurator 2:** anti-intrusion alarm disabled and technical alarm enabled.

**Configurator 4:** anti-intrusion alarm and technical alarm enabled. System ON/OFF sound signal.



Rear view

**Configurator 5:** anti-intrusion alarm enabled and technical alarm disabled. System ON/OFF sound signal.

**Configurator 6:** anti-intrusion alarm disabled and technical alarm enabled. System ON/OFF sound signal.



## 4-zone central unit

L/N/NT4600/4

### Description

The 4-zone central unit contains all system controlling functions and is contained in 3 modules only; in order to facilitate the comprehension of its functioning, it can ideally be divided into 3 separate sections: activation, dividing and system control.

### Activation section

This section carries out the activation function; visible are the IR receiver and 2 LEDs that report the system status as follows:

- green LED on, system disarmed;
- red LED on, system has detected an alarm;
- red LED flashing, the battery inside the external siren is down, not connected or defective.

### Dividing section

In this section, there are four pushbuttons and four LEDs for controlling those zones into which the system can be divided.

By pressing one of the pushbuttons, the corresponding zone is armed/disarmed.

Within four seconds after the last pressure, the separation made must be confirmed by transmitting an impulse by means of the remote control.

Should this not take place, then the previous condition is automatically restored.

Red LEDs on indicate that the zones are active, whereas red LEDs off show that they are disarmed.

No more than 3 zones at the same time can be excluded.

At least one zone must be enabled.

### System control section

In this section are visible LEDs and pushbuttons used for monitoring the central unit and the system.

The green LED “~” on shows that the system is powered. The red LED “24h” on shows that a tampering alarm (24H alarm) has been detected.

The red LED “Aux” on shows that an alarm has been detected from an auxiliary channels interface.

The red LEDs “24h” and “Aux” flashing alternatively show that the central unit is in maintenance condition and thus non active.

The yellow LED “Test” on shows that the system is in a test phase.

A yellow LED “Prog” on shows that the central unit is in the remote controls’ programming phase.

The pushbutton “S” and the microswitch “P” in combination with the remote control are used for selecting the different functions.

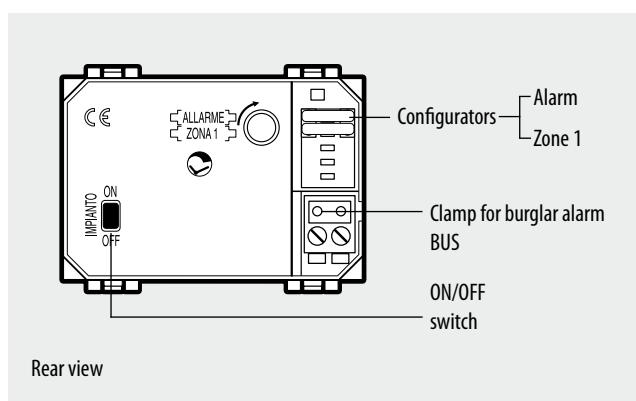
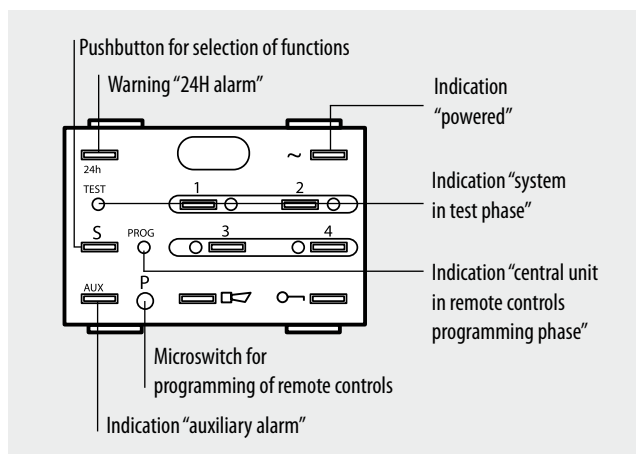
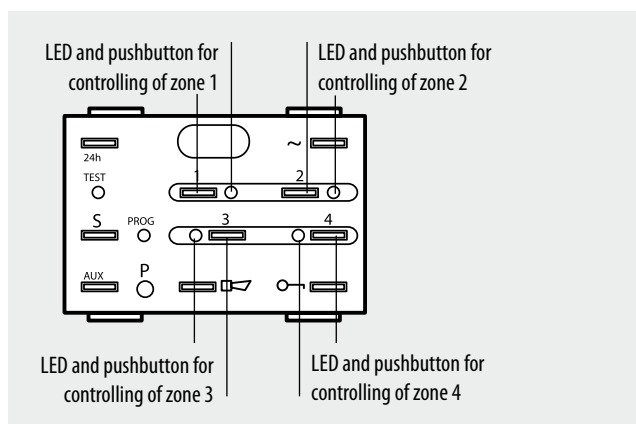
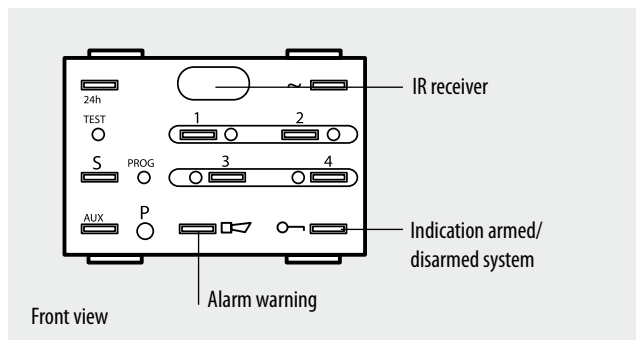
### Rear panel

On the back of the central unit are visible:

- connection clamps
- ON/OFF switch, that makes it possible to put the central unit in maintenance mode
- Configurator sockets for “ALARM” and “ZONE 1” times to adjust the alarm time and the delay of the last output/first input.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 25 mA
- Operating temperature: 5 – 40°C



### Dimensional data

Size: 3 modules

### Configuration

By means of configurators the system central unit can set the following timings.

#### ALARM

This configurator sets the length of the alarm time (siren sound).

To select the times use the configurators as shown in the table below:

Configurator No.	Alarm length
no configurator	0' (only a short pulse)
1	1'
2	2'
3	3'
4	4'
5	5'
6	1' 30"
7	2' 30"
8	3' 30"
9	10'

**NOTE:** To choose the alarm time check the local regulations.

#### Zone 1

This configurator sets the delay times for activating the "ZONE 1" sensors ("Last output/first input" delay).

To select the time use the configurators as shown in the table below:

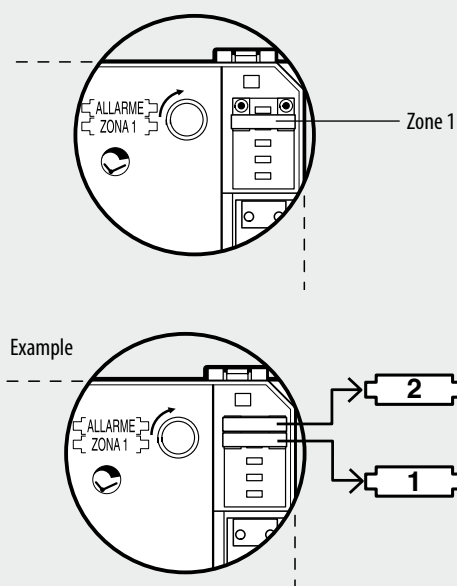
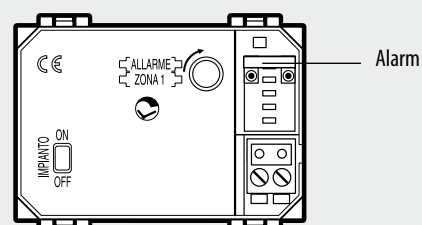
Configurator position	Output time	Input time
none	0" (instant)	0" (instant)
1	30"	7"
2	30"	15"
3	30"	30"
4	2'	2'

#### Example

Alarm time (siren sound) 2 minutes and last output/first input delay time 30" and 7" respectively.

Configurator position	Value
ALARM	2
ZONE 1	1

4-zone central unit





# IR divider for zones 1 – 4

HS/HC/HD/L/N/NT4603/4

## Description

The IR divider carries out the function of arming and disarming the system by means of the IR remote control and to activate or deactivate the 4 zones.

It allows repeating the functions of the main central unit in several places of the installation, in case of big houses.

It has the same functions described in the section "dividing" of the 4-zone central unit.

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 15 mA
- Operating temperature: 5 – 40°C

## Dimensional data

Size: 2 modules

## Configuration

The zones 1 to 4 divider is part of the group of activators, and therefore requires setting of the progressive number, as well as the possibility of programming the special functions.

### N°

This configurator assigns the progressive number to the activator within the group. Configurator 1 will identify the first device, configurator 2 will identify the second and so on to a maximum of 9 activators (expanders, dividers or activators).

### LED

This configurator sets the operating mode of the luminous signals given by the LED. In fact, the signals can be concealed when, as an example, the device is installed in a bedroom and the light emitted by the LED is unwelcome.

No configurator – the LED will indicate the active zones by switching on permanently. Configurator 1 – the LED will only light up when any one of the pushbuttons is pressed for 4 seconds.

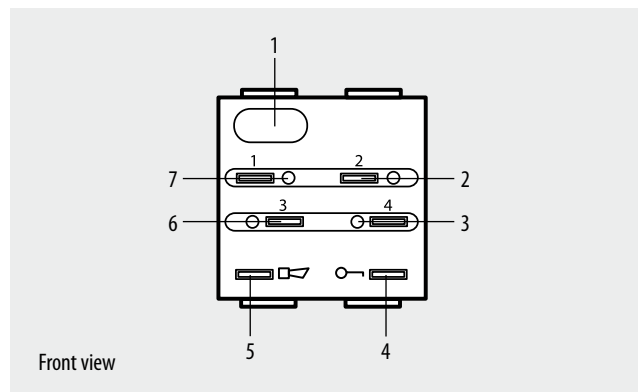
For more information concerning the indications given by the LED in the various modes of operation consult the "Instructions for use" manual.

### BEEP

This configurator enables or disables the audible signal the device gives when it receives a signal from a remote control.

No configurator – the signalling is enabled.

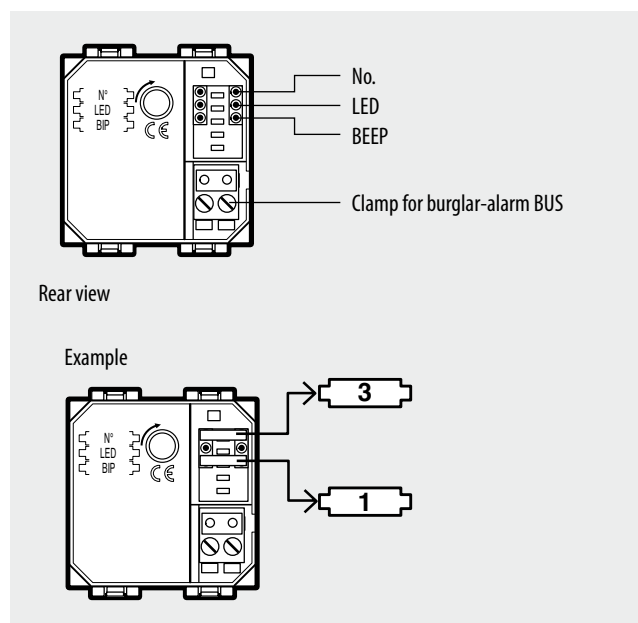
Configurator 1 – the signalling is disabled.



Front view

## Legend

- 1 - IR receiver zone;
- 2 - LED and pushbutton for controlling of zone 2;
- 3 - LED and pushbutton for controlling of zone 4;
- 4 - Indication "System ON/OFF";
- 5 - Alarm warning;
- 6 - LED and pushbutton for controlling of zone 3;
- 7 - LED and pushbutton for controlling of zone 1.



Rear view

Example

## Example

Configuration of zones 1 to 4 divider.

Third connecting key device with optical signal permanently enabled and audible signal disabled.

Configurator position	Value
N°	3
LED	none
BEEP	1



## Expander 5 – 8 zones

HS/HC/HD/L/N/NT4603/8-AM5783/8

### Description

This device can be used with the 4 zone central unit item L/N/NT 4600/4. or with advanced central units items 3485 and 3486, to ensure a total coverage of the system with 8 separable zones. It performs the same functions of the dividing section of the "4-zone central unit", item L/N/NT4600/4. By pressing one of the pushbuttons, the corresponding zone is armed/disarmed. Within four seconds from the last pressure, the separation performed must be confirmed by moving a transponder or a remote control saved in the central unit to a zone 1-4 separator. Should this not take place, then the previous condition is automatically restored. Red LEDs on indicate that the zones are active, whereas red LEDs off show that they are disarmed.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 10 mA
- Operating temperature: 5 – 40°C

### Dimensional data

Size: 2 modules

### Configuration

The zones 5 to 8 expander is part of the group of activators and therefore requires setting of the progressive number with the possibility of programming the special functions.

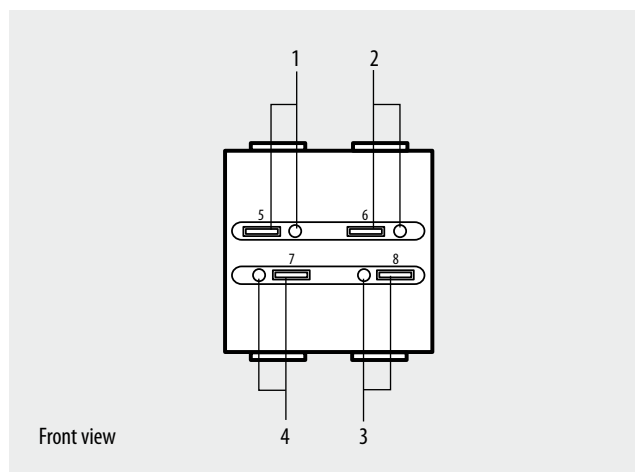
#### N°

This configurator assigns the progressive number within the group of activators. Configurator 1 will identify the first device, configurator 2 will identify the second and so on to a maximum of 9 connecting key devices (expanders, dividers or activators).

#### LED

This configurator sets the operating mode of the luminous signals given by the LED. In fact, the signals can be concealed when, as an example, the device is installed in a bedroom and the light emitted by the LED is unwelcome.

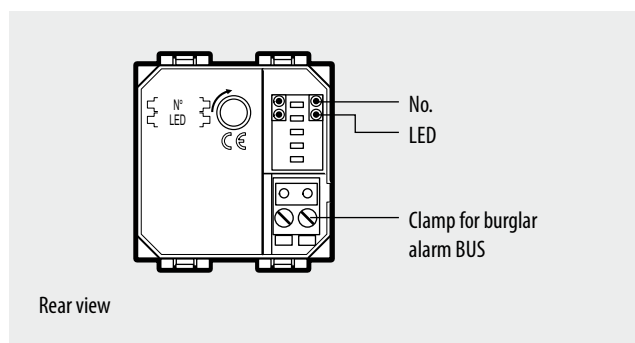
No configurator – the LED will indicate the active zones by switching on permanently.  
Configurator 1 – the LED will only light up when any one of the pushbuttons is pressed for 4 seconds.



Front view

### Legend

- 1 - LED and pushbutton for controlling of zone 5;
- 2 - LED and pushbutton for controlling of zone 6;
- 3 - LED and pushbutton for controlling of zone 8;
- 4 - LED and pushbutton for controlling of zone 7.



Rear view



# IR activator

HS/HC/HD/L/N/NT4604

## Description

The activator performs the function of arming and disarming the system by means of the remote control and offers the same possibilities described for the connecting section of the 4-zone central unit.

The luminous indications given by the LEDs on the front part and the audible signal given on each system state change can be disabled. It can be enabled for the fixed division of zones pre-set in the configuration stage.

The activator, configured as auxiliary device (configurator 1-9 in the AUX socket) works in an alternative way to the burglar-alarm system, and therefore does not arm/disarm the system.

In this mode, using the remote control, it activates the corresponding auxiliary control, enabling to obtain actuations that are typical of access control systems.

## Technical data

Power supply from SCS BUS: 27 Vdc

Max. absorption: 8 mA

Operating temperature: 5 – 40°C

## Dimensional data

Size: 2 modules

## Configuration

The activator must be allocated a progressive number. It can also program the special functions.

### N°

This configurator assigns the progressive number to the activator within the group.

Configurator 1 will identify the first device, configurator 2 will identify the second and so on to a maximum of 9 activator devices (activators, dividers or expanders).

### MOD

This configurator sets the operating mode of the signals given by the LED (1) and enables or disables the audible signal emitted by the activator when it receives a signal from a remote control.

Configurator value	BEEP enabling	LED ON
none	YES	YES
1	YES	NO
2	4"	YES
3	4"	NO

### P. N°

This configurator sets the activation of fixed system zones on the basis of the number assigned.

The divider selected is activated or deactivated by using the remote control to operate the activator.

In this way, for example, a system with many zones can be divided into "day zone" and "night zone" which can be automatically divided by means of the connecting key.

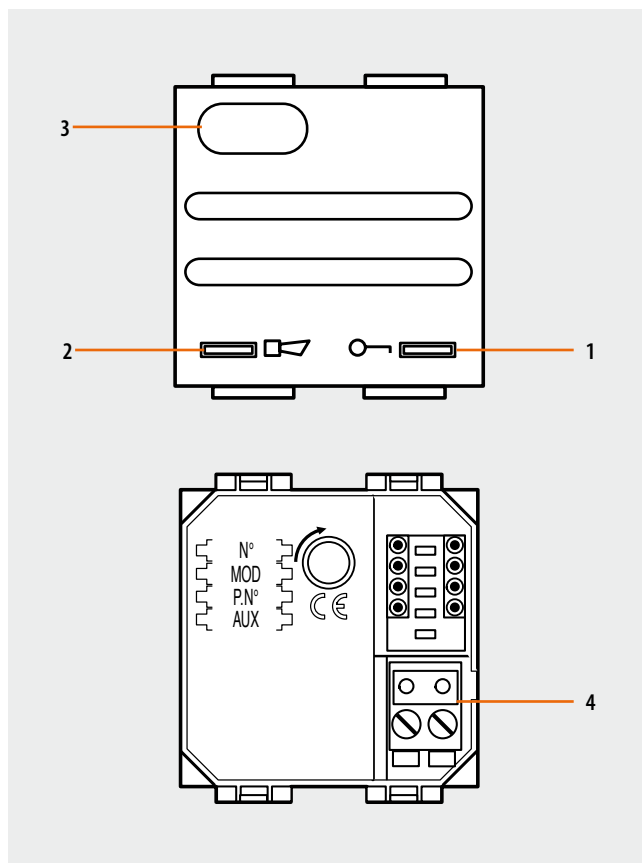
### Example

No configurator: system on/off.

Configurator 1: zone 1 active, remaining zones not active.

Configurator 6: zones 1 to 6 active, remaining zones not active.

When switched off by the remote control, the previous division is reset.



## Legend

1. LED indicating system status;
2. LED indicating the alarm system status;
3. IR receiver zone;
4. Clamp for burglar alarm BUS.

**AUX**

The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

**WARNING:** the AUX configurator, and in alternative the P.N° configurator, which assigns instead a burglar-alarm function

**Note:** to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

**Example**

Example: configuration of an activator.

Third activator device with optical signalling enabled and audible signalling disabled, with assignment, by the remote control, of fixed active zones (from 1 to 5 = day zone) of the system and separation of the remaining zones (from 6 to 8 = night zone).

Configurator position	Value
N°	3
MOD	1
P.N°	5
AUX	none

**Example**

Example of activator with auxiliary configuration; third activator device with optic signalling enabled and audible signal disabled, with allocation, both with the system armed and disarmed, of auxiliary channel no. 4 (for example the opening of an electrical door lock).

Configurator position	Value
N°	3
MOD	1
P.N°	none
AUX	4



# Keylock disconnecter

HS/HC/HD/L/N/NT4605-AM5785

## Description

This module makes it possible to disarm and block in the current state the burglar-alarm system. It can be used in emergency situations, if the remote controls are lost.

The mechanical key is a safety key with 10,000 combinations and can be extracted from the lock both in position ON and OFF.

This device requires no configuration.

## Technical data

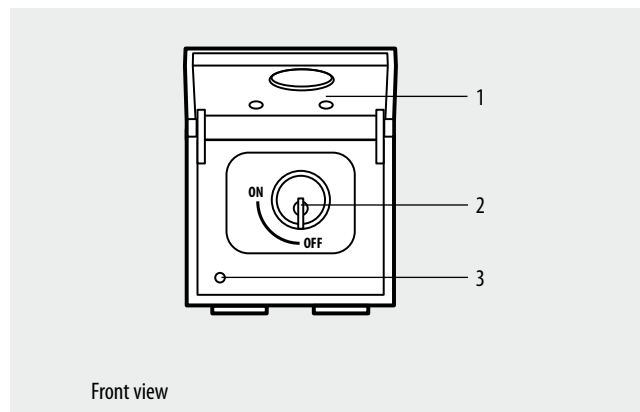
- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 5 mA
- Operating temperature: 5 – 40°C

## Dimensional data

Size: 2 modules

## Configuration

This device requires no configuration.



## Legend

- 1 - Lock closing lid;
- 2 - Lock for safety mechanical key;
- 3 - LED indicating blocked and disarmed system.



# Keypad activator

HC/HD/HS/L/N/NT4606-AM5786

## Description

This device arms or disarms the system by keying a secret code previously stored in burglar-alarm systems central units with display, or in three module flush mounted central units. By pressing two pushbuttons ('o' and 'P') and entering the secret code, the system can be disarmed, while at the same time sending a silent alarm (robbery function).

## Indications supplied by the LED and the Buzzer (sound signalling device)

Event	Green LED	Red LED	Buzzer
Keying-in	Flashing	-	Active
Code entering	-	-	Active
System armed	OFF	OFF	-
System disarmed	ON	OFF	-
Wrong code entered	Flashing (5s)	ON	-
Intrusion alarm	OFF	ON	-
24 hour alarm	ON/OFF	ON	-

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 5.5 mA
- Operating temperature: 5 – 40°C

## Dimensional data

Size: 2 modules

## Configuration

**Z**  
This configurator assigns the number of the appropriate zone (from 1 to 8) in the "group" of devices (any free zone in the system).

To configure it as belonging to the activator group, no configurator must be connected. Configurator 9 assigns the device to the "group" of auxiliary devices (Aux channel interface or Relay actuator).

## N°

This configurator assigns the progressive number to the activator within the group. Configurator 1 identifies the first device, configurator 2 identifies the second, and so forth, up to a maximum of 9 activators (dividers, expanders or activators).

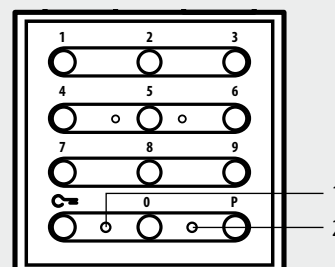
## MOD

The configurator of this location specifies the type of control unit installed in the system.

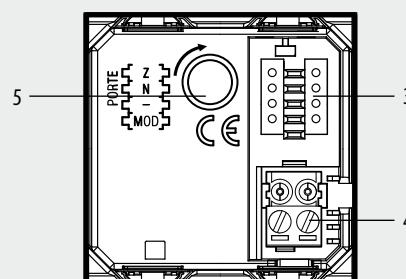
Central unit used	Configurator value
3486 - 3485/B HC/HD/HS/L/N/NT4601	0
L/N/NT4600/4	1

**NOTE:** When used with central units with display, the secret code is the one saved in the central units themselves (maximum 25 or 50 codes depending on the type of central unit). If used with the flush mounted central unit, item L/N/NT4600/4, the code must be programmed in the central unit itself. In this case, up to 29 codes must be saved.

Front view



Rear view



## Legend

- 1 - Red LED: alarm status;
- 2 - Green LED: system status  
OFF: ON, ON: OFF;
- 3 - Configurator socket;
- 4 - BUS;
- 5 - Anti-tamper device socket.

## Configuration for use with central unit item L/N/NT4600/4

In order for the keypad to operate as activator of the system with three-module central unit, it will be necessary to first program the code in the central unit itself following the procedure below:

1. Place the central unit in maintenance mode by moving the back slide switch to the OFF position;
2. Press P and check that the yellow LED comes on (PROG);
3. Program the remote controls first (see chapter STARTING AND TESTING);
4. Enter 'o' + the desired 5 digit code;
5. Ensure that a long beep is emitted by the keypad, and that the central unit responds with a short beep;
6. To memorize further codes, or several keypads with different codes, repeat 4 and 5;
7. Once the last code has been set, press S on the central unit (the yellow PROG LED goes off) and move the central unit slide switch back to the ON position;
8. Send a pulse signal using the IR remote control;
9. Perform some arming/disarming tests.

## Disabling the keypad BUZZER when keys are pressed

Irrespective of the type of central unit installed, the keypad sound can be enabled/disabled. To do this press key 1 for 5 seconds, until the activator beeps and flashes quickly twice.

To switch the sound back on repeat the same procedure.



# 1-4 zone transponder divider

HS/HC/HD/L/N/NT4607/4-AM5787/4

## Description

This device is used to arm, disarm, and separate the zones of the system by placing a transponder badge (item 3530S and item 3540 previously stored in the central unit) in front of the zone transponder badge receiver.

When used in an automation system it performs the control function for the management of scenarios.

By pressing one of the pushbuttons, the corresponding zone is armed/disarmed.

Within four seconds from the last pressure, the separation performed must be confirmed by moving a transponder saved in the central unit close to the device.

Should this not take place, then the previous condition is automatically restored. Red LEDs on indicate that the zones are active, whereas red LEDs off show that they are disarmed.

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 15 mA
- Operating temperature: 5 – 40°C

## Dimensional data

Size: 2 modules

## Configuration

### BURGLAR-ALARM mode:

Since this item belongs to the activator group, it needs to be set up with the number of the "group" assigned and the progressive number of the devices in the "group". It can also be programmed to perform Automation functions (scenario management).

See Automation "MY HOME" guide for details.

### Z

This configurator assigns the number of the appropriate zone (from 1 to 8) in the "group" of devices (any free zone in the system). To configure it as belonging to the activator group, no configurator must be inserted.

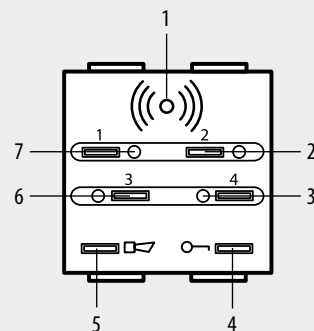
### N°

This configurator assigns the progressive number within the group of activators. Configurator 1 identifies the first device, configurator 2 identifies the second, and so forth, up to a maximum of 9 activators (dividers, expanders or activators).

**NOTE:** If all 9 permitted devices have already been assigned to the activator group, it could be possible to assign to configurator Z (zone it belongs to) a value between 1 and 9, taking into account the progressive number.

### MOD

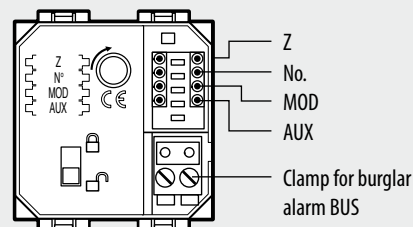
It assigns the modes of the audible signals (BEEP) and luminous signals (LED ON) provided by the divider when controlled by the transponder; it is used as a activators/disconnector of the "Burglar-alarm" system.



Front view

## Legend

- 1 - Transponder badge receiver zone;
- 2 - LED and pushbutton for controlling of zone 2;
- 3 - LED and pushbutton for controlling of zone 4;
- 4 - Indication "System ON/OFF";
- 5 - Alarm warning;
- 6 - LED and pushbutton for controlling of zone 3;
- 7 - LED and pushbutton for controlling of zone 1.



Rear view

Central unit used	Configurator value	LED ON	Enabling BEEP
3486 3485/B HD/HC/HS/L/N/ NT4601	none	YES	YES
	1	NO	YES
	2	YES	NO
	3	NO	NO
L/N/NT4600/1 A/AM5780/1	4	YES	YES
	5	NO	YES
	6	YES	NO
	7	NO	NO

### AUX

Position not configurable for the "Burglar-alarm" function; configure only if it is necessary to enable the device for Automation functions (management of the scenarios stored in the unit or scenario module).

## HS/HC/HD/L/N/NT4607/4-AM5787/4

**Configuration****AUTOMATION mode – SCENARIO MANAGEMENT:****Z**

This configurator with value 0-9 coincides with the A position of the scenario module.

**N°**

This configurator with value 1-9 coincides with the PL position of the scenario module.

**MOD**

Assigns the operating mode. Connect configurator 9.

**AUX**

It assigns one of the scenarios programmed on the scenario module to the four pushbuttons (SCE = 1-9) as per the table.

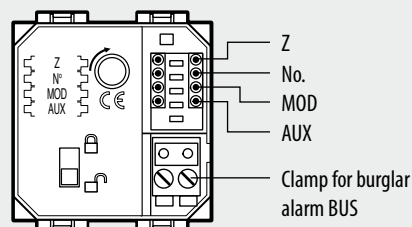
Pushbutton no.	Associated scenario no.
pushbutton 1	SCE
pushbutton 2	SCE + 1
pushbutton 3	SCE + 2
pushbutton 4	SCE + 3

**Example**

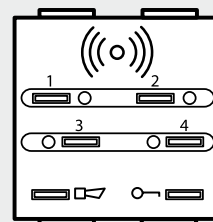
If configurator 3 is connected to AUX, use pushbutton 1 to recall scenario no. 3, pushbutton 2 to recall scenario no. 4, pushbutton 3 to recall scenario no. 5, and pushbutton 4 to recall scenario no. 6

**Pairing transponders**

1. Move the “programming block” switch to the open padlock and then:
2. Press pushbuttons 1 and 4 at the same time for more than 5 seconds until the alarm LED status comes on for 0.5 second and an audible signal is heard.
3. Release pushbuttons 1 and 4.
4. Move the transponder being programmed close to the device:
  - if the transponder has been correctly saved the alarm status LED will slowly flash twice and an audible signal will be heard. Go to step 6.
  - if the code is already in the memory there will be 2 audible signals and the led will flash quickly twice.
  - if the memory is full there will be 5 audible signals and the LED will flash quickly 5 times.
5. To store other transponders repeat the procedure in step 4, otherwise go to step 6.
6. Move the “programming block” switch back on the closed padlock to exit programming. Otherwise the device will exit programming mode after 1 minute of inactivity.

**Erasing the memory**

1. Move the “programming block” to the open padlock.
2. Press pushbuttons 1 and 4 at the same time for more than 10 seconds and check that the LED flashes slowly 4 times, and that there is an audible signal.
3. Release pushbuttons 1 and 4.
4. The transponder zones activator will remain in programming mode, ready for a new programming sequence.
5. Move the switch back to the closed padlock position to exit the erasing procedure.





# Transponder reader

HC/HD/HS/L/N/NT4607-AM5787

## Description

The transponder reader is a device which activates when the Transponder badge is in its immediate vicinity (1-2 cm). The signal generated by the approach of the badge is then transferred to the bus (BUS cable item L4669S). The transponder reader is fitted in the wire burglar-alarm system and works like a traditional activator; it is thus connected to the BUS cable like any other burglar-alarm device.

The transponder does not need a power supply battery. When compared with the traditional remote control, the "transponder reader/transponder system offers better safety due to the code encryption system. Also, the possibility of saving up to 50 badges (depending on the central unit used) offers better flexibility in the management of the system, particularly in those environments (companies, offices, shops), where the number of people enabled to use the system is high and changes regularly.

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 12 mA
- Operating temperature: 5 – 40°C

## Dimensional data

Size: 2 modules

## Configuration

### BURGLAR-ALARM mode:

The transponder reader used as burglar-alarm system activator/disconnector must be assigned to the group of activator; it thus requests the assignment of the "group" number attributed (see below) and the progressive number of the devices in the "group".

### Z

This configurator assigns the number of the appropriate zone in the "group" of devices (any free zone in the system). To configure it as belonging to the group of activators, no configurator must be inserted.

- Configurators 1, 8 instead would assign the transponder reader to the sensor (IR detectors or contact interface) "group" while configurator 9 would assign it to the "group" of auxiliary devices (auxiliary channel interface or relay actuator).

### N°

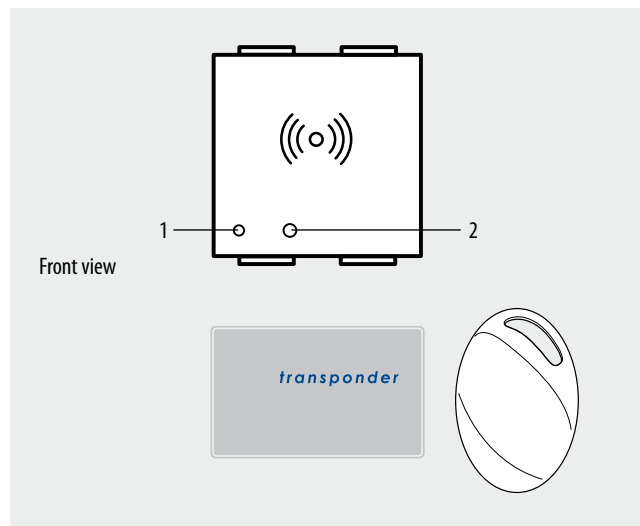
This configurator assigns the progressive number of the transponder reader inside the zone attributed. Configurator 1 identifies the first reader-transponder, configurator 2 the second and so on until a maximum of 9 receiver devices for each of the zones.

### MOD

Assigns the operating mode. It assigns the operating mode. In order for it to operate as activator, use configurator **1** with flush mounted central units item 4600/4, and configurator **0** for other central units.

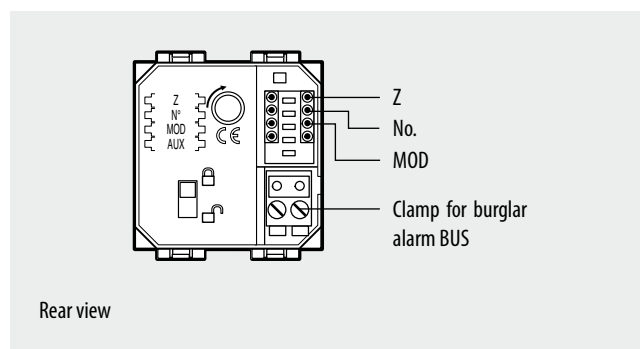
The transponder is saved in the burglar-alarm central unit. The maximum number that can be managed is:

- 29 with flush mounted central unit, item L/N/NT4600/4.
- 50 with central unit with display, item 3486 or 3485.
- 20 with central unit with display, item 3485B or HC/HD/HS/L/N/NT4601.



## Legend

- 1 - Three-colour LED for operation indications;
- 2 - Reset pushbutton (NOT ACTIVE).



**NOTE:** when all the 9 devices allowed have already been inserted in the group of activators, a value between 1 and 9 could be assigned to configurator Z (appropriate zone) taking account of the progressive No.

## HC/HD/HS/L/N/NT4607-AM5787

### Configuration

**Night function:** when the system is disconnected, it is possible to activate the zones up to the numeric value of the configurator in AUX position. This function can be enabled with configurator 7 in MOD position if central units with a display are used or with configurator 8 if flush mounted central units item L/N/NT4600/4 are used.

**Example: MOD = 7, AUX = 3**

In this case, when the burglar-alarm with the central unit and communicator are activated, only the first three zones will be enabled.

### AUX

This configurator activates the activator auxiliary modes of operation, assigning an auxiliary channel.

To use the activator as auxiliary device, refer to the My Home application guide.

### Example

configured in this way the transponder reader works as 4th device of the activator group.

Configurator position	Value
Z	none
N	4
MOD	1
AUX	none

### Use with central unit item L/N/NT4600/4

The transponder (badge) programming operation is necessary in order for it to work as a normal infrared remote control, item 4050.

The initial programming - which is carried out when installing the Transponder reader - shall be carried out with the central unit in MAINTENANCE mode (selector switch located on the back in OFF position).

Proceed as indicated below:

- 1) With central unit in maintenance mode, press the P key and check if the yellow LED PROG lights up;

### AUTOMATION mode – ON/OFF TIMED:

It can be used for the actuation of an ON/OFF control lasting 1 second.

### Z

This configurator coincides with A (room) of the automation system; (it assigns the homogeneous room where the actuation is performed – from 1 to 9 -).

### N°

It coincides with the PL of the automation system (it assigns the point where the actuation must be performed – from 1 to 9 -).

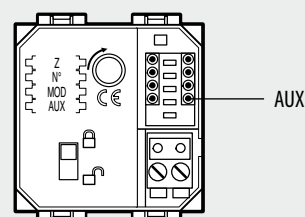
### MOD

Assigns the operating mode. For the automation functions connect configurator 2.

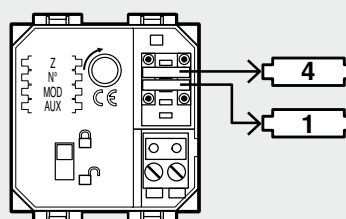
### AUX

No configurator.

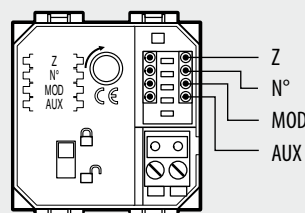
**Example:** If Z=3, N=2 and MOD=2 the device sends an ON/OFF control lasting 1 second (e.g. electrical door lock release) to an actuator with address A=3 and PL=2.



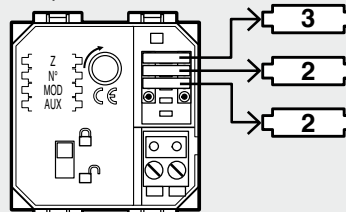
Example



- 2) Program the IR remote controls first;
- 3) Now, move the badges towards the transponder reader;
- 4) Make sure that two short tones are emitted: the first is emitted from the transponder reader, the second is emitted from the central unit;
- 5) Repeat points 3 and 4 for all available badges;
- 6) When you have finished programming the last badge, press the S pushbutton on the central unit (the yellow PROG LED turns off) and flip the back selector switch to ON.



Example



**Configuration**

**AUTOMATION mode – SCENARIO MANAGEMENT:**

**Z**  
It coincides with the room of the scenario module item F420 where the actuation is performed – from 0 to 9 – (reference socket A on the scenario module).

**N°**  
It coincides with the PL position (configurator from 1 to 9) of the scenario module.

**MOD**  
Assigns the operating mode. For the automation functions connect configurator **2**.

**AUX**  
It assigns the correspondence between the required scenario and the scenario module. The configurators that can be used are those between 1 and 9 and coincide with the corresponding scenario of the scenario module, item F420.

**AUTOMATION mode – TIMED CONTROL:**

It enables the actuation of an ON timed control

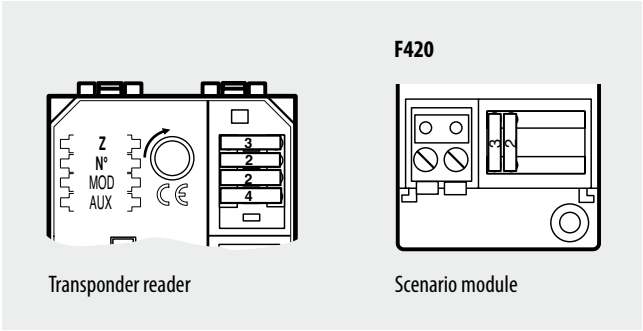
**Z**  
This configurator coincides with A (room) of the automation system (it assigns the homogeneous room where the actuation is performed – from 1 to 9).

**N°**  
It coincides with the PL of the automation system (it assigns the point where the actuation must be performed – from 1 to 9).

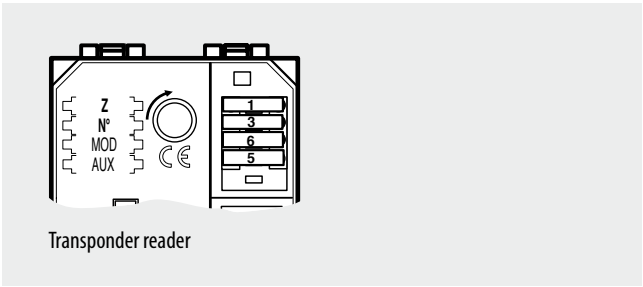
**MOD**  
It assigns the operating mode. To obtain an ON timed control connect configurator 6.

**AUX**  
It assigns the duration of the time delay based on the value of the configurator used, as shown in the following table.

Aux	Time
0	
1	1 min.
2	2 min.
3	3 min.
4	4 min.
5	5 min.
6	15 min.
7	30 sec.
8	0.5 sec.
9 (not used)	---



**Example:** configured in this way the control activates scenario no. 4 of the scenario module item F420 with address A=3, PL=2.



**Example:** configured in this way, the transponder reader sends to an actuator with address A = 1 and PL = 3 an ON control with a delay of 5 minutes (e.g. switching on a service light).

**SLAVE control**

It enables reproducing an enabled control on a “Master” transponder reader. The transponder keys used must only be saved in the “Master” device.

**Z**  
It coincides with the Z configurator of the master device.

**N°**  
It coincides with the N° configurator of the master device.

**MOD**  
Assigns the operating mode. To obtain SLAVE devices connect the SLA configurator.

**AUX**  
It coincides with the AUX configurator of the master device.

## HC/HD/HS/L/N/NT4607-AM5787

### Configuration

#### AUTOMATION mode – AUXILIARY CONTROL:

This mode can be obtained by connecting the AUX configurator to MOD. This will generate a 1 sec. ON/OFF control on the assigned auxiliary channel. The difference when compared with the auxiliary function generated with the reader connected to the burglar-alarm system (MOD=1) is that in this case the codes of the transponders are saved in the reader itself, with the possibility of managing 120 badges at the same time.

#### Z

It assigns the no. of the zone it belongs to, from 0 to 9.

#### N°

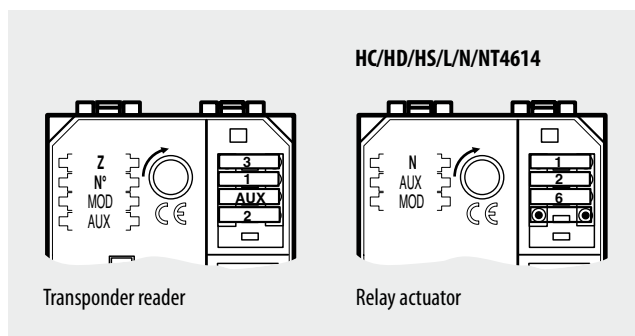
It assigns the progressive no. inside the zone.

#### MOD

It assigns the operating mode. For the auxiliary functions connect the AUX configurator.

#### AUX

It assigns the auxiliary channel.



**Example:** when configured in this way, as auxiliary device no. 1 (N=1) in zone 3 (Z=3), the control sends an ON/OFF command on auxiliary channel 2 (AUX=2) intended for the relay actuator item HC/HD/HS/L/N/NT4614 configured with AUX = 2.



# Display keypad

HC/HD/HS/L/N/NT4608

## Description

Using the transponder key, or a secret code set on the central unit, this device with display and digital keypad can be used to arm/disarm the system and separate the zones with the same flexibility and using the same procedure as for burglar-alarm central unit with display, or three module flush mounted central units.

In this way the central units can be installed in an appropriate equipment room, out of sight.

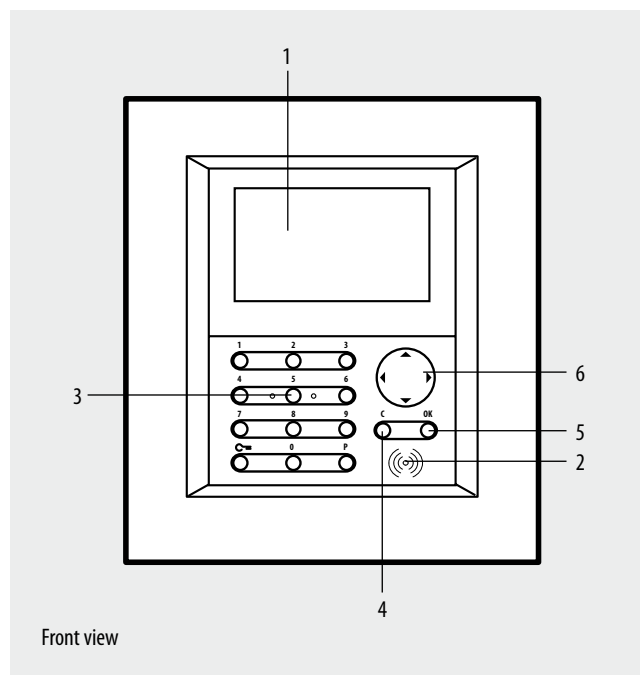
All system status details are shown of the large backlit display.

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 28 mA
- Operating temperature: 5 – 40°C

## Dimensional data

Size: 3+3 modules



## Legend

- 1 - Graphic display:** displays the messages which guide the programming operations and the events which have occurred.
- 2 - Transponder reader:** receives the burglar-alarm system switching on and off commands directly from the transponder keys.
- 3 - Alphanumeric keypad:** allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.
- 4 - C key:** exit the current menu and the programming.
- 5 - OK key:** to confirm the programming operations.
- 6 - Navigation keypad:** navigate the menu.

## Configuration

The activator with display must be configured by assigning a zone address (Z), indicating the activator group it belongs to, and a progressive number (N) within the group. To configure it as belonging to the activators group, no value must be entered in Z. The configuration is performed using a specific menu shown on the display, following the procedure below:

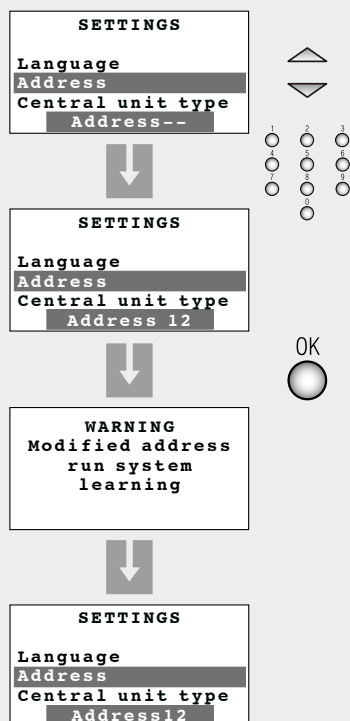
1. Ensure that the system is in "maintenance" mode.
2. Upon switching on the activator, the "SETTING" screen appears in Italian language.
3. Select "Address" (address).
4. Enter the Z and N address to assign to the activato and press OK to confirm.
5. Enter the other settings or return to the main page, and start the learning procedure on the central unit.

## Selecting the central unit installed in the system

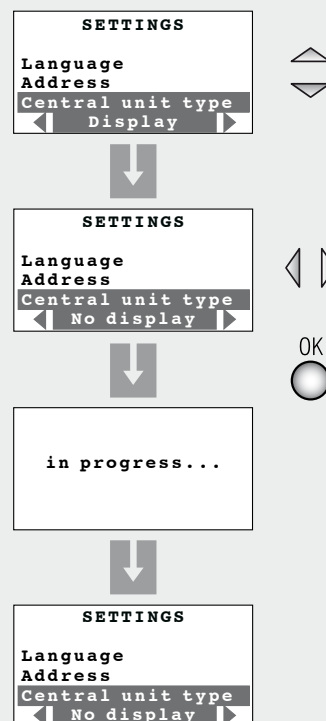
1. Select "type of central unit".
2. Select the type of burglar-alarm central unit installed:  
- "Display" for central unit item 3486, item 3485/B and item HC/HD/HS/L/N/NT4601 -  
- "No display" for central unit item L/N/NT4600/4 and AM5780/4.
3. Press OK to confirm.
4. Enter the other settings or return to the main page, and start the learning procedure on the central unit.

For further device customisation procedures refer to the information on the CD supplied with the product.

Address configuration menu



Address configuration menu





# Passive IR detector

HC/HD/HS/L/N/NT4610-AM5790

## Description

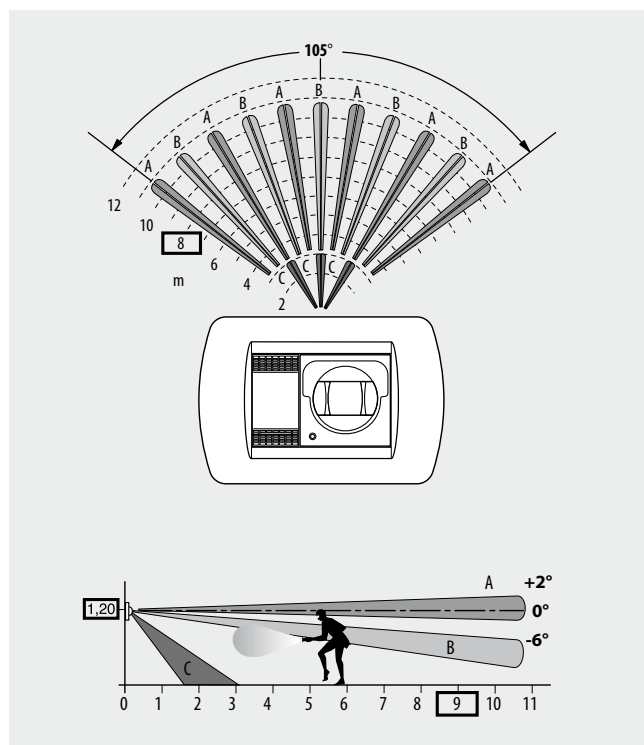
The passive infrared detector is a volumetric detector with fixed lens, sensitive to the movement of warm bodies. The volume of the protected zone is divided into 14 beams distributed on 3 levels. The detector works in two different ways: instantaneous or with impulse calculation, in order to reduce the possibility of false alarms.

It can also be used in the automation system for timed ON/OFF functions, or to activate auxiliary controls.

## Technical data

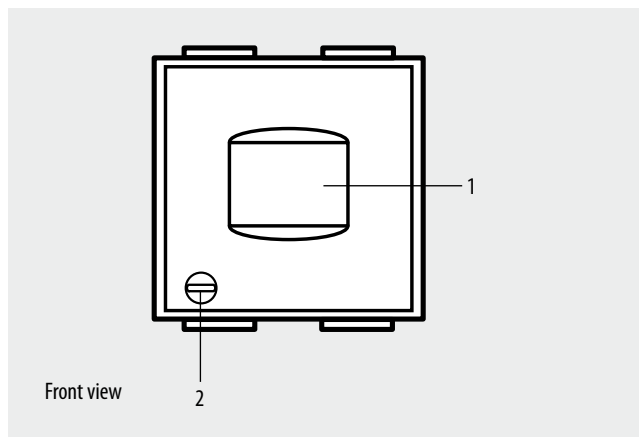
- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 4.5 mA
- Operating temperature: 5 – 40°C

## Covering range



## Dimensional data

Size: 2 modules



## Legend

- 1 - Fresnel lens;
- 2 - Alarm warning LED.

## HC/HD/HS/L/N/NT4610-AM5790

### Configuration

Infrared ray detectors require assignment of the appropriate zones and the progressive number of the sensors in the zone, setting of the detection mode and possibly assignment of an auxiliary channel.

#### Z

This configurator assigns the number of the appropriate zone to the detector. Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

#### N°

This configurator assigns the progressive number of the detector inside the appropriate zone.

Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

#### MOD

This configurator sets the sensor detection mode.

It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1 <sup>st</sup> level of sensitivity (1 high sensitivity impulse)
1	1 <sup>st</sup> level of sensitivity (2 high sensitivity impulses)
2	2 <sup>nd</sup> level of sensitivity (1 medium sensitivity impulse)
3	3 <sup>rd</sup> level of sensitivity (1 low sensitivity impulse)
4	1 <sup>st</sup> level of sensitivity (1 high sensitivity impulse), but with delay.
5	1 <sup>st</sup> level of sensitivity (2 high sensitivity impulses), but with delay.
6	2 <sup>nd</sup> level of sensitivity (1 medium sensitivity impulse), but with delay.
7	3 <sup>rd</sup> level of sensitivity (1 low sensitivity impulse), but with delay.
AUX	auxiliary function activation. The device, in any system status (enabled or disabled), sends an auxiliary alarm to the channel specified in the AUX position. If the assigned zone is divided, the auxiliary command will be disabled.

High sensitivity = maximum coverage 9 metres

Medium sensitivity = maximum coverage 6 metres

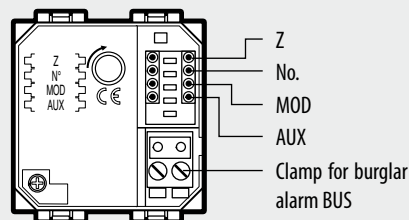
Low sensitivity = maximum coverage 3 metres

#### AUX

If the AUX configurator has been connected to the MOD position, the 1 to 9 value of the configurator in this position activates the auxiliary function assigned to the 1 to 9 number of the auxiliary channel.

If no configurator, or one of the 1 to 7 configurators, is connected to the MOD position, the device only activates the auxiliary function when the system is disarmed.

For further information and advanced functions contact Technical Support Centre.



Rear view

Configuration

AUTOMATION mode – TIMED CONTROL:

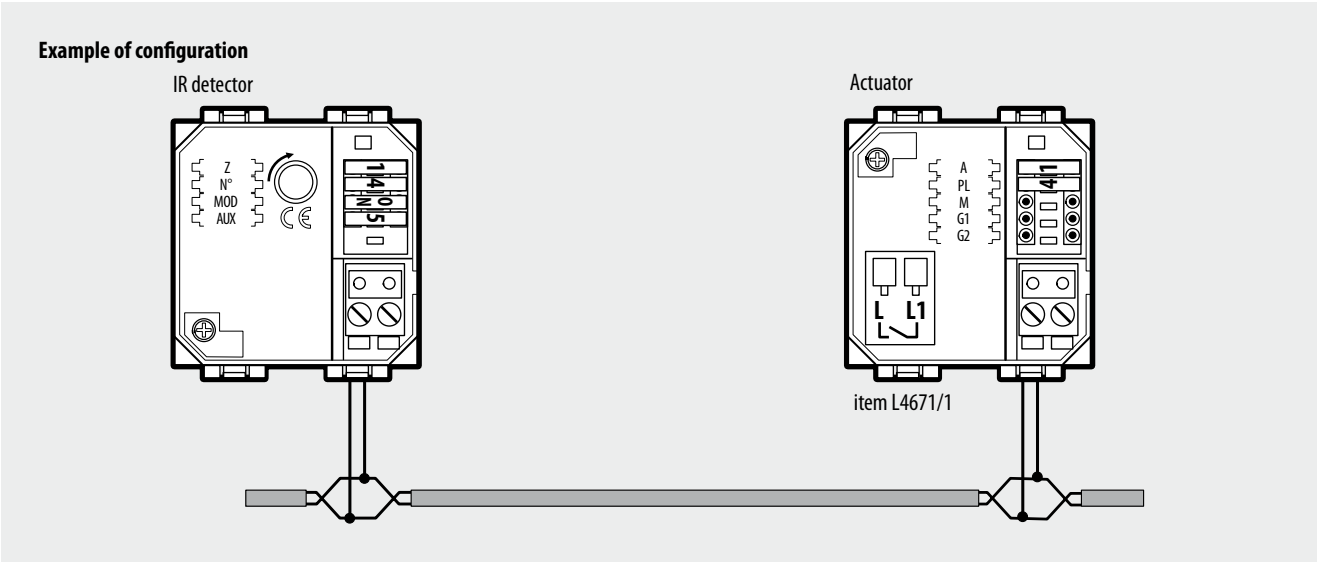
Passive IR detectors can generate and send an ON timed control directly to one or more actuators.

For this mode, configure in the Z and N positions of the detector the addresses A and PL of the actuator to control respectively.

To the MOD position connect the ON configurator to enable the time delay function.

The switching ON period is set by connecting numerical configurators 1 to 9 to the AUX position as shown in the following table:

AUX	1	2	3	4	5	6	7	8	9
Time	1 min.	2 min.	3 min.	4 min.	5 min.	15 min.	30 sec.	0.5 sec.	2 sec.



AUTOMATION mode – GENERIC CONTROL

USING AUXILIARY CHANNELS:

In this case, the actuator is managed by a control device, item H/L4651M2 or AM5831M2, which, based on its own operating mode, set in its own M position, activates the actuator with address set in A and PL.

The communication between the detector and the associated control device item H/L4651M2 or AM5831M2 is established by defining an auxiliary channel that has been configured in the IR detector by connecting the AUX configurator to the MOD position, and specifying, with numeric configurators 1-9 in the AUX position, the number of the auxiliary channel. Obviously, in order to univocally establish the auxiliary channel, also the AUX position of the control must have the same configurator as the IR detector.



# Passive IR detector

HC/HD/HS/L/N/NT4611-AM5791

## Description

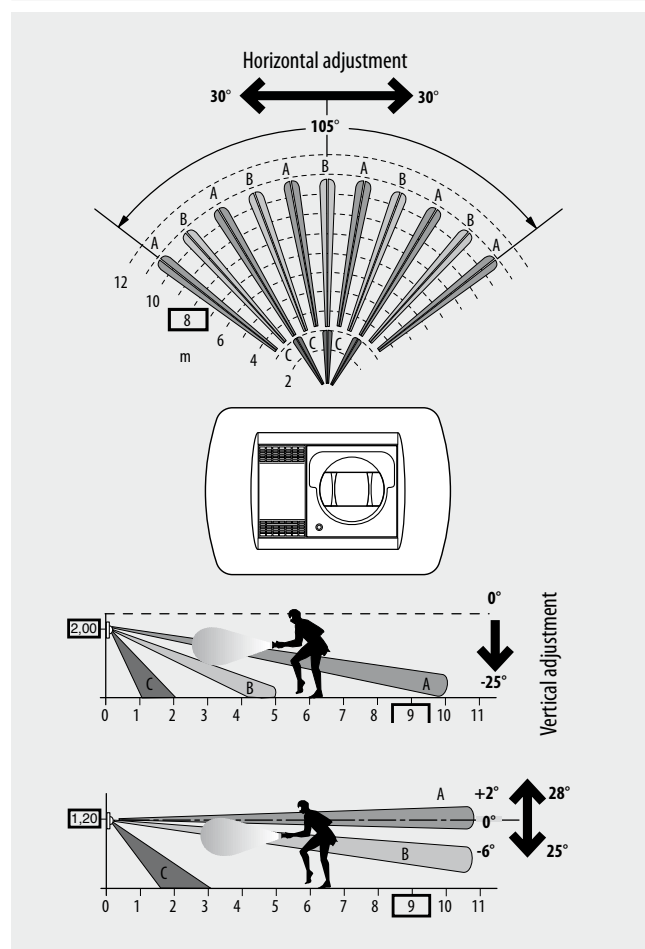
The passive infrared detector is a volumetric detector with tilting lens, sensitive to the movement of warm bodies. The volume of the protected zone is divided into 14 beams distributed on 3 levels. The detector works in two different ways: instantaneous or with impulse calculation, in order to reduce the possibility of false alarms. It is available for installation in the high sections of rooms, at heights between 1.2 and 2 metres. The position of the lens should then be adjusted based on the characteristics of the room to protect.

It is also possible to change the sensitivity threshold, and to generate auxiliary functions when the system is disarmed.

## Technical data

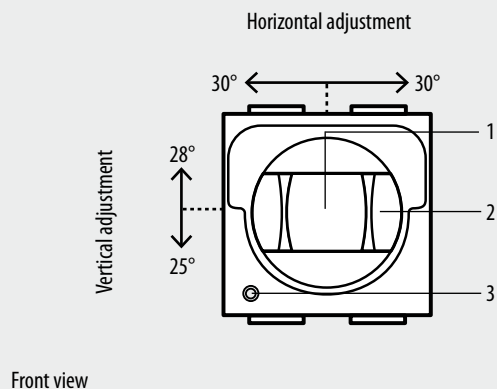
- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 4.5 mA
- Operating temperature: 5 – 40°C

## Covering range



## Dimensional data

Size: 2 modules



## Legend

- 1 - Fresnel lens;
- 2 - Covering reducing lid;
- 3 - Alarm warning LED.

Configuration

Infrared ray detectors require assignment of the appropriate zones and the progressive number of the sensors in the zone, setting of the detection mode and possibly assignment of an auxiliary prealarm channel.

Z

This configurator assigns the number of the appropriate zone to the detector. Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N°

This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD

This configurator sets the sensor detection mode. It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1 <sup>st</sup> level of sensitivity (1 high sensitivity impulse)
1	1 <sup>st</sup> level of sensitivity (2 high sensitivity impulses)
2	2 <sup>nd</sup> level of sensitivity (1 medium sensitivity impulse)
3	3 <sup>rd</sup> level of sensitivity (1 low sensitivity impulse)
4	1 <sup>st</sup> level of sensitivity (1 high sensitivity impulse), but with delay.
5	1 <sup>st</sup> level of sensitivity (2 high sensitivity impulses), but with delay.
6	2 <sup>nd</sup> level of sensitivity (1 medium sensitivity impulse), but with delay.
7	3 <sup>rd</sup> level of sensitivity (1 low sensitivity impulse), but with delay.
AUX	pre-alarm function activation. The device, in any system status (enabled or disabled), sends an auxiliary alarm to the channel specified in the AUX position. If the assigned zone is divided, the auxiliary command will be disabled

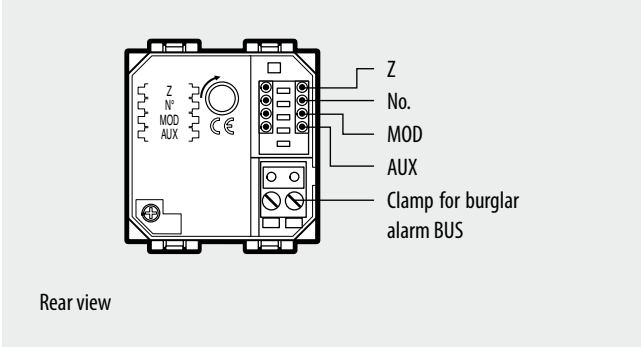
High sensitivity = maximum coverage 9 metres  
Medium sensitivity = maximum coverage 6 metres  
Low sensitivity = maximum coverage 3 metres

AUX

If the AUX configurator has been connected to the MOD position, the 1 to 9 value of the configurator in this position activates the auxiliary function assigned to the 1 to 9 number of the auxiliary channel.

If no configurator, or one of the 1 to 7 configurators, is connected to the MOD position, the device only activates the auxiliary function when the system is disarmed.

For further information and advanced functions contact Technical Support Centre.



Rear view

### Configuration

#### AUTOMATION mode – TIMED CONTROL:

Passive IR detectors can generate and send an ON timed control directly to one or more actuators.

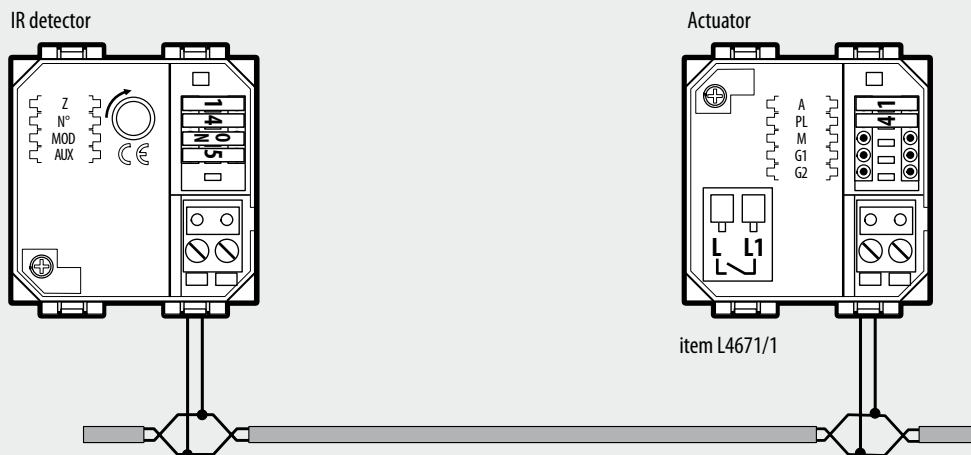
For this mode, configure in the Z and N positions of the detector the addresses A and PL of the actuator to control respectively.

To the MOD position connect the ON configurator to enable the time delay function.

The switching ON period is set by connecting numerical configurators 1 to 9 to the AUX position as shown in the following table:

AUX	1	2	3	4	5	6	7	8	9
Time	1 min.	2 min.	3 min.	4 min.	5 min.	15 min.	30 sec.	0.5 sec.	2 sec.

#### Example of configuration



#### AUTOMATION mode – GENERIC CONTROL

##### USING AUXILIARY CHANNELS:

In this case, the actuator is managed by a control device, item H/L4651M2 or AM5831M2, which, based on its own operating mode, set in its own M position, activates the actuator with address set in A and PL.

The communication between the detector and the associated control device item H/L4651M2 or AM5831M2 is established by defining an auxiliary channel that has been configured in the IR detector by connecting the AUX configurator to the MOD position, and specifying, with numeric configurators 1-9 in the AUX position, the number of the auxiliary channel. Obviously, in order to univocally establish the auxiliary channel, also the AUX position of the control must have the same configurator as the IR detector.



# Passive IR detector

L/N/NT4611B-AM5791B

## Description

These devices are the simplified version of sensors item L/N/NT4611 and item AM5791. They have a fixed level of sensitivity (6 metres).

Also in this case, the passive infrared detector is a volumetric detector with tilting lens, sensitive to the movement of warm bodies.

The volume of the protected zone is divided into 14 beams distributed on 3 levels.

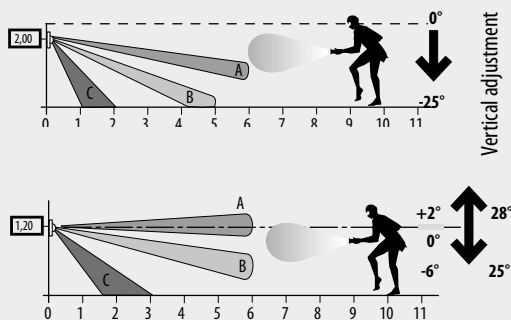
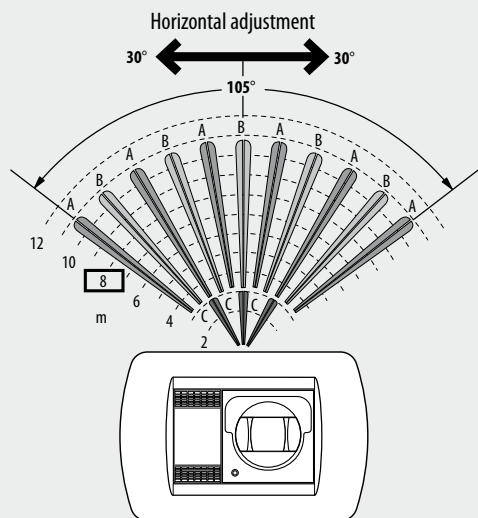
The detector works in two different ways: instantaneous or with impulse calculation, in order to reduce the possibility of false alarms. It is available for installation in the high sections of rooms, at heights between 1.2 and 2 metres.

The position of the lens should then be adjusted based on the characteristics of the room to protect.

## Technical data

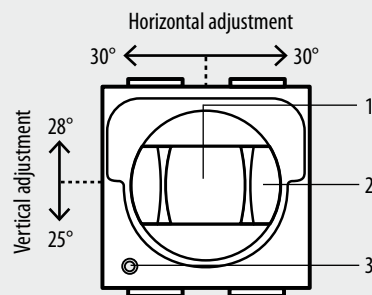
- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 4.5 mA
- Operating temperature: 5 – 40°C

## Covering range



## Dimensional data

Size: 2 modules



Front view

## Legend

- 1 - Fresnel lens;
- 2 - Covering reducing lid;
- 3 - Alarm warning LED.

L/N/NT4611B-AM5791B

### Configuration

They require that the zone they belong to and the progressive sensor number within the zone are assigned. They also require setting of the detection mode.

#### Z

This configurator assigns the number of the appropriate zone to the detector.

Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

#### N°

This configurator assigns the progressive number of the detector inside the appropriate zone.

Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

#### MOD

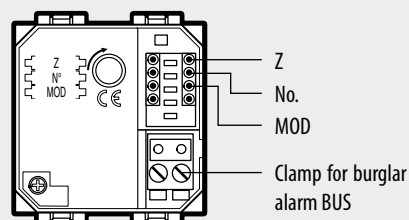
This configurator sets the sensor detection mode.

It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1 pulse
1	pulse counter (*)
2	1 pulse with delay
3	pulse counter with delay

(\*) The sensor generates an alarm signal based on the detection performed during a period of 30 seconds.

**NOTE:** Use the pulse counter function to avoid false alarms caused by thermal variations (radiators etc.).



Rear view



# Double technology IR+MW detector

HS/HD/HC/L/N/NT4613

## Description

This device consists of two sensors: one infrared sensor (IR) to detect the presence of warm bodies, and one microwave (MW) sensor to detect moving bodies.

The combination of these technologies guarantees greater immunity against false alarms. In fact the device is programmed to give the alarm only if both the detection technologies are activated, and this guarantees a high standard of safety.

The volume of the protected zone is split into 14 bands on 3 floors.

Due to the fact that the sensors do not operate correctly if their covering ranges overlap those of double technology sensors, the installation of several sensors in the same room is not recommended.

The detectors, configured in the AUX socket, activate the auxiliary operating modes, assigning an auxiliary channel. The device performs all its burglar-alarm functions, but when the system is disarmed it activates the corresponding auxiliary channel (unless separated). The auxiliary function can therefore be excluded by separation of the zone it belongs to. It also enables activating any auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

Note: do not mount in places where there are moving metal parts (e.g. thermoconvectors or air-moving blades).

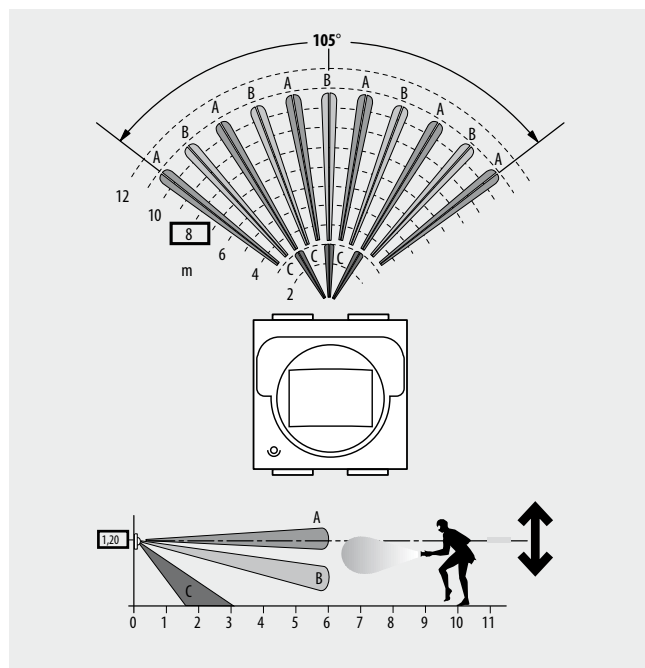
## Technical data

Power supply from SCS BUS: 27 Vdc

Max. absorption: 35 mA for the first detector installed, 7 mA for all the others

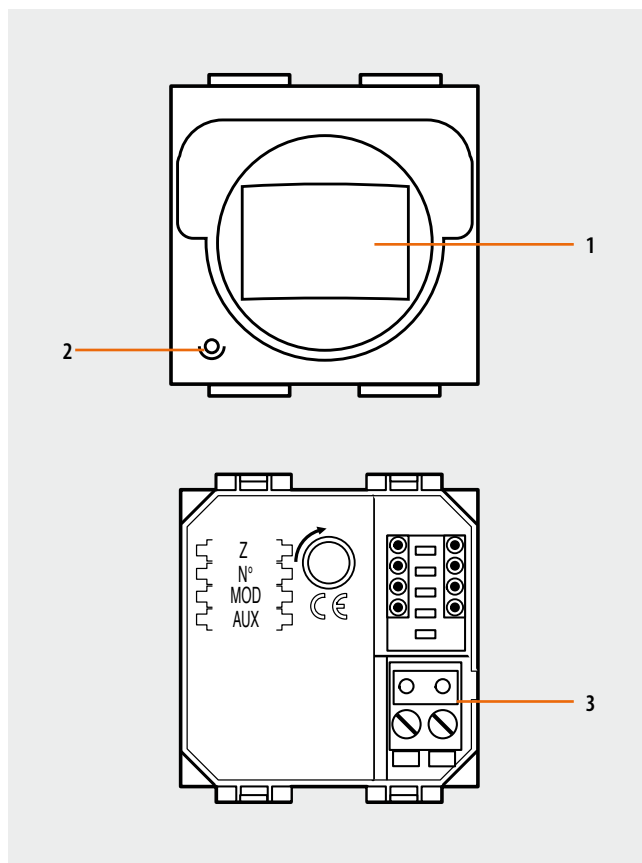
Operating temperature: 5 – 40°C

## Covering range



## Dimensional data

Size: 2 modules



## Legend

1. Fresnel lens;
2. Alarm warning LED;
3. Clamp for burglar alarm BUS.

## Configuration

Double-technology detectors require assignment of the appropriate zones and the progressive number of the sensors in the zone, setting of the detection mode and possibly assignment of an auxiliary prealarm channel.

### Z

This configurator assigns the number of the appropriate zone to the detector.

Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

### N°

This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

### MOD

This configurator sets the sensor detection mode.

It can be used, for example, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1 <sup>st</sup> sensitivity level
2	2 <sup>nd</sup> sensitivity level
3	3 <sup>rd</sup> sensitivity level
4	1st sensitivity level with delay.
6	2 <sup>nd</sup> sensitivity level with delay.
7	3 <sup>rd</sup> sensitivity level with delay.
AUX	Activation of the pre-alarm function, irrespective of the system status (armed or disarmed). The device sends an auxiliary type alarm through the specified channel in the AUX position. If the zone it belongs to is separated, the auxiliary command is disabled.

### AUX

If the AUX configurator has been installed in the MOD position, the 1 to 9 value of the configurator in this position activates the pre-alarm function, assigning the 1 to 9 number of the auxiliary channel.

If no configurator, or one of the 2 to 7 configurators, are present in the MOD position, the device only activates the pre-alarm function when the system is disarmed.

Note: to complete the activations using the relay actuator type F or 3479, see the appropriate technical sheet.

### EXAMPLE

First sensor belonging to zone 2.

Configurator position	Value
Z	2
N°	1
MOD	none
AUX	none

### Example

Example of IR detector with auxiliary configuration. First sensor belonging to zone 2, and with high sensitivity, and pre-alarm on auxiliary channel no. 3 with the system disarmed (e.g. activation of bell when someone goes through the area). With the system armed, the device only operates as burglar-alarm sensor.

Configurator position	Value
Z	2
N°	1
MOD	none
AUX	3

High sensitivity (1<sup>st</sup> level) = maximum coverage 8 metres

Medium sensitivity (2<sup>nd</sup> level) = maximum coverage 6 metres

Low sensitivity (3<sup>rd</sup> level) = maximum coverage 3 metres



# Alarm radio receiver

HC/HD/HS/L/N/NT4618

## Description

The radio receiver, fitted in the MY HOME burglar-alarm sYStem, allows the use of devices which transmit radio wave signals (volumetric sensors, perimeter sensors, technical alarm sensors, radio system remote control, radio remote control for remote assistance) inside the burglar-alarm system, transferring the radio signal on SCS cable (item L4669S). The radio receiver will thus be connected to the SCS cable like any burglar-alarm device and must be configured depending on whether it is used with radio sensors or remote control.

The connection between receiver and radio sensors or remote control does not need conductors because each device is supplied by batteries and the information is transmitted via radio.

**NOTE:** for more information consult the manual supplied with the product.

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 15 mA
- Operating temperature: 5 – 40°C

## Dimensional data

Size: 2 modules

## Configuration

**Z** - This configurator assigns the number of the zone it belongs to within the device group (any free zone in the system).

Configurators 1 - 8 assign the receiver zone within the group of sensors (IR detectors or interface contacts);

configurator 9 assigns the receiver zone within the group of auxiliary devices (auxiliary channel interface or relay actuator);

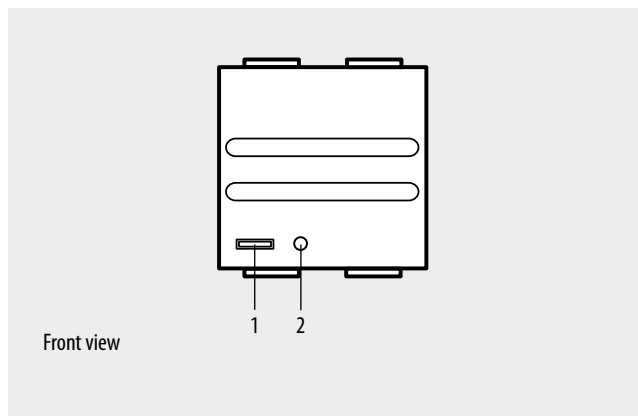
no configurator assigns the receiver zone within the group of activators (activator, divider, zone expander).

**N°** - This configurator assigns the progressive receiver number inside the zone attributed.

Configurator 1 identifies the first device, configurator 2 the second and so on up to a maximum of 9 expander devices for each of the zones.

**AUX** - This configurator activates the prealarm (with volumetric and/or perimeter sensors) or technical alarm function (with technical alarm sensors) and assigns an auxiliary channel (AUX).

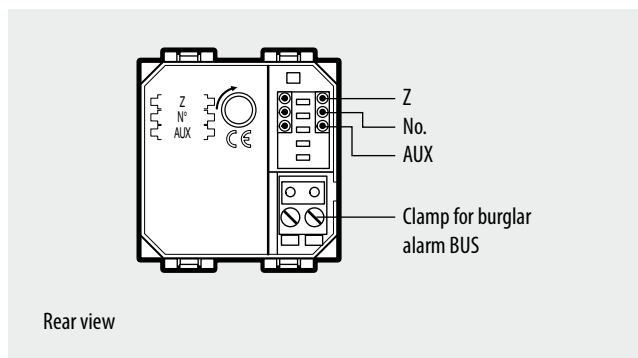
**NOTE:** if the system is configured to have technical alarms, prealarms CANNOT be generated with the system switched off.



Front view

## Legend

- 1 - Operation indication LED;
- 2 - Reset or programming key.



Rear view

## CONTENTS

Technical sheets – Load control



## Pulses counter interface

3522

### Description

The device detects, counts and processes the information (water, gas, etc.) received from meters with pulse outputs, and makes it available to the SCS Bus.

The processing and accounting functions are:

- calculation of the instantaneous value (calculated as the average of two pulses received during the time unit);
- hourly, daily and monthly pulse meter (one year memory).

The pulse meter may be installed in a MY HOME Automation/Temperature Control system, or in a system only intended for the display of consumption levels. In this case a mini power supply will be required, to power the BUS, as well as a Touch Screen, for the displaying of consumptions levels.

The device may be installed in flush mounted boxes, behind traditional type devices, or also inside distribution boards, but without taking up any DIN rail space.

In order to allow the device to archive consumption information, the system must be fitted with a device capable of supplying current date and time information (e.g. Touch Screen). If this is not available, the meter will be unable to archive the data, and will continue to increase the meters of the totalizers, and to calculate the instantaneous variables (number of pulses within the time unit).

The device has been designed to save the partial data in the memory in case of power cut. The pulse counter interface is provided with socket for 6 configurators: A1, A2, A3, G, M, SM.

NOTE: the meter cannot detect pulses of less than 50 ms, and cannot be connected to sensors sending more than 5 pulses per second (minimum period 200 ms).

### Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Stand-by absorption:	7.5 mA max
Operating temperature:	0 – 40 °C

### Dimensional data

Basic module:	- Length: 40mm
	- Width: 40 mm
	- Height: 23 mm

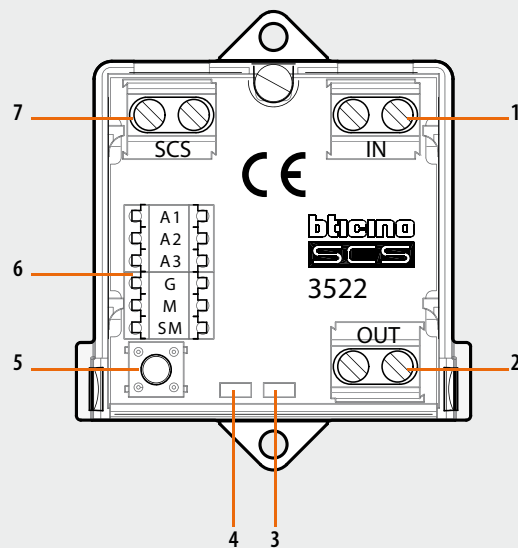
### Configuration

The device can be configured by connecting the physical configurators to their own sockets (physical configuration).

The pulses counter interface is provided with socket for six configurators, which define:

- A1/A2/A3 device address (A1 for the hundreds, A2 for the tens, A3 for the units);  
The maximum number of addresses is 255;
- G the group it belongs to (future developments);
- M type of value measured, 1-4;
- SM under 0-3 mode.

Front view



### Legend

1. Pulse input
2. Opto isolated pulse input repetition
3. Red LED: pulse detection
4. Green LED: device active
5. Virtual configuration pushbutton (for future applications)
6. Configurator socket
7. SCS/BUS connection

The M configurator indicates the type of value measured by the sensor as shown in the table:

Configurator in M	Measured value
1	Gas volume
2	Heat
3	Water volume
4	Generic sensor (for future uses)

When configured in 1, 2, 3, 4 mode, it processes and/or saves the following variables:

- Number of units/h: it calculates the number of pulses within the observation time, and multiplies the result by a set multiplying coefficient.
- Total number of pulses: it calculates the total number of pulses.
- Unit count profile: it archives the unit meter information for each hour of each day of the month, on the basis of the internal clock.

The SM configurator indicates if the increases of the counted and saved variables, must be performed every 1, 10, 100 or 1000, pulses as shown in the table:

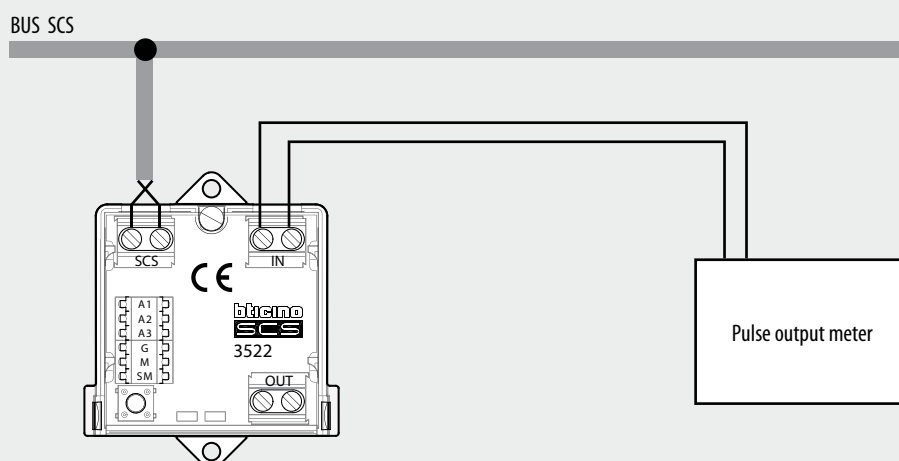
Configurator in SM	Splitter
0	1
1	10
2	100
3	1000

It is generally recommended to leave SM=0. In this case, the value shown coincides with the one released by the meter pulse output.

Explanatory table:

Unit of measur to display	Meter pulses every	Splitter	Resolutions	Full scale
Litres	Litre	1 (SM=0)	1 Litre/hour	254 Litres/hour
Cubic metres	1000 Litres=1m <sup>3</sup>	1 (SM=0)	1 m <sup>3</sup> / hour	254 m <sup>3</sup> / hour
	100 Litres	10 (SM=1)		
	10 Litres	100 (SM=2)		
	1 Litre	1000 (SM=3)		

## Wiring diagrams





# Bus meter with 3 inputs for toroids

F520

## Description

The SCS device measures currents and voltages of separate lines (up to 3), connecting maximum three toroids to the appropriate inputs (one toroid, item 3523 supplied as standard). The meter processes and saves the following variables:

- instantaneous power in W;
- total energy accumulated in Wh.

The device has an internal memory that allows saving the following information:

- cumulative energy on an hourly basis for the last 12 months;
- cumulative energy on a daily basis for the last 2 years;
- cumulative energy on a monthly basis for the last 12 years.

In order to allow the device to archive consumption information, the system must be fitted with a device capable of supplying current date and time information (e.g. Touch Screen). If this information is not available, the meter will be unable to archive the data, and will continue calculating the values of the instantaneous variables (power).

The space requirement for the device is equal to 1 DIN module. The device is provided with socket for 5 configurators: A1, A2, A3-Ta, A3-Tb, A3-Tc.

## Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	35 mA max
Rated current:	16 A
Maximum current:	90 A
Operating temperature:	5 – 40 °C

## Dimensional data

1 DIN module

## Configuration

The device can be configured by connecting the physical configurators to the correct sockets (Physical configuration).

The device is provided with socket for five configurators:

- A1 for the hundreds
- A2 for the tens
- A3Ta for the units
- A3 Tb for the units
- A3 Tc for the units

The combination of the configurators defines:

- A1/A2/A3-Ta address of meter A
- A1/A2/A3-Tb address of meter B
- A1/A2/A3-Tc address of meter C

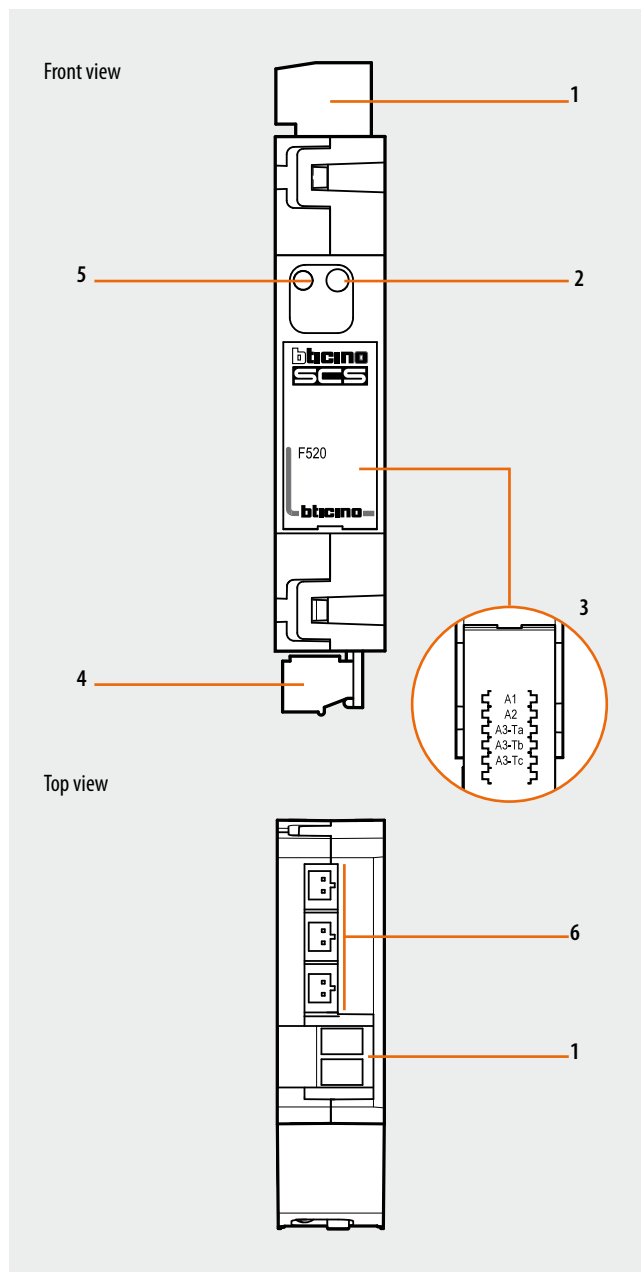
The maximum number of addresses is 255.

**WARNING:** The A3-Ta configurator cannot be zero, differently from configurators A3-Tb and A3-Tc, which can have a zero value (if the corresponding input is not managed).

The meter must be installed as close as possible to the power supply, to ensure a high BUS voltage, and enable correct management of memory savings in case of voltage cut. If the supply voltage is insufficient (below 21 Vdc), the meter will cause the green LED to flash to signal the installation error. The device will work regularly, but will not guarantee correct saving and recovery of data in case of BUS failure.

Procedure for the deletion of the cumulative energy data:

- 1 Press the key; after 20 seconds the orange LED flashes quickly; release the key.
- 2 All the cumulative energy data are reset.



## Legend

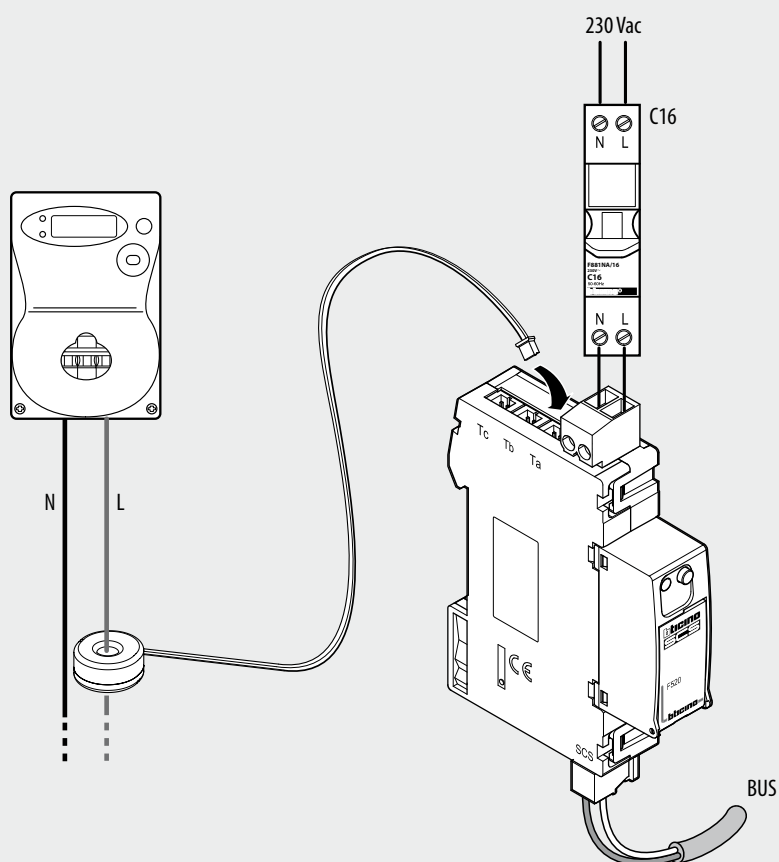
1. 230 Vac connection
2. Pushbutton for the deletion of cumulative energy data
3. Configurator sockets closing door
4. SCS/BUS connection
5. User interface LED, SEE TABLE
6. Ta, Tb, Tc connectors for toroids, item 3523

# LED notifications based on the status of the power meter:

Device status	LED
Normal operation	GREEN
BUS problem (BUS voltage insufficient, or voltage drop detected)	GREEN flashing 500 ms/500 ms
Installation error (230 Vac not detected)	RED flashing 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
No configuration	ORANGE flashing 128 ms/128 ms on GREEN

## Wiring diagrams

Connection of the meter to the bus, the line, and the toroid





# Central unit for load management

F521

## Description

The central unit for load management is an SCS device that measures the power consumed by the electric system and controls the status of the Load Management system actuators, to prevent the risk of tripping of the electric meter. The device can manage up to 63 actuators (electric loads) per each phase.

The central unit is also capable of processing and saving currents and voltages, to provide information on energy and power

- instantaneous power in W;
- total energy accumulated in Wh.

The device has an internal memory that allows saving the following information:

- cumulative energy on an hourly basis for the last 12 months;
- cumulative energy on a daily basis for the last 2 years;
- cumulative energy on a monthly basis for the last 12 years.

This information is then made available on the user interfaces, and is displayed through instantaneous values, totalizers and graphs.

In order to allow the central unit to archive consumption information, the system must be fitted with a device capable of supplying current date and time information (e.g. Touch Screen). If this information is not available, the meter will be unable to archive the data, and will continue calculating the values of the instantaneous variables (power).

## Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	28 mA max
Rated current:	16 A
Maximum current:	90 A
Operating temperature:	0 – 40 °C

## Dimensional data

1 DIN module

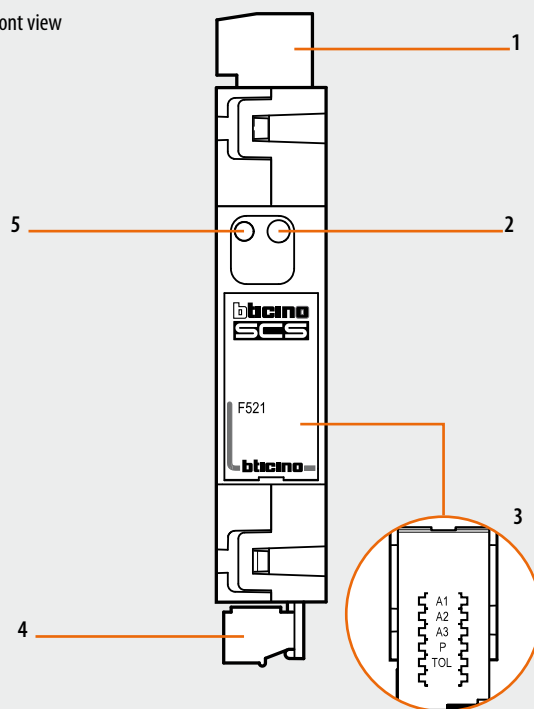
## Configuration

The device can be configured by connecting the physical configurators to the correct sockets (Physical configuration)

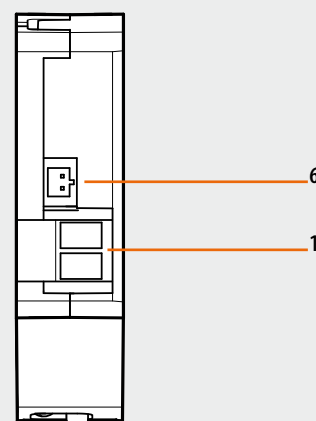
The central unit for load management is provided with socket for 5 configurators, which define:

- A1/A2/A3 central unit address (A1 for the hundreds, A2 for the tens, A3 for the units);  
The maximum number of addresses is 255.
- P rated power R<sub>pow</sub>
- TOL tolerance

Front view



Top view



## Legend

- 230 Vac connection
- Switch on and deletion of cumulative energy data procedures pushbutton
- Configurator sockets closing door
- SCS/BUS connection
- User interface LED, SEE TABLE
- Toroid connection, item 3523

The P configurator is used to select the rated power (Rpow) as shown in the table:

P	Rated power Rpow (kW)	Approximate value in Ampere at 230 Vac(*)
0	3	13
1	1.5	6.5
2	4.5	20
3	6	26
4	9	40
5	10.5	46.5
6	12	52
7	14	61
8	15	65
9	18	78

**NOTE (\*)**: The reference value for the load control thresholds is the one of the rated power in kW. The Ampere value can be used as general indication to help the installer in those cases when the service manager supplies the current information.

The TOL configurator is used to select the rated power tolerance as shown in the table:

TOL	Tolerance
0	0
1	-5%
2	-10%
3	-15%
4	-20%
5	+5%
6	+10%
7	+15%
8	+20%

#### Load control actuators acquisition

Once the installation stage has been completed, the central unit must acquire the actuators on the bus; unless this operation is carried out, the device will continue signalling lack of information (fixed orange LED), and no load control function will be carried out.

The procedure for the acquisition of the actuators on the BUS is as follows:

1. Press the key; after approximately 10 seconds the red LED will turn on steadily; release the key.
2. The red LED flashes quickly and the central unit interrogates the system to identify the actuators installed.
3. Once the procedure has been completed, if no actuators have been found the acquisition failed notification (orange LED on steady) remains active, otherwise the LED turns green, and the central unit starts operating correctly.

The procedure for the acquisition is inhibited if the central unit is not installed correctly (voltage of the bus too low, or 230 V missing), or if an overload is present; it is therefore only possible to complete the acquisition procedure if the LED is orange steady (installation correct but no actuator acquired), or green steady (system already configured and actuators acquired).

If the power supply voltage is insufficient (lower than 21 V approximately), the central unit causes the green LED to flash to indicate the installation error: the device works correctly, but does not ensure the correct saving and recovery of the data in case of BUS error.

#### Procedure for the deletion of the cumulative energy data:

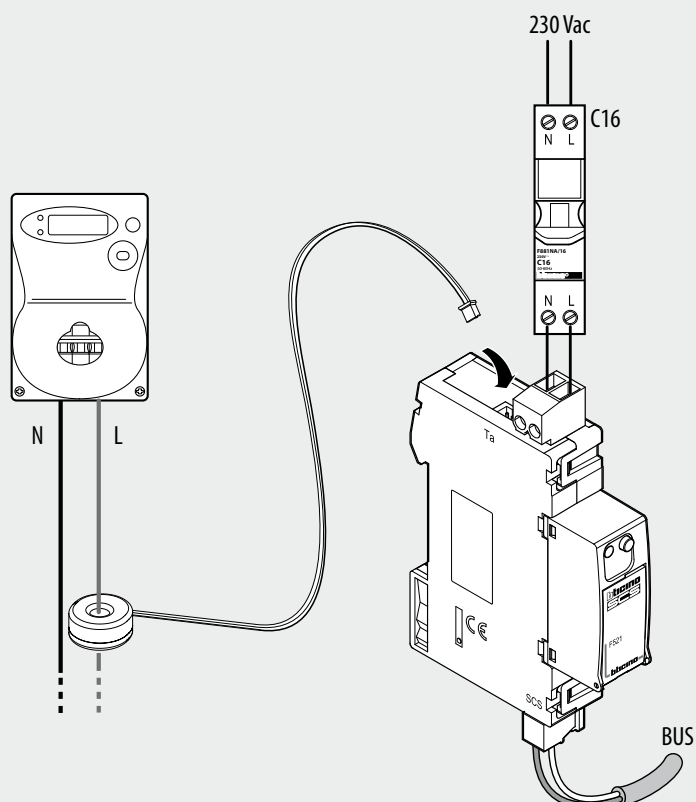
1. Press and hold down the key; after approximately 10 seconds, the red LED will turn on steadily; continue holding down the key.
2. After 10 seconds the orange LED flashes quickly. release the key.
3. All the cumulative energy data are reset.

**LED notifications based on the status of the Central unit for load management:**

Device status	LED
Normal operation (below threshold with all loads enabled)	GREEN
Current threshold exceeded	RED
System not acquired	ORANGE
Current system acquisition	RED flashing 100 ms/100 ms
BUS problem (BUS voltage insufficient, or voltage drop detected)	GREEN flashing 500 ms/500 ms
Installation error (230 Vac not detected)	RED flashing 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
No configuration	ORANGE flashing 128 ms/128 ms on GREEN

**Wiring diagrams**

Central unit for load management connection





# Actuator 16 A with current sensor

F522

## Description

The device is an actuator with 1 bistable relay sensor with zero crossing functionality, intended for the load control and/or automation functions.

The actuator is capable of assessing frequency (50 Hz) and voltage (230 Vac) in an isolated way.

### In load control mode:

The actuator will be given a priority indicating the tripping order that will be followed by the F521 central unit for load management (e.g. Priority 1 will be the first load disabled if the threshold is exceeded). This priority coincides with the address that will be used in all configuration software programs. The actuator is fitted with a current sensor for the measurement of the controlled load consumptions, as well as for the display of the instantaneous consumption, and 2 energy totalizers that can be reset independently.

In this mode the device can process the following functions:

- measure the input power of the controlled load;
- measure the total power;
- measure the earth leakage current and display on the Touch Screen the status of the controlled load. This function is only available by connecting the optional external toroid, item 3523, to the actuator.

Using the forcing pushbutton it will be possible to re-enable the load for 4 hours after DISABLING by the central unit, or remove the load forcing previously set.

### In automation mode, the actuator can perform the following functions:

- all operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays (shutters);
- additional modes using the M configuration socket.

### In mixed load control and automation mode, the following rules are followed:

The local key performs the load control management function (forcing/end of forcing)

- if the load is ENABLED or FORCED, the status of the relay follows the commands of the Automation system.

- if the load is DISABLED by the central unit for load management, the status of the relay does not follow the commands of the Automation system, but can only be re-enabled by a control, ENABLING or FORCING, from the load control management.

During disabling, the actuator keeps the statuses requested by the Automation commands in the memory. After RE-ENABLING the relay is placed in the status required by the last automation command.

This function has been conceived for applications where the load control management function is implemented, with the need of performing hourly load scheduling. If during DISABLING stage the relay is switched OFF due to the scheduling settings, when re-enabling takes place it will stay switched OFF.

The bistable relay enables preserving the status of the load also in case of lack of voltage from the SCS bus (e.g. device reset).

The space requirement for the device is equal to 1 DIN module. The device is provided with socket for 6 configurators: A, PL, M, P1, P2, PF.

## Technical data

Operating power supply

with SCS BUS: 18 – 27 Vdc

Absorption: 30 mA max

Measurement interval: 100 mA – 16 A

Operating temperature: 0 – 40 °C

Power/Absorption of driven loads:

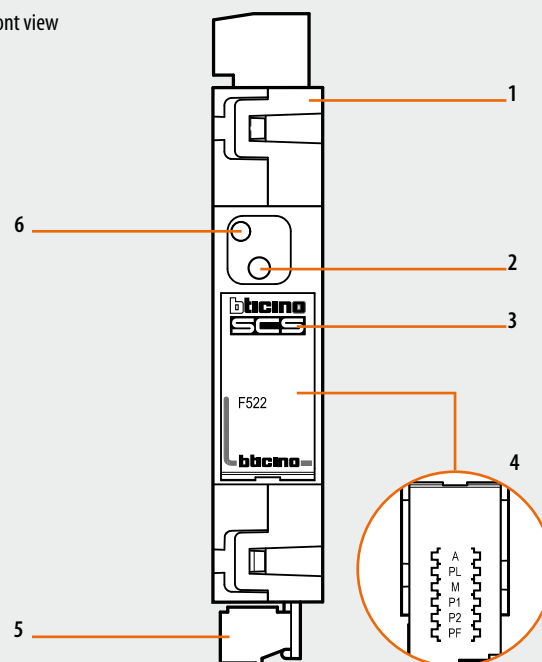
Incandescent lamps and halogen lamp 10 A / 2300W

LED lamp and compact fluorescent lamp 500 W / Max. 10 lamps

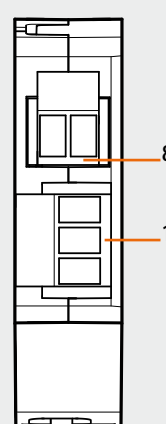
Linear fluorescent lamp and electronic transformer 4 A / 920 W

Ferromagnetic transformers 4 A cos 0.5 / 920 VA

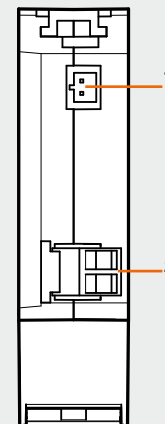
Front view



Top view



Bottom view



## Legend

1. 230 Vac connection
2. Load forcing pushbutton
3. Virtual configuration pushbutton (future application)
4. Configurator socket
5. BUS connection
6. User interface LED, SEE TABLE
7. Toroid connection (Item 3523) for earth leakage current measurement
8. Load connection

## Dimensional data

1 DIN module

### Configuration

The device can be configured by connecting the physical configurators to the correct sockets (Physical configuration)

The device is provided with socket for six configurators, which define:

- A/PL/M local address (room, light point) and mode in the automation system.
- P1/P2 address/priority in the load control management system (P1= tens, P2= units).
- PF Power Factor for power calculation.

The PF is configured as shown in the table:

PF	Power Factor	Typical loads
0	0.925 (default)	Hoover, Microwave, Television
1	1	Oven, iron, electric heaters, hair straightener, incandescence, electronic transformers, toroid transformers,
2	0.85	CFL lamps
3	0.80	
4	0.75	Washing machine, dishwasher, PC (desktop)
5	0.70	
6	0.65	
7	0.60	Other electronic devices (Home theatre, DVD recorder, PC notebook, etc. ...)
8	0.55	
9	0.50	

The parameters listed in the table are only indicative

### 1) Automation Mode:

The actuator performs all the operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays.

In addition, the following table lists the operating modes required for the configurator connected to the M position of the actuator itself.

In the A and PL positions it will be necessary to indicated the device addresses in order

for this to be reached as automation actuator. In order to display the instantaneous and cumulative consumptions of the controlled load (saved inside the actuator), it will be necessary to configure also P1 and P2. In this case P1 and P2 shall indicate the address to be entered in the software programs in order to make it possible to display consumptions in the dedicated pages.

Possible function	Configurator in M
Actuator as slave. It receives a command sent by a Master actuator with the same address	SLA
Pushbutton (On monostable) ignores Room and General controls	PUL
Master actuator with delayed Off control on the corresponding Slave actuator. Only for point-point type control. With the Off control, the Master actuator is disabled; the Slave actuator is disabled after the time set using the configurators has elapsed <sup>1)</sup>	1 – 4 <sup>1)</sup>

<sup>1)</sup> In the Off delayed mode, the master sends the Off command after a period of time set using the 1 - 4 configurator connected to M as shown in the table:

Configurator in M	Time (minutes)
1	1
2	2
3	3
4	4

LED notifications based on the status of the actuator in automation mode:

Device status	Green LED	Red LED	Result
Load OFF	Fixed ON	OFF	GREEN
Load ON	Fixed ON	Fixed ON	ORANGE

**2) Load control management mode:**

In the P1 and P2 positions it will be necessary to indicate the priorities from 01 to 63, in PF (see table), the A, PL and M positions must be configured equal to zero.

LED notifications based on the status of the actuator in load control management mode:

Device status	Green LED	Red LED	Result
Enabled	Fixed ON	Fixed ON	ORANGE
Enabled with consumption lower than 50 W	Fixed ON	Flashing 900 ms ON/100 ms OFF	ORANGE flashing 900 ms ON/100 ms OFF on GREEN
Forced	Fixed ON	Flashing 1 s/1 s	ORANGE flashing 1s/1s on GREEN
Disabled	OFF	Fixed ON	RED

**3) Load control management and automation:**

In the P1 and P2 positions it will be necessary to indicate the priorities from 01 to 63.  
In A and PL it will be necessary to indicate the device address.

LED notifications based on the status of the actuator in load control management and automation mode:

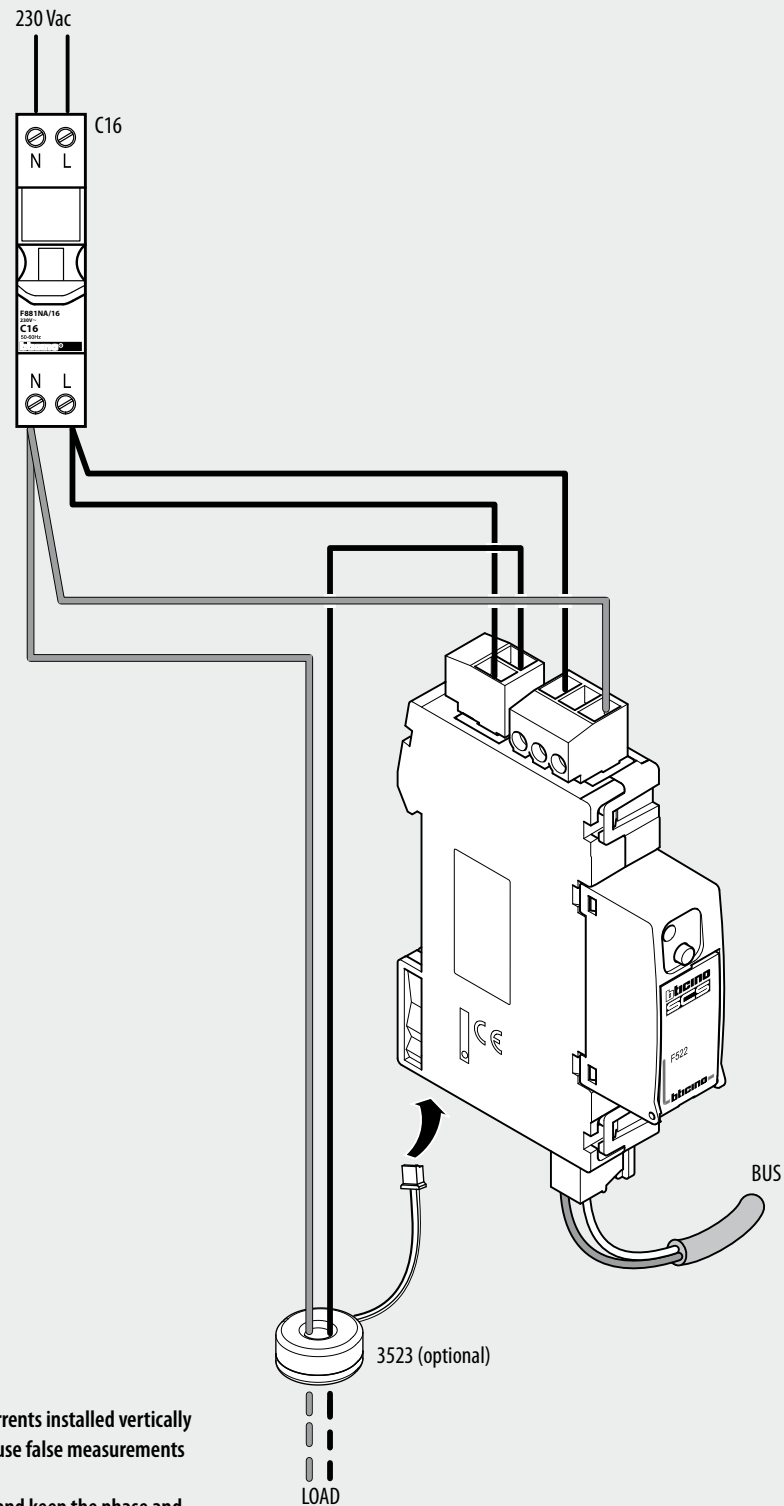
Device status	Green LED	Red LED	Result
Enabled + ON	Fixed ON	Fixed ON	ORANGE
Enabled + OFF	Fixed ON	OFF	GREEN
Enabled + ON with consumption lower than 50 W	Fixed ON	Flashing 900 ms ON/100 ms OFF	ORANGE flashing 900 ms ON/100 ms OFF on GREEN
Disabled	OFF	Fixed ON	RED
Forced + ON	Fixed ON	Flashing 1 s/1 s	ORANGE flashing 1s/1s on GREEN
Forced + OFF	Flashing 1 s/1 s	Flashing 1 s/1 s	ORANGE flashing 1s/1s

Common LEDs signalling:

Device status	Green LED	Red LED	Result
Installation error (230 Vac not detected)	OFF Flashing	Flashing 100 ms/900 ms	RED flashing 100 ms/900 ms
Configuration error	Fixed ON	Irregularly flashing	ORANGE irregularly on GREEN
No configuration	Fixed ON	Flashing 128 ms/128 ms	ORANGE flashing 128 ms/128 ms on GREEN

## Wiring diagrams

Actuator connection:



**WARNING:** Cables carrying high currents installed vertically near the actuator (< 5 cm) may cause false measurements of the integrated current sensor.  
In this case move the cables away and keep the phase and the neutral coupled.



# Energy Data Logger

F524

## Description

The energy data logger is a device that can be used to:

- Display on the PC or other device (e.g. Smartphone) consumption/production data, recalling the web pages using an Internet Browser.
- Concentrate and save data consisting of 10 separate energy lines maximum. The lines can be the electric power lines, by connecting F520 meters, or an F521 Central unit for load management, or lines for water, gas, or heat consumption, by connecting 3522 pulse counter interfaces.
- Have a more detailed recording of electric data (using the Web pages included in the device it is possible to download an excel file to have in hand every 15 minutes details of each single electric line).
- Set several time bands for a more detailed conversion of the electric power value into an economic value (it is in fact possible to configure up to 8 different tariffs. E.g. two-hourly tariff, three-hourly tariff). For water and gas lines there are monetary conversion values without time bands.
- Export the data in excel file
- Have a simple data backup: the device features a housing for a micro SD memory card, on which consumption details for each individual line are saved daily.

## Technical data

Operating power supply with SCS BUS:	18 - 27 Vdc
Absorption:	30 mA
Operating temperature:	5 – 40 °C

## Dimensional data

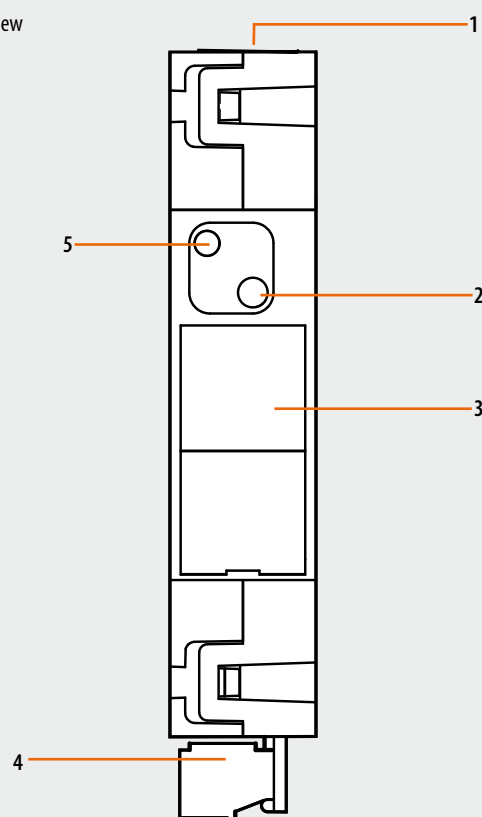
1 DIN module

## Configuration

The device is configured using the WEB pages in the device. For the activation and the setup of the WEB pages refer to the CD supplied.

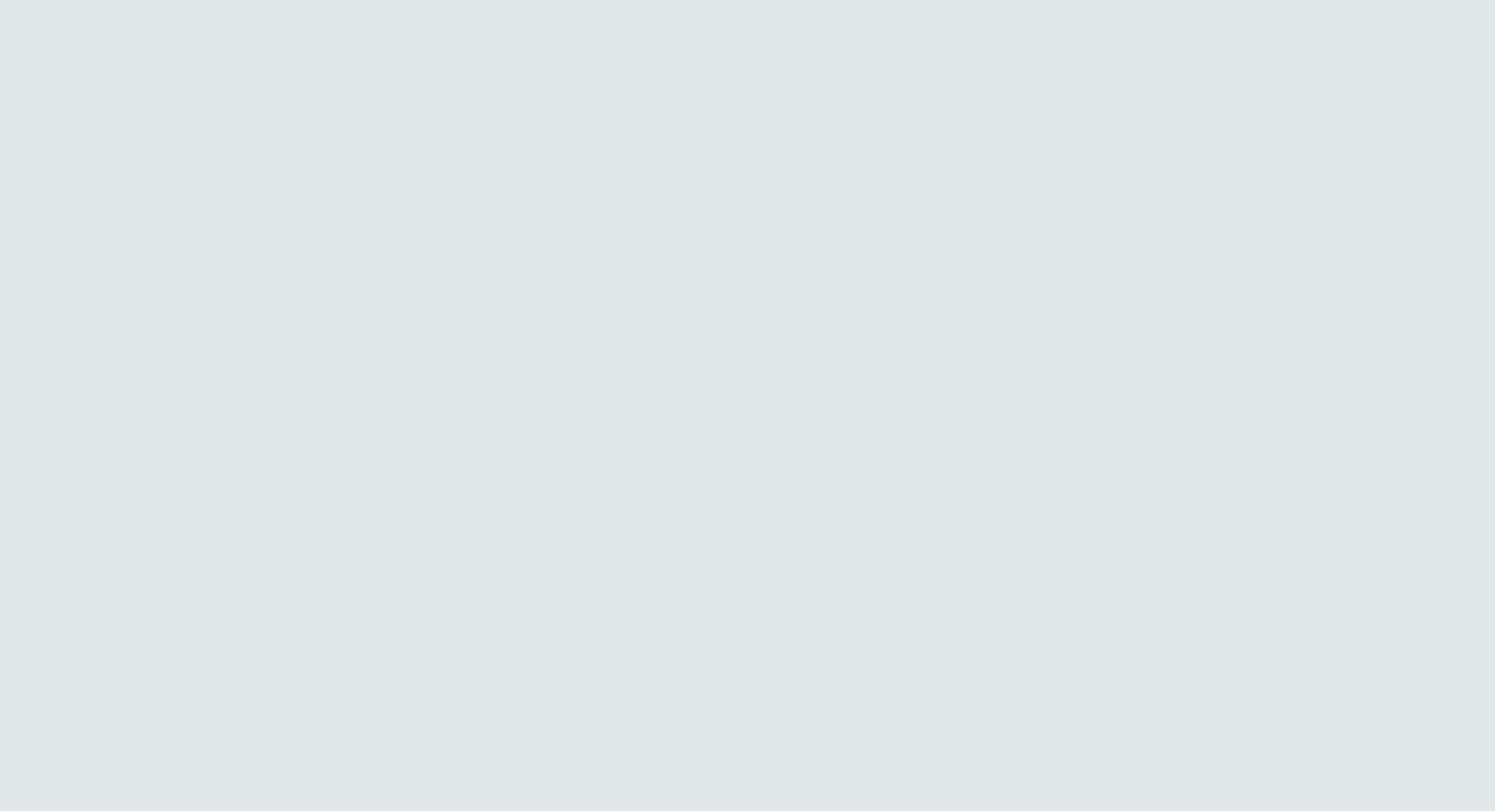
**WARNING:** To activate the Energy Data Logger functions, the date and time must be set (from WEB pages or other device).

Lower view



## Legend

1. Ethernet cable connection
2. Pushbutton
3. Micro SD memory card housing door
4. SCS/BUS connection
5. Power line/device status LED



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CONTENTS

Technical sheets – Temperature control



# Radio outdoor temperature probe

3455

## Description

The outside temperature can be measured by means of this radio probe. The data is then sent through radio waves to the receiving interface, and to the temperature control system. Central units item HC/HS/L/N/NT4695, item AM5875 and item 3550 can simply display this data. The automations are reserved just to the 99-zone central unit item 3550 and can activate controls on the basis of exceeding particular temperature thresholds set by means of the TiThermo software.

These automations also allow the management of enhanced systems with combination boiler. Up to nine temperature probes can be installed in a system.

The radio probe is practically maintenance-free and is supplied by a small solar cell installed on the device. Special care should be taken to install the solar cell in positions which can guarantee sufficient irradiation.

For applications in badly lit or dark places, where the solar cell cannot supply the device, power can be supplied by means of a Lithium battery (type LS14250/1/2AA), to be inserted in the battery compartment. To guarantee the operation of the battery-supplied probe the battery should be replaced at least every 5 years.

The effective battery lifetime depends on the "data updating time" setting (see configuration section).

On the probe printed circuit there is a small key to be used during programming and when the receiving interface is acquiring the radio probe details.

## Legend

1. Temperature sensor: to measure the temperature
2. Transmission key: allows the association between radio probe and receiving interface
3. Compartment: for lithium battery
4. Solar cell: supplies the entire device
5. Jumpers: to set the temperature update interval
6. IP65 enclosure

## Technical data

- Power supply: - solar cell  
- 3.6 V / 1.1Ah type LS14250/1/2AA lithium battery
- Operating temperature: (-25) – (+40) °C
- Measurement field: (-20) – (+60) °C
- Radio frequency: 868 MHz
- Transmission power: < 10 mW
- Range: 70 m in free field (metal and reinforced concrete walls reduce the range);
- Protection index: IP65

## CE CONFORMITY

89/336/EWG – Electromagnetic compatibility

R&TTE 1999/5/EC – Directive on radio and telecommunication devices

## CONFORMITY TO REGULATIONS

ETSI EN 301 489-3

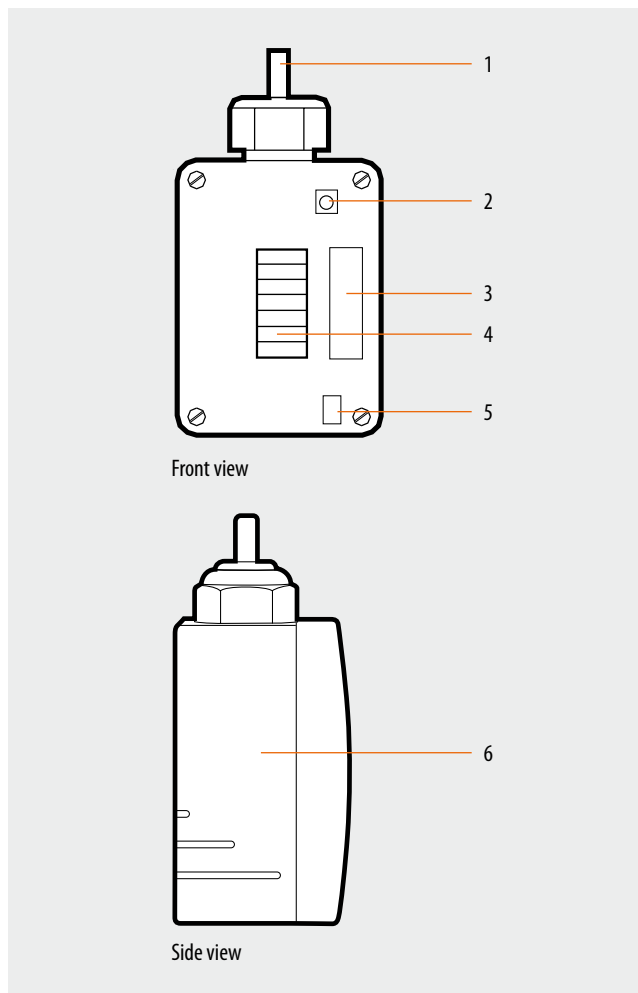
ETSI EN 300 220-3

EN 60669-2-1

EN 60950

EN 60065

EN 60529

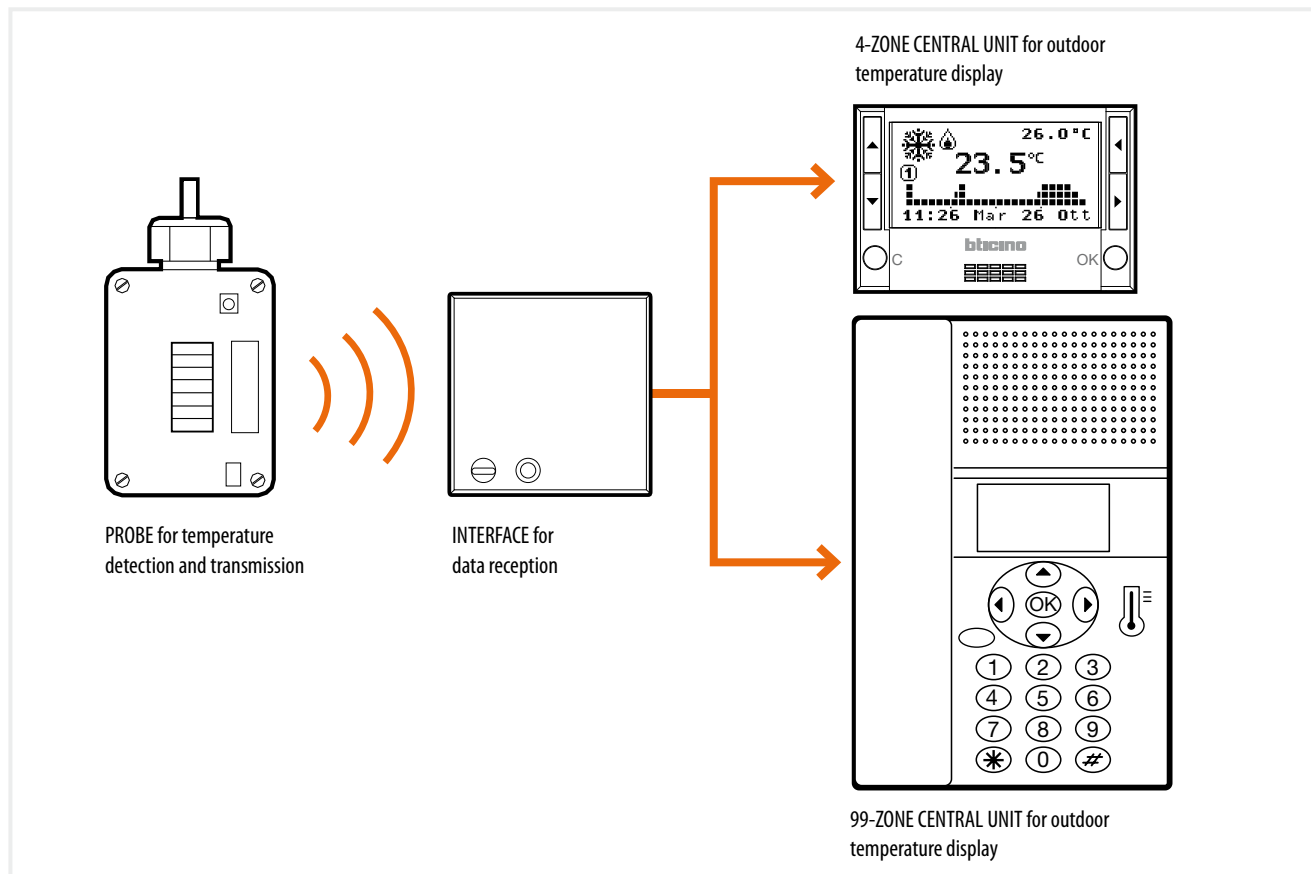


## Probe installation

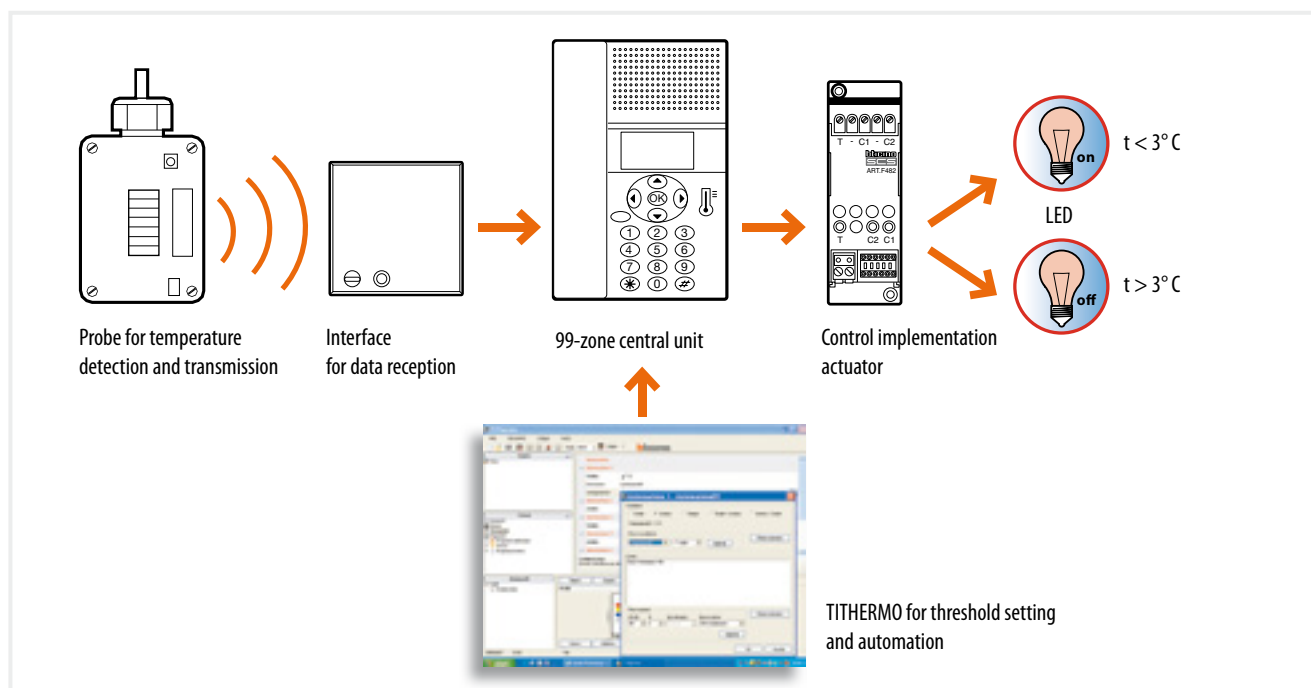


**NOTE:** the probe must be installed in a position away from direct sunlight, as this may cause a false temperature reading. Avoid both excessively shady and excessively bright areas.

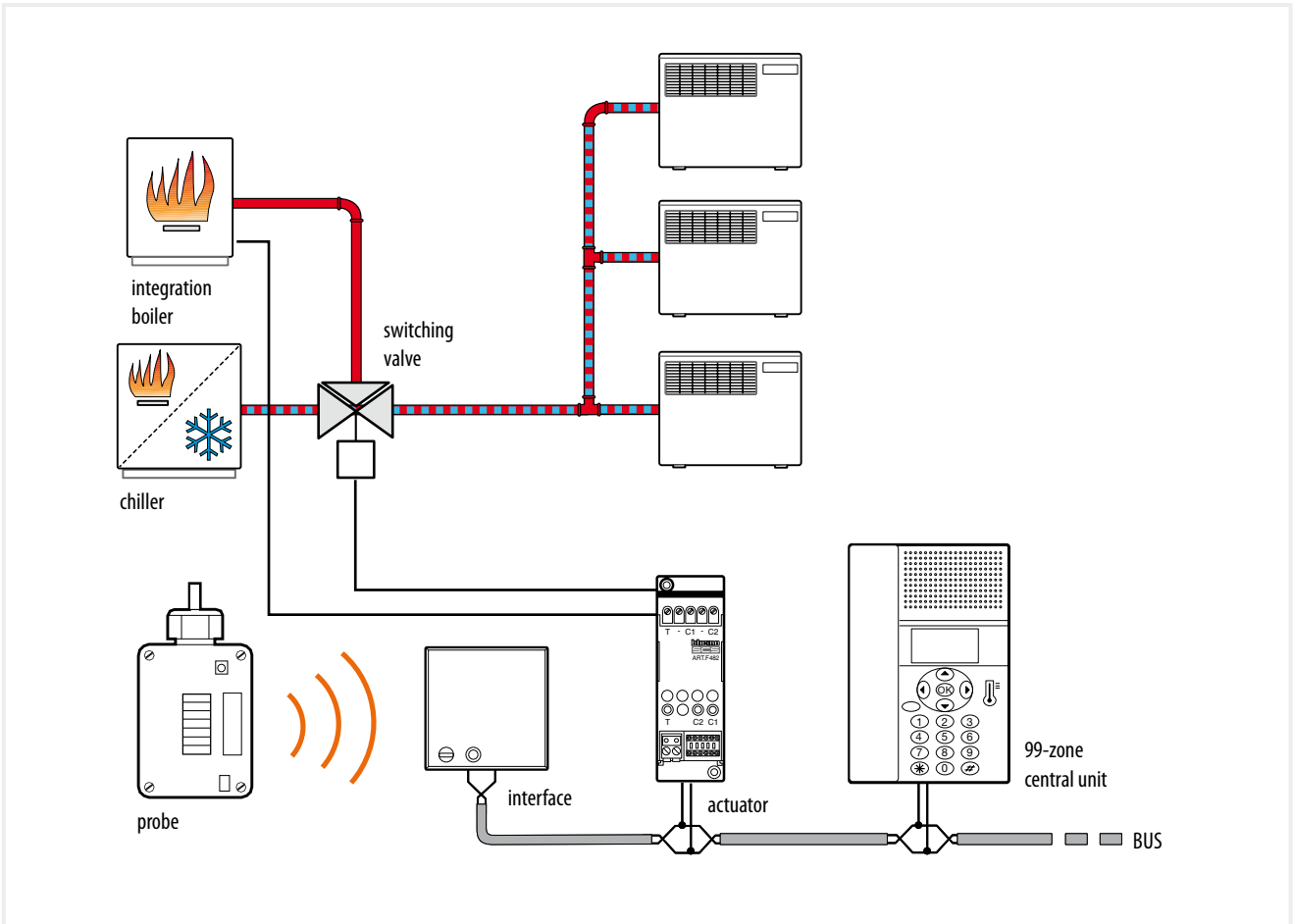
## Temperature display



## Automation - threshold exceeded LED



Automations - system with integration boiler



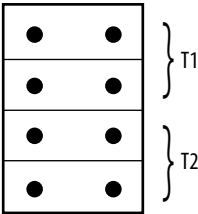
Setting the temperature update interval

The radio probe sends the "temperature" reading to the receiving interface at regular intervals that can be manually set using the jumpers, which must be connected to the T1 and T2 sockets. The update time is calculated following the formula below:  $T = T1 \times T2$ . The correspondence between the settable times and the jumpers is shown on the table. When the factory settings are used, the temperature will be updated every 1000 seconds. A change in the factory settings will also entail a variation on the solar cell recharging time, or the duration of the battery (if applicable).

Jumper/time table

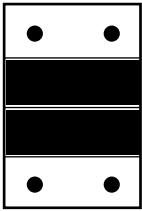
Jumpers	T1/T2
	1 sec.
	10 sec.
	100 sec.

Jumper sockets



Factory settings

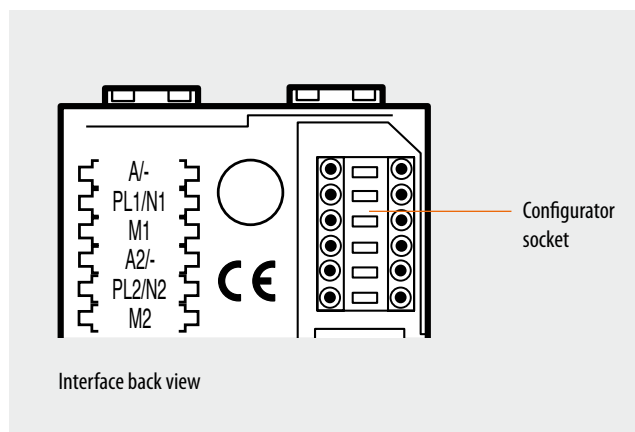
$$T = 10 \times 100 = 1000 \text{ sec}$$



### HC/HS 4577 and L/N/NT4577 receiving interface configuration

In order to use a receiving interface and radio probe, configuration must first be performed, followed by the programming procedure. Only the interface needs configuring. Up to 2 probes may be combined with each interface, therefore providing the system with two detection points for each interface. Up to a maximum of 9 temperature probes may be installed in one system.

The configuration sockets on the interface identify the radio probes addresses. They are: A1/-, PL1/N1, M1 for the first address, and A2/-, PL2/N2, M2 for the second address. The two addresses must always be different from each other,  $PL1/N1 \neq PL2/N2$ . Only one radio probe may be associated to each address. Only used addresses must be configured. **The interface must be configured in temperature control mode by connecting configurator 1 to M1 and M2. With this mode the A1/- and A2/- sockets are not used, therefore no configurator needs to be connected.**



### Programming of devices:

After performing the configuration, it will be necessary to associate the radio probe to the interface following the programming procedure:

- 1) Press the pin pushbutton of the interface for 5 seconds. The red LED turns on. Release the pushbutton. The interface LED will flash every two seconds to confirm that programming mode is active on the first address (group of configurators **PL1/N1, M1**). If the second address of the interface is not configured (no configurator is connected to the **PL2/N2, M2** positions), go to step 2 of the procedure. However, if also the second address must be configured (group of configurators **PL2/N2, M2**), simply press the pin pushbutton of the interface again. The LED will flash twice in succession every two seconds. Every time the pin pushbutton is pressed, the system will switch from the first to the second address and vice versa.
- 2) After choosing the address, The radio probe should be associated to, within 20 seconds press the transmission key of the probe itself. Pressing the transmission key will send the probe serial code. After receiving the code through the radio signal, the red LED of the interface will quickly flash for 2 seconds, confirming that programming is complete, and the procedure has been terminated.

If necessary repeat the operation to save the code of another probe. If on the other hand an address has already been associated and the procedure is repeated with another probe, the interface performs an overwriting action, only keeping the last probe in memory. During normal operation, the sending of information from the probe is confirmed by the flashing of the red LED of the interface. A single flashing indicates that the radio message has been received, and the "temperature" data has been sent through the BUS by a probe associated to the **PL1/N1, M1** address. A double flashing indicates that the radio message has been received, and the "temperature" data has been sent through the BUS by a probe associated to the **PL2/N2, M2** address. To delete all codes from the interface press the pin pushbutton for 12 seconds. After 5 seconds from pressing the key, the LED will turn on steadily, and after a further 7 seconds, it will start flashing quickly, confirming that all programs have been deleted.

### NOTES:

- If the interface configuration is wrong, the red LED will flash. Correct the configuration.
- If the second interface address has not been configured (no configurator connected to the **PL2/N2, M2** sockets), during the programming procedure it will not be possible to switch to this address, which therefore cannot be programmed.



# Air conditioning units control IR emitter

3456

## Description

The air conditioning units control IR emitter is a device capable of controlling the air conditioning units of the air conditioning system by sending infrared controls. All the controls are sent to the splitter using the Touch Screen, or Multimedia Touch Screen, of the MY HOME system.

The device may be installed inside flush mounted boxes, behind traditional devices, in distribution boards, without using a DIN rail space, or inside the splitter. It is fitted with an IR transmitter with a two metre wire, for connection to the splitter receiver.

The IR transmitter has sockets for 4 configurators: ZA/A, ZB/PL, N, M.

## Technical data

Operating power supply	
with SCS BUS:	18 – 27 Vdc
Absorption:	15 mA in stand-by
	25 mA during transmission peak
Operating temperature:	5 – 40 °C

## Dimensional data

Basic module

## Configuration

The device can be configured in two separate ways:

1. Physical configuration: by connecting the physical configurators to their sockets.
2. Virtual configuration: the device is configured remotely, when no physical configurators are connected (future use).

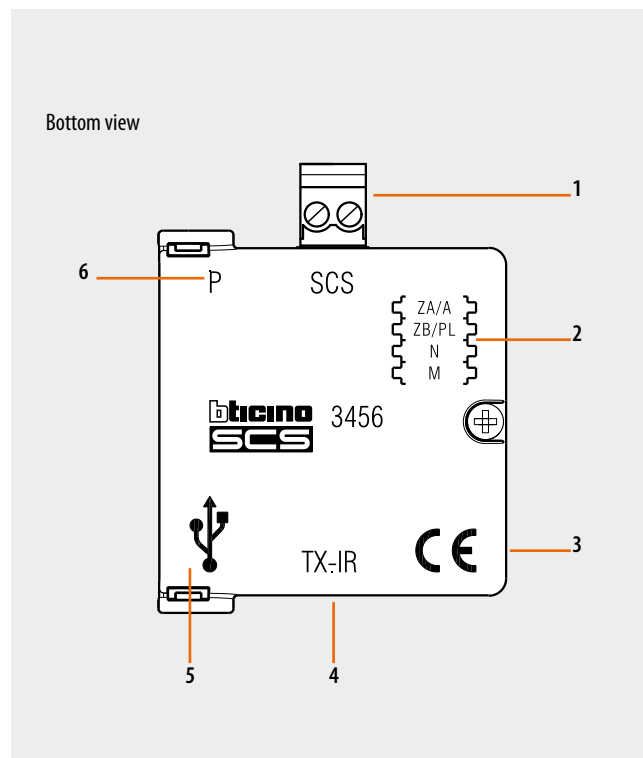
### 1) Basic mode M = 1

In this mode the device can learn up to 20 controls from the air conditioning unit remote control. These can be recalled by all the devices controlling the scenarios (scenario control, Local Display, Touch Screen, Multimedia Touch Screen, MH200, MHVisual, Web server).

In this mode, the device fully becomes part of the automation system, with A/PL address (the N configurator must be equal to 0). Acquisition of the control is ensured by connecting the device to the PC with the dedicated software.

Using the IR emitter it is possible to acquire the IR controls from the remote control, which can then be saved in a personal database.

Using the software, each control can be associated to a number from 1 to 20, and then downloaded on the IR emitter.



## Legend

1. BUS connection
2. Configurator socket
3. Remote control IR receiver
4. IR transmitter connector
5. Software programming USB connector
6. Virtual configuration pushbutton (future use)

### 2) Advanced mode M = 0

In this mode the IR emitter provides control of the main functions of the air conditioning units (temperature, mode, speed and swing) from the Touch Screen and the Multimedia Touch Screen.

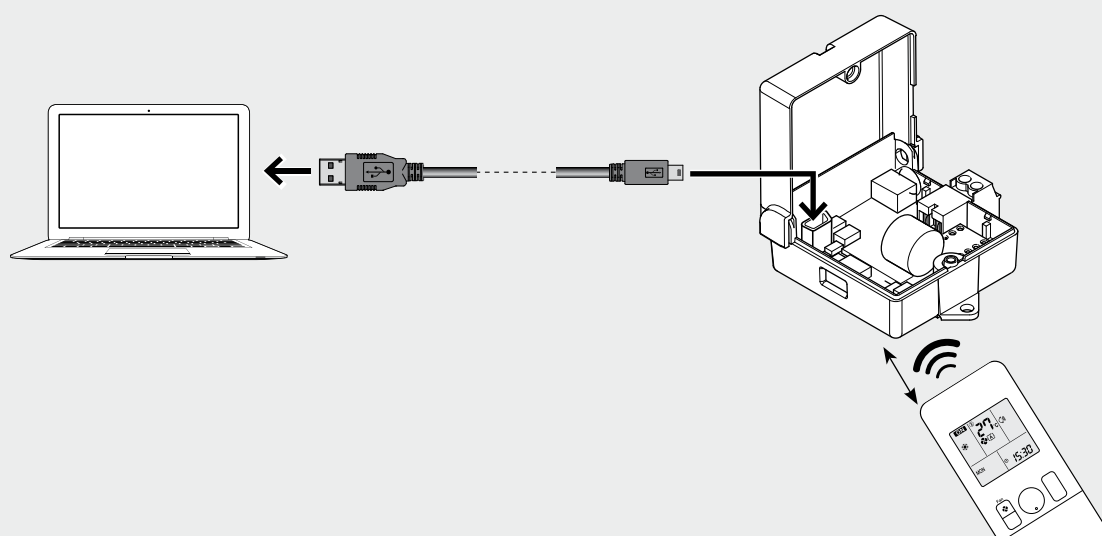
This mode is available for the air conditioning units listed in the database supplied with the product.

If used with the right air conditioning unit model, the following controls are possible:

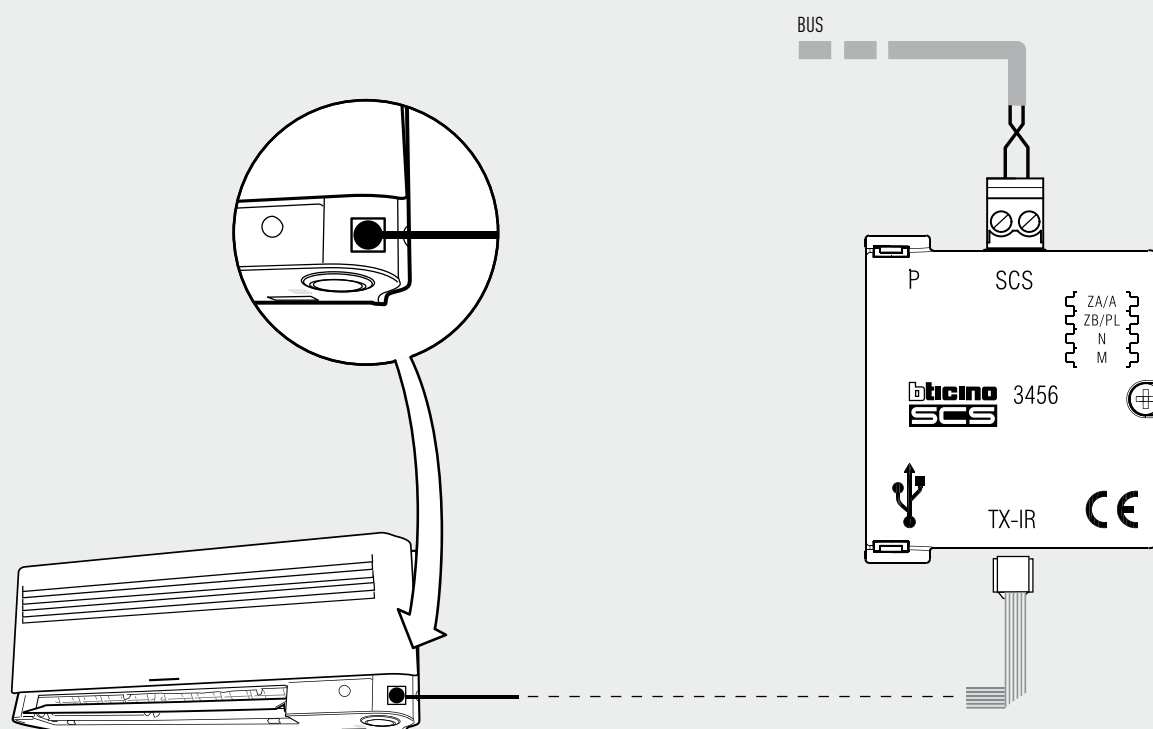
- temperature: adjustment 16 – 30 °C
- mode: auto, heating, cooling, dry and fan
- speed: auto, minimum, medium, maximum
- fins oscillation (swing): on - off

## Wiring diagrams

IR transmitter connected to the PC for the acquisition of the remote control using the dedicated software



IR transmitter connected to the splitter and the BUS





## 99-zone central unit

3550

### Description

This central unit can manage temperature control systems up to 99 zones, set the system and modify the system operating mode. It is more complete than the 4-zone flush mounted version; in fact just with item 3550 it can manage the magnetic contacts installed on the window frames to activate the energy-saving function (switching OFF the zones affected by any changes of air).

Equipped with management software with guided menus shown on the display, it allows the user to choose the operating mode, display the temperatures of the various zones and display and modify the daily temperature profiles and the weekly programs, while the maintenance menu, reserved for the installer (password protected), allows access to the system settings (zone configuration, system test, total reset, etc.).

The Central unit can provide both heating and cooling and can manage up to 99 different zones (with one Master probe for each zone plus possible Slave sensors) and up to 9 circulation pumps.

A contact can be connected in input for remote control by means of a telephone actuator to switch from the anti-freeze mode to the automatic mode and vice versa (function not available with item HC/HS4695 and item L/N/NT4695 and AM5875).

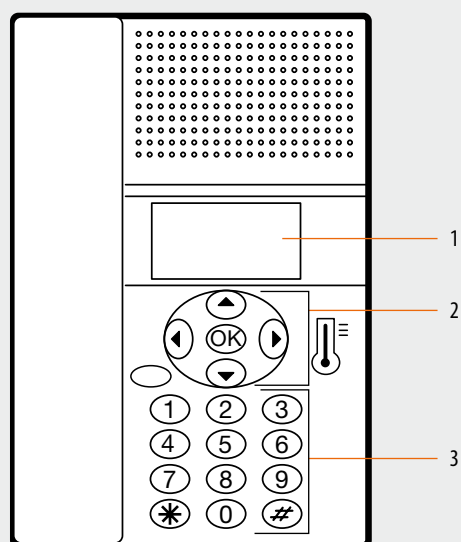
By using the serial connector and the TiThermo software, it is possible to program the unit from a PC.

### Legend

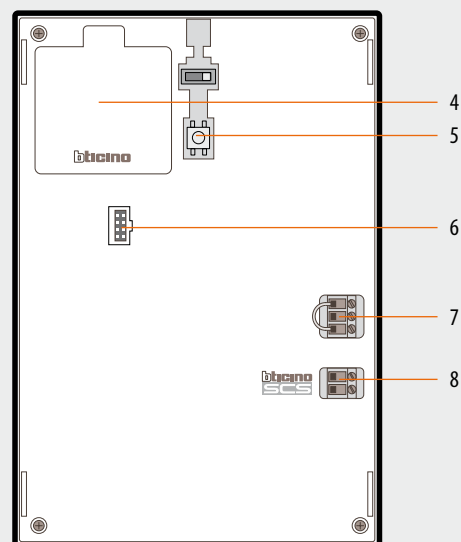
1. Graphic display: shows the messages which guide the programming operations and the system state.
2. Navigation keypad: allows navigation within the menus and confirms or deletes programming operations.
3. Alphanumeric keypad: allows manual entry of all those programming operations which require the use of numbers and/or symbols.
4. Battery compartment: housing for battery item 3507/6.
5. Reset pushbutton: pushbutton to reset the hardware.
6. Serial connector: connects to a PC via cable item 335919 (for RS232) or item 3559 (for USB).
7. Remote control: connection clamp.
8. BUS: BUS connection clamp.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Max. absorption: 75 mA
- Operating temperature: 0 – 40 °C
- Temperature adjustment range: 3 - 40 °C +/- 0.5 °C
- Size: L=140 mm, H=210 mm, D=35 mm



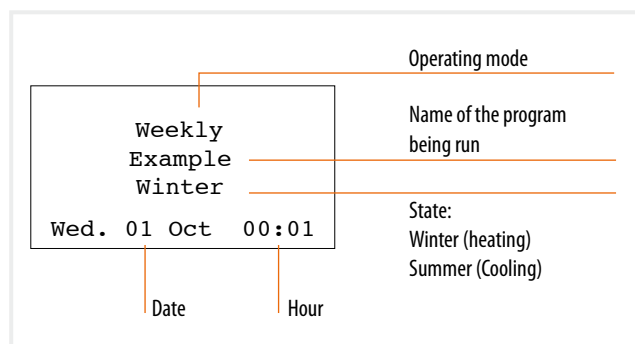
Front view



Rear view

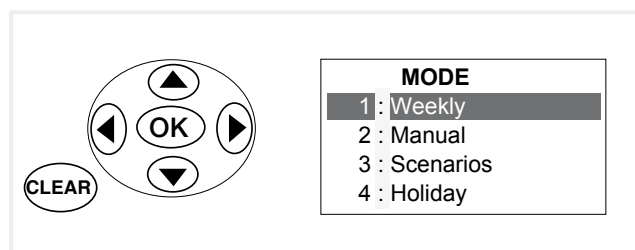
### Graphic display

In normal working conditions the Central unit display shows the following information on the initial page:

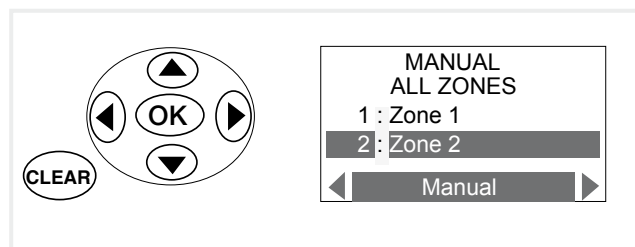


### Navigation keypad

The scroll keys scroll through the list of items in the menu.

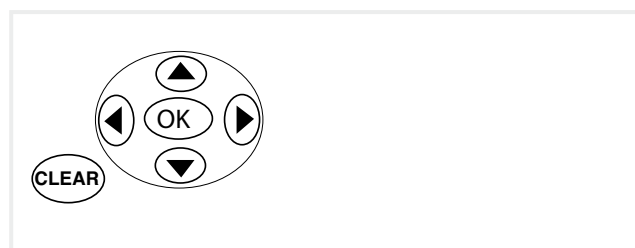


The selection keys can select the functions in the menu.



**OK** Key to confirm the selection or data entered.

**CLEAR** Key to delete the selection and return to the previous screen; if kept pressed quits the Temperature control menu.



### Programming

To complete the learning procedure of all zones within the system, use the item "Configure Zone" of the "Maintenance" menu. It will be necessary to define if the zone should manage a heating system, a cooling system, or a combined one. Using the same

menu item, also select the type of load to control, choosing between: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL, and GATEWAY, and indicate which pumps the zone must control, and the delay. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

### Circulation pump

In addition to controlling the zone valves, for some types of systems it will also be necessary to control one or more water circulation pumps.

When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the central unit through the "Pump" item; inside the "Maintenance" menu, select the zones that must be served by a circulation pump.

Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supply them.

To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups.

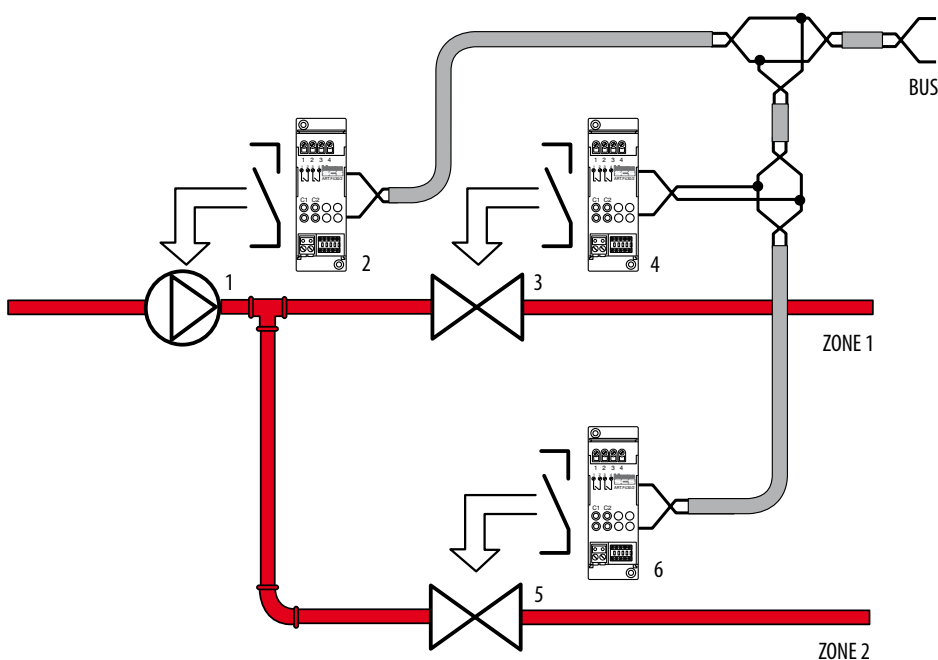
If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves. In the following cases, pump control is not necessary, or needed:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in system where the pump has simply not been installed (for example for air conditioning units or electric heating control).

**NOTE:** for details of the programming operations to be performed from the central unit refer to the installation manual supplied with the central unit itself.

### System with one circulation pump

The system shown only has one circulation pump, that only supplies two zones, controlled by two solenoid valves. The pump is managed by a dedicated actuator configured in zone 00. In the same way as the pump, also the two valves are controlled by two different actuators. The circulation pump will remain active until at least one of the two valves remains open and will stop when both valves are closed.



#### Legend

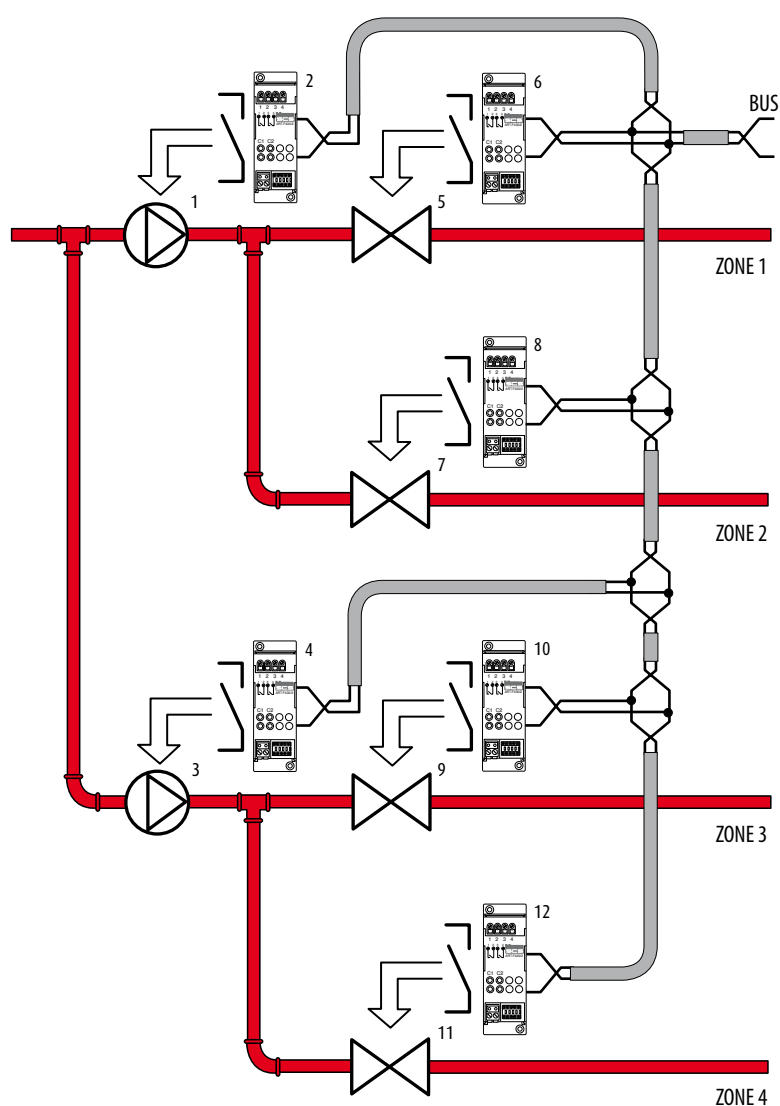
1. circulation pump
2. pump actuator
3. zone 1 solenoid valve
4. zone 1 actuator
5. zone 2 solenoid valve
6. zone 2 actuator

### System with two circulation pumps

The system shown requires two circulation pumps that serve two different zone groups controlled by their own solenoid valves. The first group pump is managed by a dedicated actuator configured in zone 00 with progressive number equal to 1 (N=1). Also the two valves that control ZONE1 and ZONE2 are managed by their own actuators.

The circulation pump will remain active until at least one of the two valves remains open and will stop when both valves are closed. The second group is similar to the first one,

but the actuator controlling the pump of zones 3 and 4 is configured in zone 00 with progressive number equal to 2 (N=2). Although belonging to the same system, the two pump/solenoid valve groups are totally independent from each other (see also actuator configuration).



#### Legend

1. zone 1 and 2 circulation pump
2. pump actuator
3. zone 3 and 4 circulation pump
4. pump actuator
5. zone 1 solenoid valve
6. zone 1 actuator
7. zone 2 solenoid valve
8. zone 2 actuator
9. zone 3 solenoid valve
10. actuator zone 3
11. zone 4 solenoid valve
12. actuator zone 4

### TiThermo software

TiThermo is the tool used for creating or changing, through a simple and logic graphic interface, the configuration to be sent to the temperature control system central unit, defining and customising the parameters of the temperature control system and the profiles of the various operating programs.

Thanks to a dedicated function, the software may also be used to update the central unit firmware.

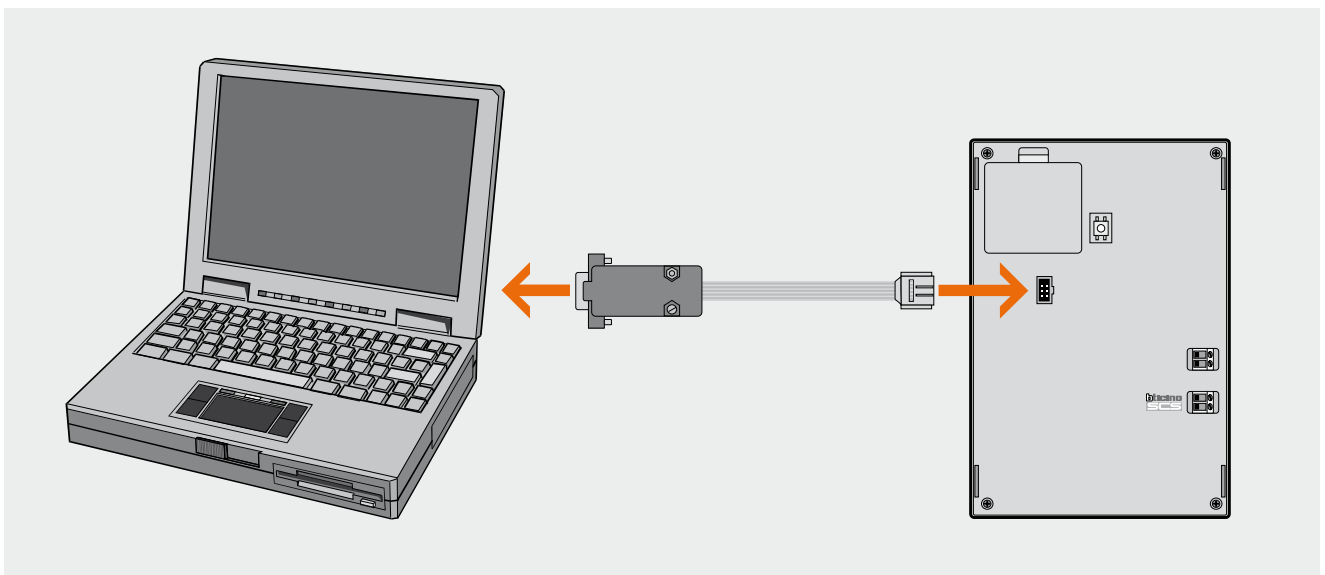
The software can be used to:

- customize the zones
- manage the actuators, selecting the type of function to be assigned (heating, cooling, heating+cooling, no function) and the type of load for the selected function (ON/OFF, Open/ Close, Fan-Coil, Gateway)
- manage the circulation pumps, selecting the type of function to be assigned (heating, cooling, heating+cooling, no function) and the tripping delays

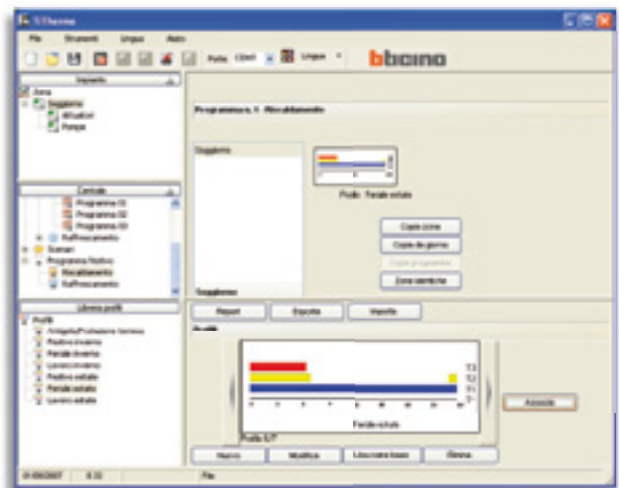
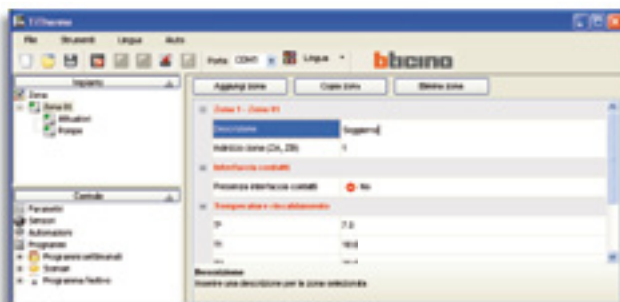
- customise the configuration parameters and the operating programs of the central unit (e.g. weekly programs, holiday programs)
- create up to 16 scenarios for each operating mode of the system (Heating and Cooling). In each scenario also set different temperatures for each area
- export and/or import profiles and collections (as XML files).

**NOTE:** for more information on the operation of the application see the manual supplied with the products.

The central unit is connected to the PC using cable item 335919 or with item 3559 (see figure). This accessory is not included with the central unit, and must therefore be purchased separately.



TiThermo screenshots





## Actuator 2 relays

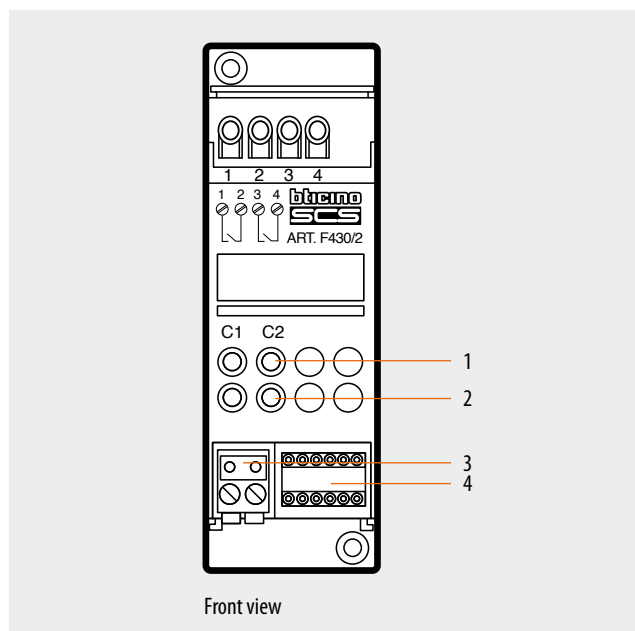
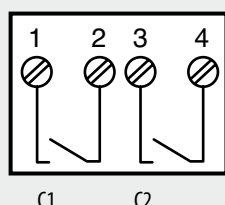
F430/2

### Description

By means of internal relays, this device executes the controls received from the central unit or the probe. It is needed to control loads such as motorised valves, pumps and electric radiators.

It has two independent relays which can be used to control two distinct loads with ON/OFF function and to control a single load with open/close function.

To manage open/close loads the actuator must be configured with the logical interlock of the two relays and contact C1 must be considered for the opening control and contact C2 for the closing control.



### Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Maximum absorption relays activated individually: 25.5 mA
- Absorption (relays activated with interlock): 14 mA
- Absorption in stand-by: 9 mA
- Current load of individual relays: 6 A (resistive) e.g. electric radiators  
2 A (inductive) e.g. solenoid valves, pumps
- Maximum power consumption: 1.7 W
- Operating temperature: 5 – 40 °C
- Size: 2 DIN modules

### Configuration

The item must be configured by connecting the two configurators identifying the actuator address and the number of the zone they belong to the **ZA** and **ZB** sockets. In practical terms, the operation is the same as the one performed for the probe, during the definition of the zone.

A probe and an actuator belonging to the same zone will require the same numeric configurators in the **ZA** and **ZB** sockets. On the front of the two-relay actuator are five sockets dedicated to the configurators:

**ZA, ZB1, N1, ZB2, N2.** The configuration sockets are distributed on the two relays in the following way:

**ZA ZB1** Relay 1 zone address

**N1** Relay 1 progressive zone address

**ZA ZB2** Relay 2 zone address

**N2** Relay 2 progressive zone address

The two relays on the device are independent, and may be used to activate two separate loads with ON/OFF function, such as: pumps, on/off type motorized valves, and electric radiators. The diagram shows the correspondence between the configurator sockets and the relay contacts.

### Legend

1. C1 clamps 1 - 2 relay forcing pushbutton  
C2 clamps 3 - 4 relay forcing pushbutton  
The forcing pushbuttons do not operate if the OFF configurator is connected to the ZB1 or the ZB2 configurator sockets.
2. Yellow LEDs for notification of activation of the corresponding relays.
3. Configurator socket.
4. Removable clamp for BUS connection SCS.

configurator	<b>ZA</b>	1	C1 contact
socket	<b>ZB1</b>	2	RL1
RL1	<b>N1</b>		
configurator	<b>ZA</b>	3	C2 contact
socket	<b>ZB2</b>	4	RL2
RL2	<b>N2</b>		

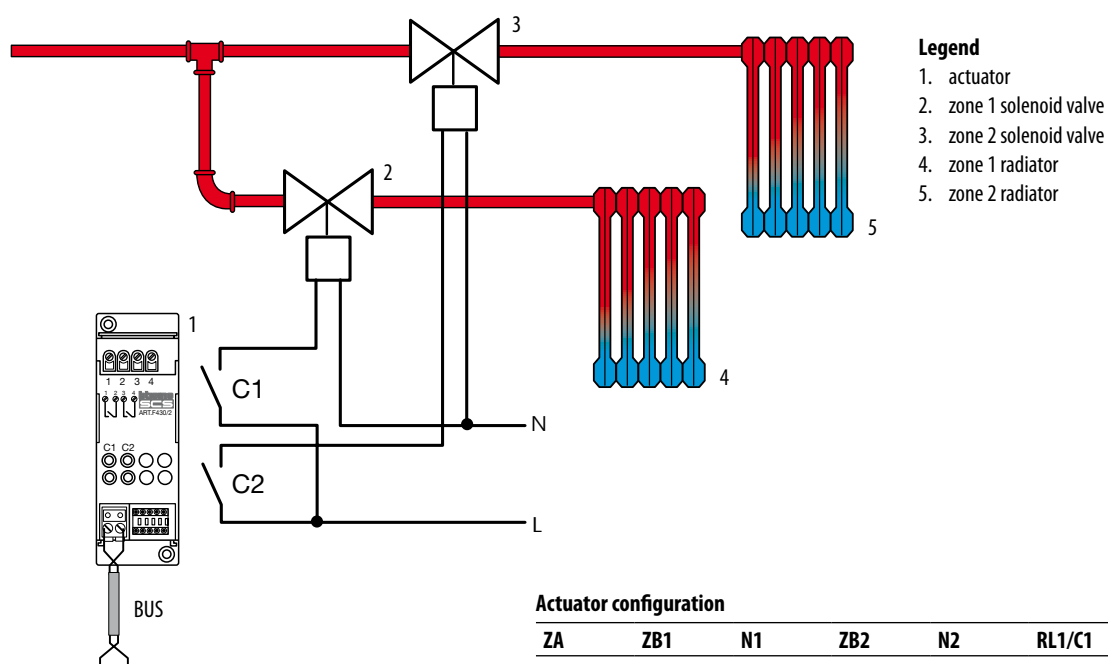
The operation of one of the two relays may be excluded. To do this, connect the OFF configurator to the socket corresponding to **ZB1** or **ZB2**. The two relays may also be used to control a single load with OPEN/CLOSE function, such as, for example, solenoid valves with opening and closing control. For the management of these loads, it will be necessary to configure the actuator with logic relay interlocking, connecting the same numeric configurator both to **ZB** and **N**, therefore **ZB1=ZB2** and **N1=N2**. In using the contacts, consider contact C1 for the opening control and C2 for the closing control. A relay configured in zone **00** operates as a circulation pump actuator; for this function, the two relays cannot be configured as interlocked.

Configurator summary table:

Socket	Function	Configurator
ZA	zone address	0 – 9
ZB1	Zone address - ON/OFF contact management - Open/Close contact management - circulation pump mode - OFF zone	0 – 9 – OFF
N1	progressive zone number - Open/Close contact management - circulation pump progressive number	1 – 9
ZB2	Zone address - ON/OFF contact management - Open/Close contact management - circulation pump mode - OFF zone	0 – 9 – OFF
N2	progressive zone number - Open/Close contact management - circulation pump progressive number	1 – 9

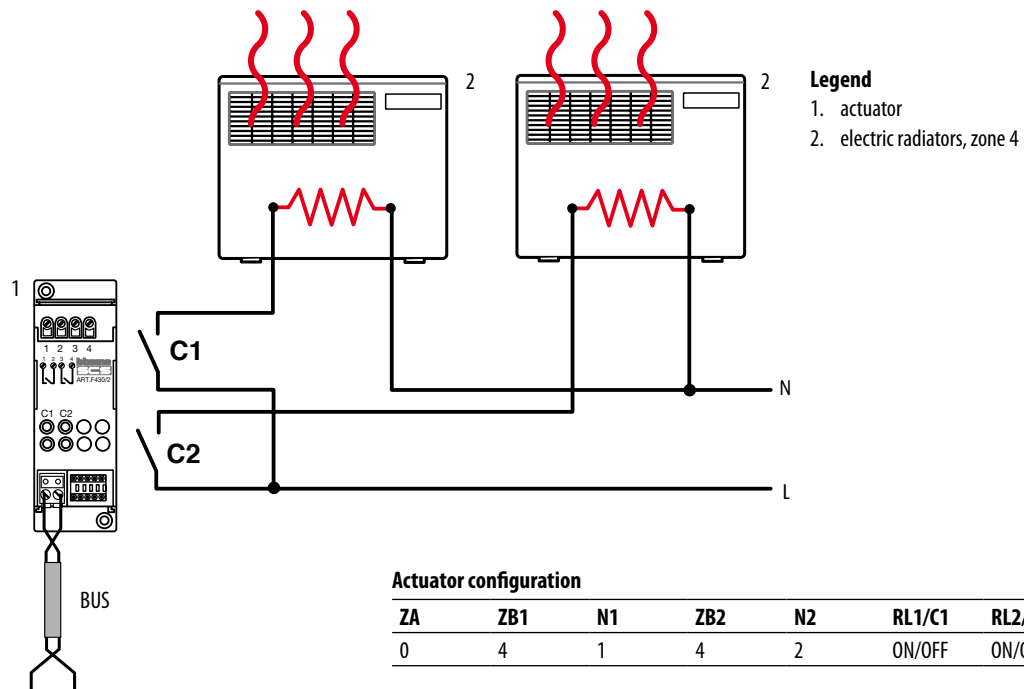
**Example 1**

Configuration and connection of the 2-relay actuator, for the control of the solenoid valves (ON/OFF type) in two different zones (zone 1 and zone 2). The progressive zone number is 1.



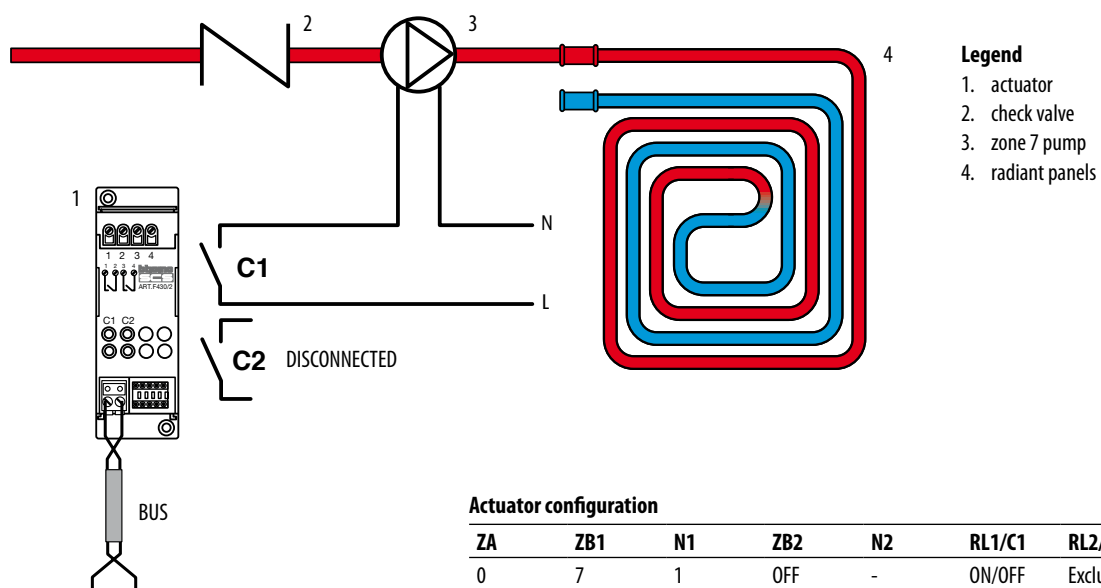
### Example 2

Configuration and connection of the 2-relay actuator, for the control of two electric radiators within the same zone (zone 4). The progressive zone numbers are 1 and 2.



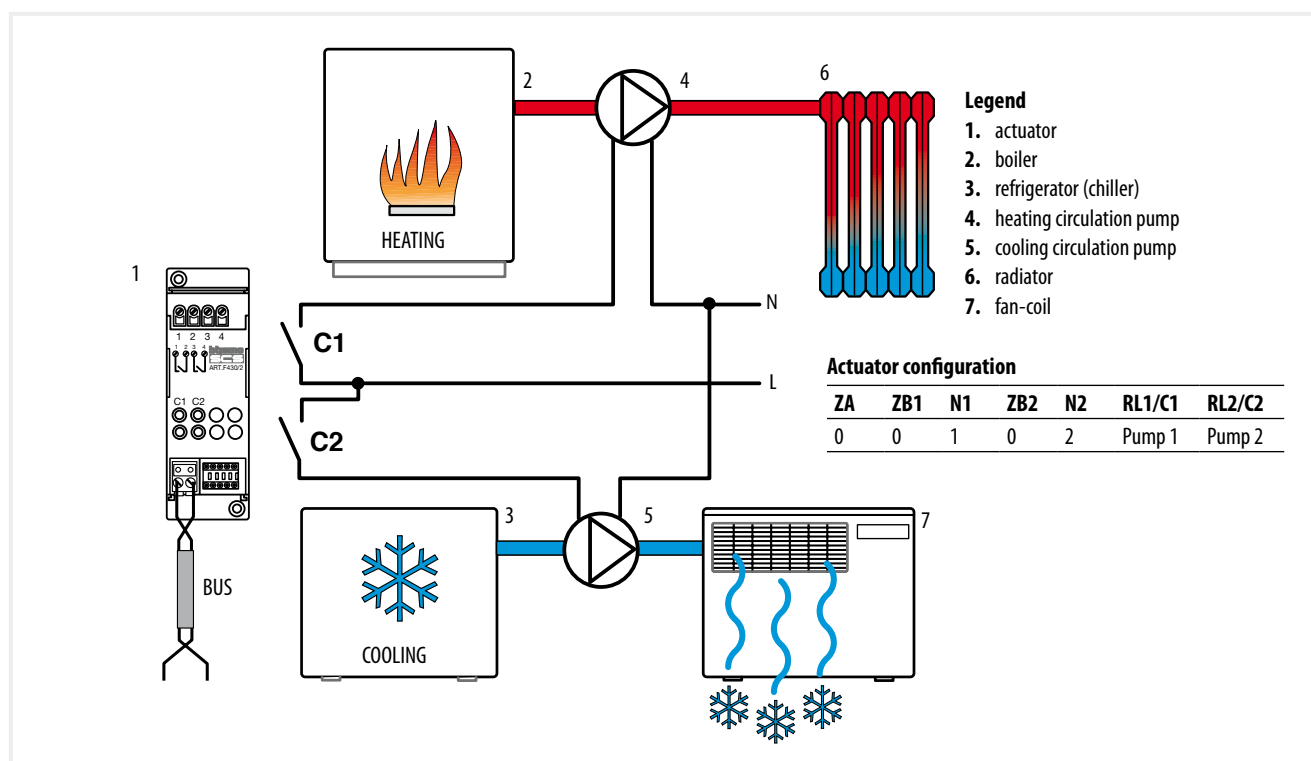
### Example 3

Configuration and connection of the 2-relay actuator, for the control of a zone pump (in zone 7). The progressive zone numbers is 1. As relay RL2 is not used, it is excluded.

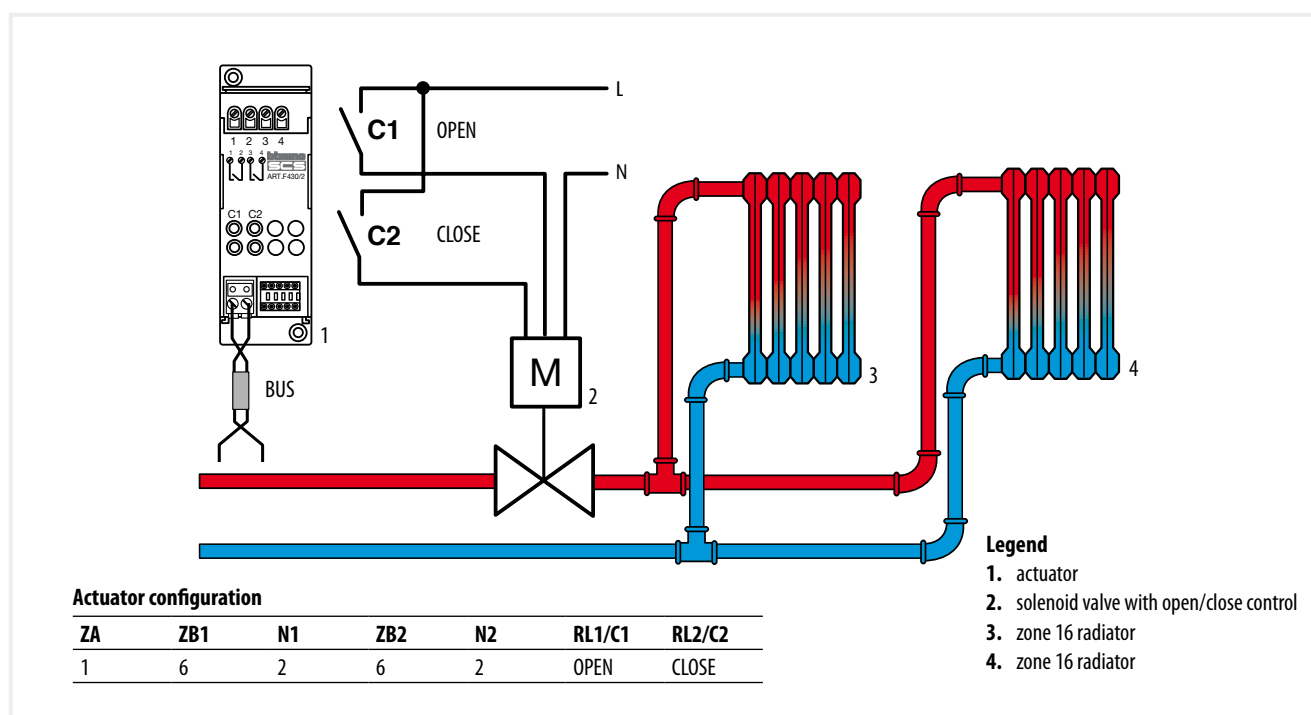


**Example 4**

Configuration and connection of the 2-relay actuator, for the control of two circulation pumps (zone 00). The progressive zone numbers are 1 and 2.

**Example 5**

Configuration and connection of the 2 interlocking relays actuator, for the control of a solenoid valve with opening and closing control in zone 16.





## Actuator 4 relays

F430/4

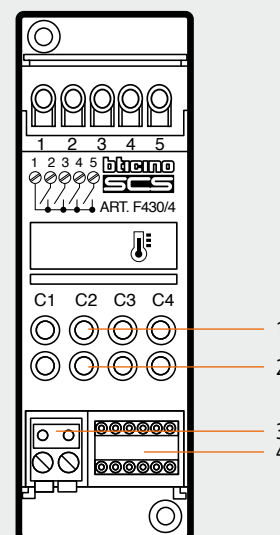
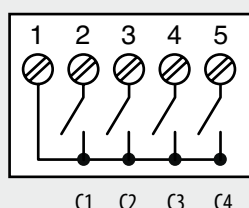
### Description

By means of internal relays, this device executes the controls received from the central unit or the probe. It is needed to control loads such as 3-speed fan-coils, motorised valves, pumps and electric radiators.

It has four relays, with independent control but common contacts, which can be used to control two distinct loads with ON/OFF function and to control a single load with open/close function.

To manage open/close loads the actuator must be configured with the logical interlock of the two relays and contacts C1/C2 respectively must be considered to open and close the first valve and contacts C3/C4 to open and close the second valve.

The contacts assume different functions when the actuator is used to control fan-coils. Contact C1 is an ON/OFF contact and controls the valve. Contacts C2, C3 and C4 control the ventilation minimum, average and maximum speed respectively. The fan speed is selected automatically depending on the difference between the temperature set by the user and the room temperature.



Front view

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Maximum absorption relays activated individually): 37.5 mA
- Absorption (relays activated with interlock or Fan Coil control): 20.5 mA
- Absorption in stand-by: 9 mA
- Current load of individual relays: 4 A (resistive) e.g. electric radiators  
1 A (inductive) e.g. solenoid valves, pumps
- Maximum power consumption: 3.2 W
- Operating temperature: 5 – 40 °C
- Size: 2 DIN modules

### Configuration

In the same way as for the 2-relay actuator, it is necessary to connect the two configurators that identify the item address, and the number of the zone the item belongs to, to the **ZA** and **ZB** sockets. A probe and an actuator belonging to the same zone will require the same numeric configurators in the **ZA** and **ZB** sockets.

On the front of the 4-relay actuator are six sockets dedicated to the configurators: **ZA**, **ZB1**, **ZB2**, **ZB3**, **ZB4**, **N**. The configuration sockets are distributed on the four relays in the following way:

**ZA ZB1** Relay 1 zone address

**ZA ZB2** Relay 2 zone address

**ZA ZB3** Relay 3 zone address

**ZA ZB4** Relay 4 zone address

**N** progressive zone number

The relays on the device are independent and may be used to activate four separate loads with ON/OFF function. Therefore, if all **ZB** configurators are different from each other, the four relays are configured to control four loads in four different zones. The diagram shows the correspondence between the configurator sockets and the contacts of the relays. The operation of one or more relays may be excluded. To do this, connect

### Legend

1. C1 clamps 1 - 2 relay forcing pushbutton  
C2 clamps 1 - 3 relay forcing pushbutton  
C3 clamps 1 - 4 relay forcing pushbutton  
C4 clamps 1 - 5 relay forcing pushbutton  
The forcing pushbuttons do not operate if the OFF configurator is connected to the ZB1, ZB2, ZB3 or the ZB4 configurator sockets.
2. Yellow LEDs for notification of activation of the corresponding relays.
3. Configurator socket.
4. Removable clamp for BUS connection SCS.

the OFF configurator to the **ZB** socket corresponding to the relay not being used. However, RL1 cannot be excluded.

The actuator may also be used to control two single loads with Open/Close function, such as, for example, solenoid valves with opening and closing control. For the management of these load it will be necessary to configure the actuator with logic relay interlocking, connecting two consecutive identical configurators in the **ZB** socket, therefore **ZB1=ZB2** and **ZB3=ZB4**. For the use of the contacts consider C1 and C2 for the opening and the closing of the first valve respectively, and contacts C3 and C4 for the opening and the closing of the second valve.

The contacts of the relays perform different functions if the actuator is used to control fan-coils. To activate this function, connect 4 identical configurators to the ZB position, therefore **ZB1=ZB2=ZB3=ZB4**.

The C1 contact is an ON/OFF type contact and controls the valve, controls C2, C3 and C4 control the minimum, medium and maximum ventilation speeds respectively.

The ventilation speed is selected automatically by the temperature control function based on the difference between the user set temperature and the room temperature. This actuator cannot be used to control the system circulation pump (configurator in zone 00), and to control separate loads belonging to the same zone.

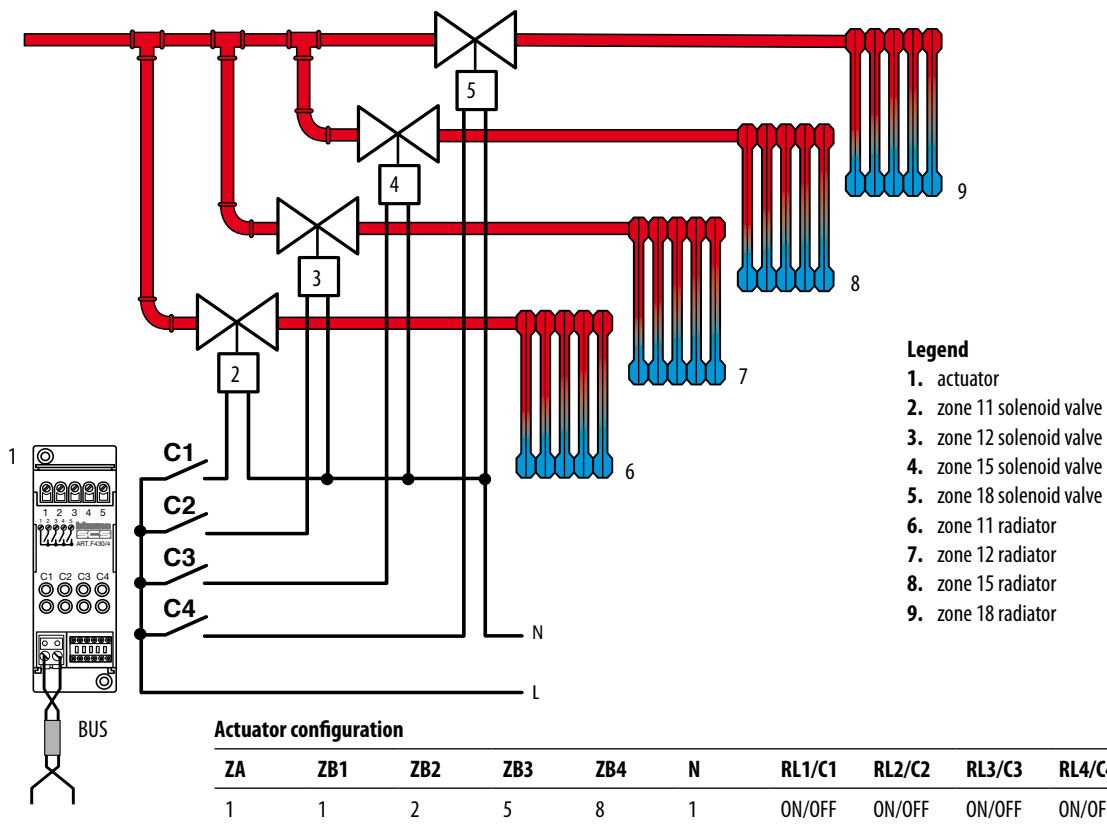
configurator	<b>ZA</b>	1	common
socket RL1	<b>ZB1</b>	2	C1 contact RL1
configurator	<b>ZA</b>	3	C2 contact RL2
socket RL2	<b>ZB2</b>	4	C3 contact RL3
configurator	<b>ZA</b>	5	C4 contact RL4
socket RL3	<b>ZB3</b>		
configurator	<b>ZA</b>		
socket RL4	<b>ZB4</b>		

Configurator summary table:

Socket	Function	Configurator
ZA	zone address	0 – 9
ZB1	zone address - ON/OFF contact management - Open/Close contact management - Fan-Coil management - OFF zone	0 – 9 – OFF
ZB2	zone address - ON/OFF contact management - Open/Close contact management - Fan-Coil management - OFF zone	0 – 9 – OFF
ZB3	zone address - ON/OFF contact management - Open/Close contact management - Fan-Coil management - OFF zone	0 – 9 – OFF
ZB4	zone address - ON/OFF contact management - Open/Close contact management - Fan-Coil management - OFF zone	0 – 9 – OFF
N	progressive zone number	1 – 9

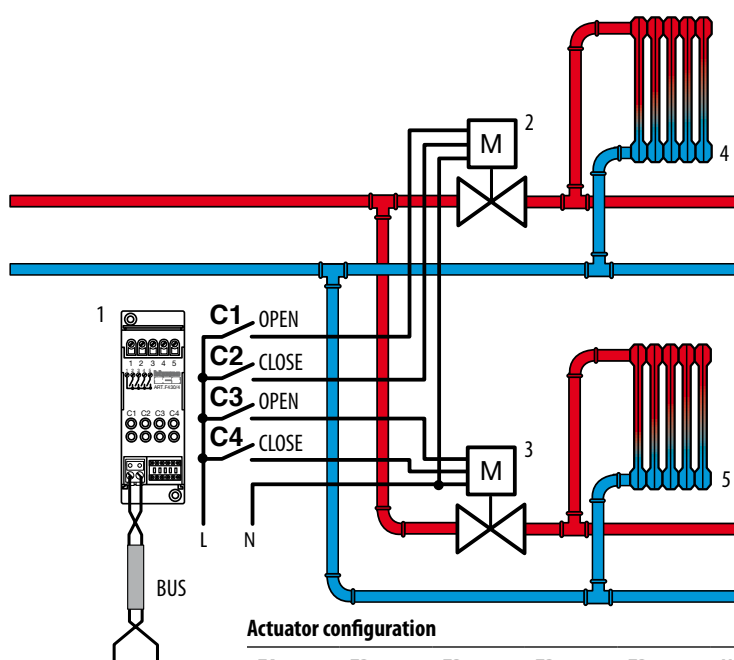
### Example 1

Configuration and connection of the 4-relay actuator, for the control of four solenoid valves (ON/OFF type) in four different zones (zone 11, zone 12, zone 15 and zone 18). The progressive zone number is 1.



### Example 2

Configuration and connection of the 4 interlocking relays actuator for the control of two solenoid valves, with opening and closing control in zones 2 and 3. The progressive zone number is 2.



#### Legend

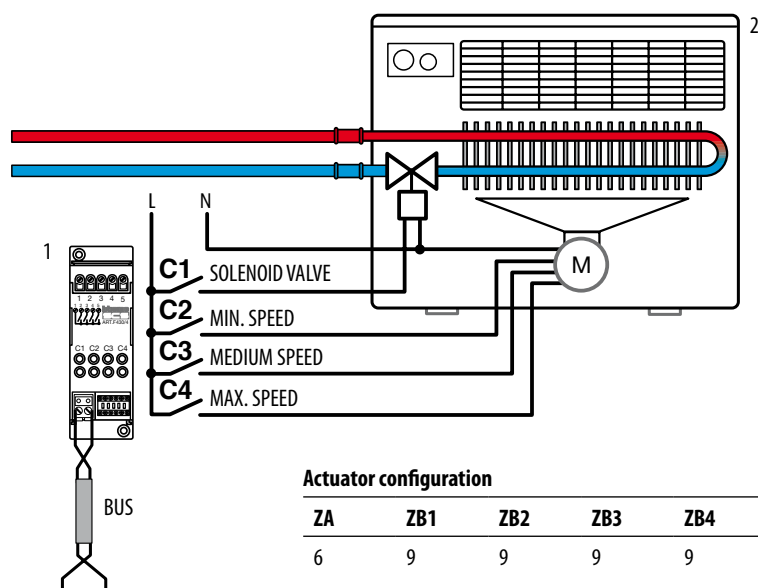
1. actuator
2. zone 2 solenoid valve
3. zone 3 solenoid valve
4. zone 2 radiator
5. zone 3 radiator

Actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
0	2	2	3	3	2	OPEN	CLOSE	OPEN	CLOSE

### Example 3

Configuration and connection of the 4-relay actuator, for the control of a 3 speed fan-coil in zone 69. The progressive zone numbers is 4.



#### Legend

1. actuator
2. 2-pipe 3-speed fan-coil

#### Note

If a fan-coil is used in a heating system, it should be ensured that the fan does not operate when the water is cold, to avoid cooling the room rather than heating it. Some fan-coils are fitted with a water temperature probe for this function. If a fan-coil without fitted sensor is used, an effective solution is to install an immersion thermostat on the water return pipe. The contact of the thermostat controls a remote switch, to which the fan-coil power supplies are connected.

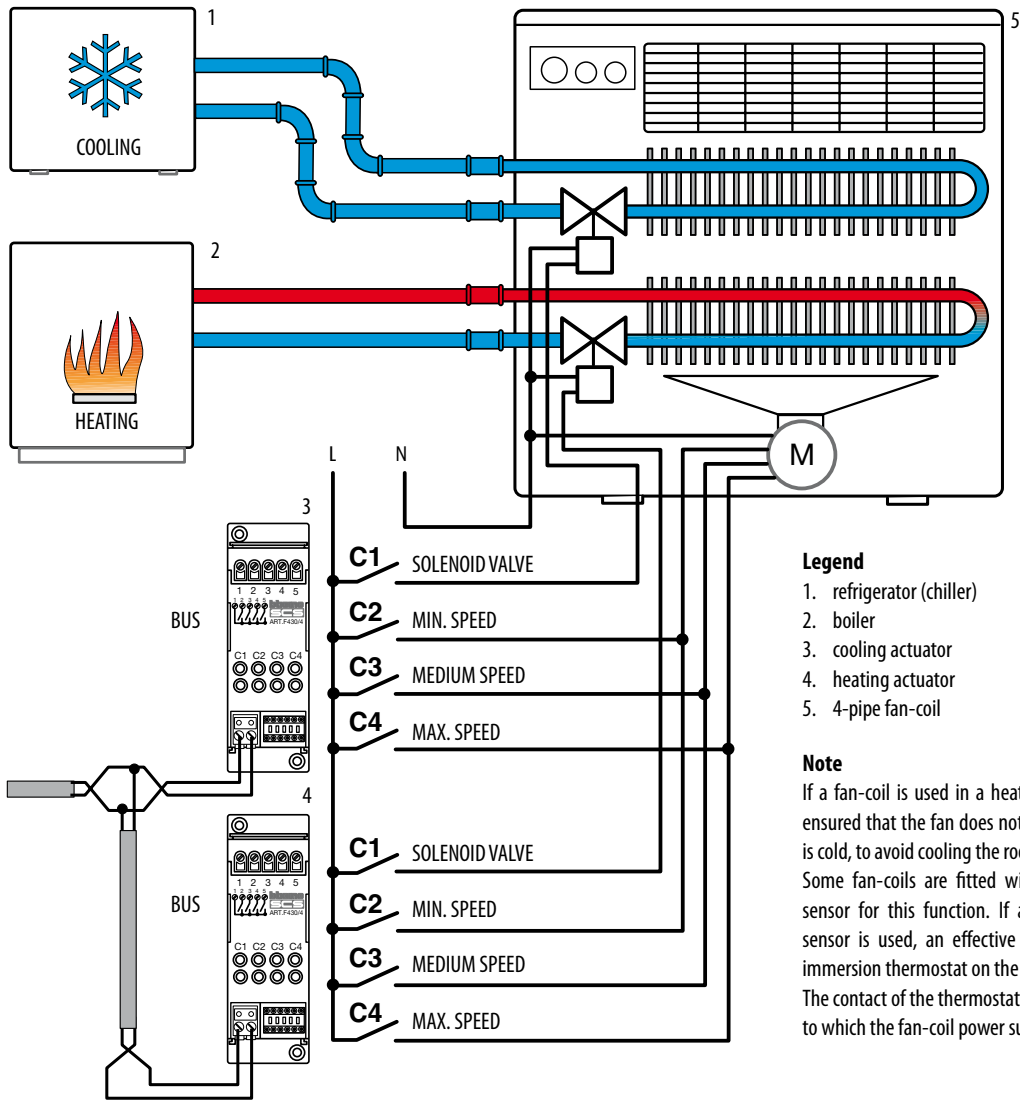
Actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
6	9	9	9	9	4	Valve	Minimum speed fan	Medium speed fan	Maximum speed fan

#### Example 4

Configuration and connection of two 4-relay actuators (one for the cooling, and one for the heating system), for the control of a 4-pipe, 3 speed fan-coil. For both actuators the corresponding zone is 28. The progressive number for the cooling actuator is 5, while for the heating actuator is 6.

The C1 contact of each actuator controls the corresponding solenoid valve, selected by the temperature control function based on the system setting (summer or winter). The C2, C3 and C4 contacts of the two actuators must be connected in parallel, to control the switching on and the speed of the ventilation system electric motor.



#### Cooling actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
2	8	8	8	8	5	Valve	Minimum speed fan	Medium speed fan	Maximum speed fan

#### Heating actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
2	8	8	8	8	6	Valve	Minimum speed fan	Medium speed fan	Maximum speed fan



## Gateway

### Description

This device represents the interface between the MY HOME Temperature control system and the Climaveneta IDRORELAX system.

The item allows the passage of the controls produced by the bus system toward the fan-coil. It is necessary to consider one for each fan-coil, thus correctly scaling the bus system as regards absorption and configuration.

As a matter of fact, the item is housed inside the fan-coil during the production phase thus it is already connected to it by means of the connector located at the top of the front side. Basically, after performing the hydraulic and electrical connection, you will only need to connect the bus using the appropriate clamp.

### Legend

1. Connector: for Climaveneta fan-coil connection
2. Configurator socket: socket for the configurators
3. Removable connector clamp for SCS BUS connection
4. LED: not used.
5. Key: not used.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Max. absorption: 18 mA
- Operating temperature: 0 – 40 °C
- Size: 2 DIN modules

### Configuration

The item is the interface that can be found on the Climaveneta Chiller and the Fan-Coil. It is necessary for the connection to the temperature control BUS. As for the actuators, also for this device it will be necessary to connect to the **ZA** and **ZB** sockets two configurators that identify the address, and the number of the zone it belongs to.

In practical terms, the operation is the same as the one performed for the probe, during the definition of the zone. A probe and a Gateway belonging to the same zone will require the same numeric configurators in the **ZA** and **ZB** sockets.

The **TYPE** socket must be configured to indicate the type of load to be managed.

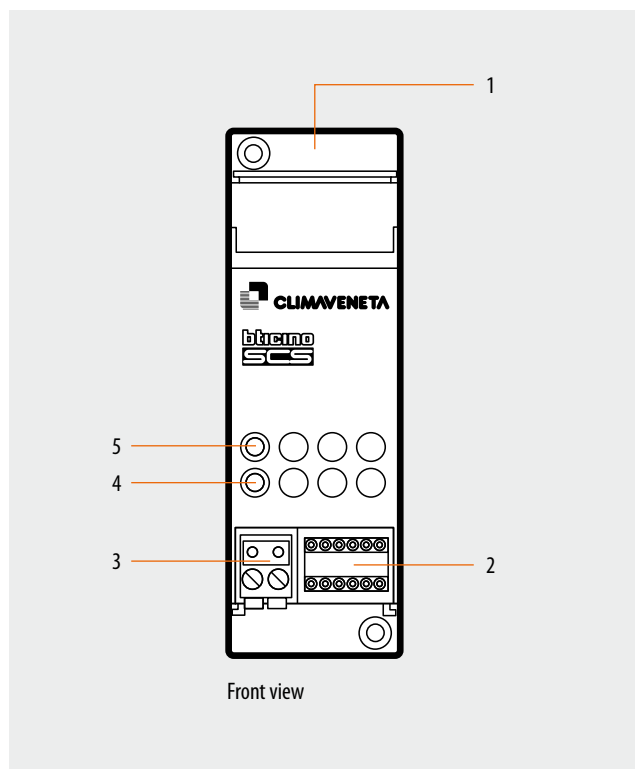
If the Gateway manages a Fan-Coil, the numeric configurator 0 must be connected to the **TYPE** socket. If it manages a Chiller, numeric configurator 1 will be required.

When the Gateway is configured for the management of the Chiller, it will be possible to read the external temperature coming from the Climaveneta Chiller.

This information may be simply displayed, or, in case the system is managed by the 99 zone central unit, item 3550, it may be used to program and activate temperature control automations.

### Configurator summary table:

Socket	Function	Configurator
ZA	Zone address	0 – 9
ZB	Zone address	0 – 9
N	Progressive zone number	1 – 9
TYPE	Fan-Coil management	0
	Chiller management	1



Depending on needs, temperature control automations may activate certain actions with certain temperature conditions. For example, in case thresholds that may be manually set are exceeded, the temperature control system may automatically switch the settings from summer to winter, and vice versa. On the front of the interface are four sockets dedicated to the configurators:

- ZA ZB** zone address  
**N** progressive zone number  
**TYPE** type of load to control (Fan-Coil or Chiller)

**NOTE:** Gateway is a Climaveneta product that can already be found on fan-coils. For further information and for the technical documentation of the Climaveneta IDRORELAX system, contact the **Customer Service Toll Free number 800.019.190** (8.30-12.30 and 14.00-18.00 Monday to Friday - calls are free of charge).



# Radio interface for outdoor temperature probes

HD4577 - HC4577 - HS4577  
L4577 - N4577 - NT4577

## Description

The radio interface is indispensable to receive the temperature data transmitted by the radio probe. Up to two probes can be associated with each interface thus giving the system two measuring points for each interface. Up to nine temperature probes can be installed in a system.

Both the interface and the communication probe use radio waves with a frequency of 868 MHz. The maximum distance of communication between the receiving interface and the temperature sensor is 70 m in free air. This distance is less if there are walls in cement, metal or other material between the devices.

## Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Max. absorption: 33 mA
- Operating temperature: 0 – 40 °C
- Radio frequency: 868 MHz
- Range: 70 m in free field (metal walls and surround plates and reinforced concrete walls reduce the range);
- Size: 2 flush mounted modules

## Configuration

In order to use a receiving interface and radio probe, configuration must first be performed, followed by the programming procedure. Only the interface needs configuring. Up to 2 probes may be combined with each interface, therefore providing the system with two detection points for each interface. Up to a maximum of 9 temperature sensors may be installed in one system.

The configuration sockets on the interface identify the radio probes address.

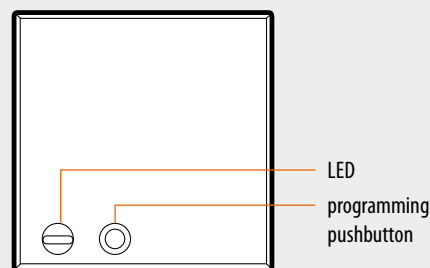
They are: A1/-, PL1/N1, M1 for the first address, and A2/-, PL2/N2, M2 for the second address. The two addresses must always be different from each other, PL1/N1  $\neq$  PL2/N2. Only one radio probe may be associated to each address. Only used addresses must be configured.

**The interface must be configured in temperature control mode by connecting configurator 1 to M1 and M2.** With this mode the A1/- and A2/- sockets are not used, therefore no configurator needs to be connected.

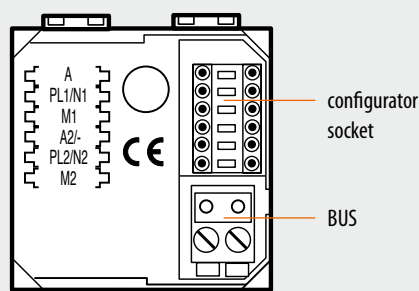
Programming of devices:

After performing the configuration, it will be necessary to associate The radio probe to the interface following the programming procedure below:

- 1) Press the pin pushbutton of the interface for 5 seconds. The red LED turns on. Release the pushbutton. The interface LED will flash every two seconds to confirm that programming mode is active on the first address (group of configurators PL1/N1, M1). If the second address of the interface is not configured (no configurator is connected to the PL2/N2, M2 positions), go to step 2 of the procedure. However, if also the second address must be configured (group of configurators PL2/N2, M2), simply press the pin pushbutton of the interface again. The LED will flash twice in succession every two seconds. Every time the pin pushbutton is pressed, the system will switch from the first to the second address and vice versa.
- 2) After choosing the address the radio probe should be associated to, within 20 seconds press the transmission key of the probe itself. Pressing the transmission key will send the probe serial code. After receiving the code through the radio signal, the red LED of the interface will quickly flash for 2 seconds, confirming that programming is complete, and the procedure has been terminated.



Front view



Rear view

If necessary repeat the operation, to save the code of another probe. If on the other hand an address has already been associated and the procedure is repeated with another probe, the interface performs an overwriting action, only keeping the last probe in the memory. During normal operation, the sending of information from the probe is confirmed by the flashing of the red LED of the interface. A single flashing indicates that the radio message has been received, and the "temperature" data has been sent through the BUS by a probe associated to the **PL1/N1, M1** address. A double flashing indicates that the radio message has been received, and the "temperature" data has been sent through the BUS by a probe associated to the **PL2/N2, M2** address. To delete all codes from the interface press the pin pushbutton for 12 seconds. After 5 seconds from pressing the key, the LED will turn on steadily, and after a further 7 seconds, it will start flashing quickly, confirming that all programs have been deleted.

## NOTES:

- If the interface configuration is wrong, the red LED will flash. Correct the configuration.
- If the second interface address has not been configured (no configurator connected to the **PL2/N2, M2** sockets), during the programming procedure it will not be possible to switch to this address, which therefore cannot be programmed.



## Probe with selector

HD4692 - HC4692 - HS4692 - L4692  
N4692 - NT4692 - AM5872

### Description

The device can adjust the room temperature in both winter and summer, varying the settings locally with respect to those received from the central unit.

The item has a knob for the local temperature selection (limited to  $\pm 3^{\circ}\text{C}$  with respect to the value set by the central unit), the antifrost mode and the OFF mode. There are two LED, one green and one yellow, on the front of the item. The green LED indicates that the device is working correctly and the activation of the antifrost mode and OFF of the corresponding area. The yellow LED indicates the actuator state and any faults.

### OFF mode

This mode has the maximum priority, whether selected by the probe or set by the central unit; to quit the OFF mode use the device which set it.

### Antifrost/thermal protection mode

In this position if the Temperature control system is set as heating the probe works in antifrost mode; if it is set as cooling it works as thermal protection. The probe can also work in collaboration with other probes in "master" configuration to allow the Central unit to calculate an average of the temperature over several measuring points. This function is useful for managing very large rooms, inside which the temperature can vary appreciably.

If there is a fault on the central unit, the probe works with the last settings received, thus continuously maintaining the last temperature determined with summer or winter setting.

If the probe selects the OFF mode this has priority even if the central unit is faulty, thus the zone controlled by the probe will remain OFF.

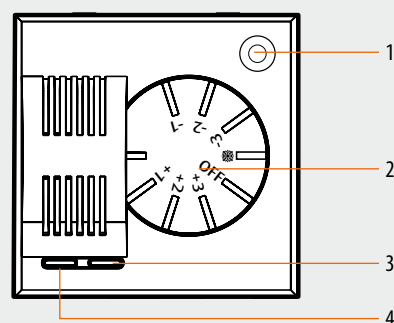
The probe can be used to control a zone with up to 9 actuators of the same type, and 8 slave probes (4693).

### Legend

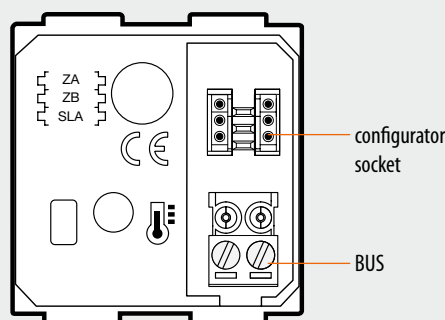
1. Key in the low position to enable virtual configuration
2. Knob: for manual temperature setting ( $\pm 3^{\circ}\text{C}$ ), to select the antifrost/thermal protection (☼) mode and the OFF state (forced zone off).
3. Yellow LED: when it shines steadily or it is OFF it signals the state of the devices in the corresponding zone, when it flashes it signals a fault.
4. Green LED: when it shines steadily it indicates that the device is active, when it flashes it indicates that the OFF or antifrost modes are set locally.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS cable: 18–27 Vdc
- Absorption: 6 mA
- Operating temperature: 0 – 40°C
- Size: 2 modules
- Installation height: 1500 mm from the floor



Front view



Rear view

**NOTE:** compared with the previous version, the P, MOD and DEL configurator sockets have been removed.

## Configuration

The probe must always be configured by connecting two configurators to the ZA and ZB sockets, which identify the device address, and the number of the zone controlled

by the probe itself. The actuators controlled by the probes must be configured with the same zone address.

Socket	Function	Configurators
<b>ZA</b>	zone address	0 – 9
<b>ZB</b>	zone address	0 – 9
<b>SLA</b>	Master/Slave mode	0 – 8

The probe can be configured remotely with "Virtual Configuration". When no physical configurators are available, a PC with Virtual Configurator software version 2.1 must be used.

## Programming

Using the "Configure zones" item of the "Maintenance" menu of the temperature control system central unit, it will be possible to define if the zone should manage a heating system, a cooling system, or a combined one. Using the same menu item, also select the

type of load to control, among the following: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

## Master and Slave probe

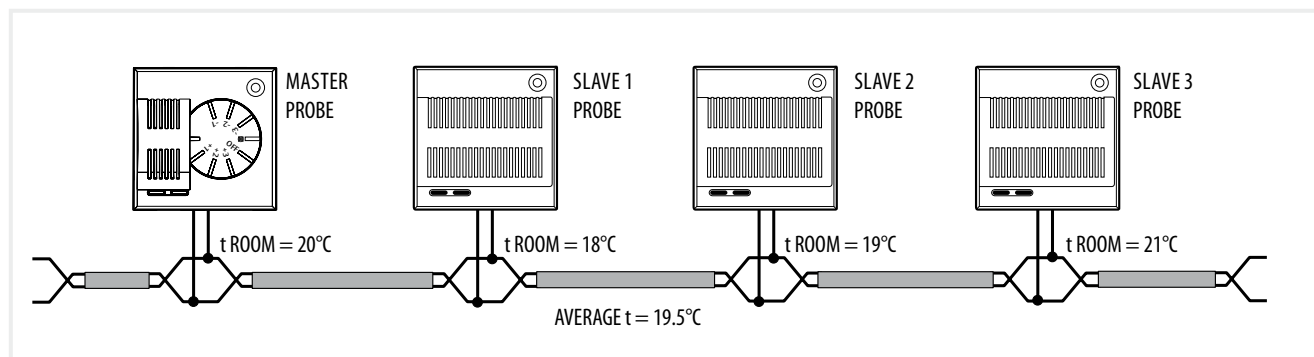
A probe can operate in conjunction with other probes so that an average temperature calculation can be performed, based on measurements taken from several points within the same zone. This function is useful for the management of very large areas, throughout which the temperature may change consistently. To activate this function, one probe must be configured as "Master", and one or more probes must be configured as "Slave" (max 8). The Master probe calculates the average between its own temperature, and the temperatures measured by the Slave probes, and then performs the appropriate operations. Configure the Master probe by connecting to the SLA socket a numeric configurator indicating the

number of Slave probes within the zone (8 max). To configure a Slave probe, connect the configurator marked as SLA to the MOD socket. Use the SLA socket to progressively assign a number to all Slave probes of the zone. During this numbering procedure, it is essential to start from no. 1, and that the sequence is respected, without missing any numbers. **The HC/HS/L/N/NT4692 and AM5872 probe can only operate as "MASTER" probes. Therefore only the probe without knob, item 4693, may be used as a "SLAVE" probe.**

## Example of configuration of a zone (address 47), with one Master, and three Slave probes.

To define the probes as belonging to ZONE 47, connect configurators 4 and 7 to the ZA and ZB sockets of the 4 devices. The SLA configurator must be connected to the MOD sockets of the three Slave probes (definition of Slave probes).

Connect configurator no. 3 to the SLA socket of the Master probe (there are three Slave probes inside the zone); Connect configurators no. 1, 2, and 3 to the SLA sockets of the three Slave probes respectively (progressive number of the probe within the zone).



Master probe (HC/HS/L/N/NT4692 and AM5872)		Slave 1 probe (HC/HS/L/N/NT4693)		Slave 2 probe (HC/HS/L/N/NT4693)		Slave 3 probe (HC/HS/L/N/NT4693)	
Socket	Configurators	Socket	Configurators	Socket	Configurators	Socket	Configurators
<b>ZA</b>	4	<b>ZA</b>	4	<b>ZA</b>	4	<b>ZA</b>	4
<b>ZB</b>	7	<b>ZB</b>	7	<b>ZB</b>	7	<b>ZB</b>	7
<b>SLA</b>	3	<b>SLA</b>	1	<b>SLA</b>	2	<b>SLA</b>	3
		<b>MOD</b>	SLA	<b>MOD</b>	SLA	<b>MOD</b>	SLA

HD4692 - HC4692 - HS4692 - L4692  
N4692 - NT4692 - AM5872

### Circulation pump

In addition to controlling the zone valves, for some types of systems it will also be necessary to control one or more water circulation pumps. When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the central unit through the "Pump" item; inside the "Maintenance" menu, select the zones that must be served by a circulation pump. Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supplies them. To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups. If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves. In the following cases, pump control is not necessary:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in systems where the pump has simply not been installed (for example for air conditioning units or electric heating control).

### Pump switch-on delay

If necessary, it is also possible to set the circulation pump to activate after a certain time delay, in relation to the opening of the zone valves. This selection depends on the type of valve installed, and enables the pump to only activate once the valve is fully open. If a time delay of 4 minutes is set, after closing the relay controlling the opening of the zone valve, the probe will wait 4 minutes before switching the pump on. A maximum delay of 9 minutes can be set, depending on the time needed for the valve to open. For the opening times refer to the official technical specifications issued by the solenoid valve manufacturer.

### Probe calibration

Probes don't normally require calibration; however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.

Before performing the calibration operation, ensure the following:

- leave the probes connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near them;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

**Note:** For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.



## Fan-coil probe with selector

HD4692FAN - HC4692FAN - HS4692FAN  
L4692FAN - N4692FAN - NT4692FAN

### Description

The device can adjust the room temperature in both winter and summer, varying the settings locally with respect to those received from the central unit.

The item has a knob for the local temperature selection (limited to  $\pm 3^\circ\text{C}$  with respect to the value set by the central unit), the antifrost mode and the OFF mode. There are two LED, one green and one yellow, on the front of the item. The green LED indicates that the device is working correctly and the activation of the antifrost mode and OFF of the corresponding area. The yellow LED indicates the actuator state and any faults.

### OFF mode

This mode has the maximum priority, whether selected by the probe or set by the central unit; to quit the OFF mode use the device which set it.

### Antifrost/thermal protection mode

In this position if the Temperature control system is set as heating the probe works in antifrost mode; if it is set as cooling it works as thermal protection. The probe can also work in collaboration with other probes in "master" configuration to allow the Central unit to calculate an average of the temperature over several measuring points.

This function is useful for managing very large rooms, inside which the temperature can vary appreciably.

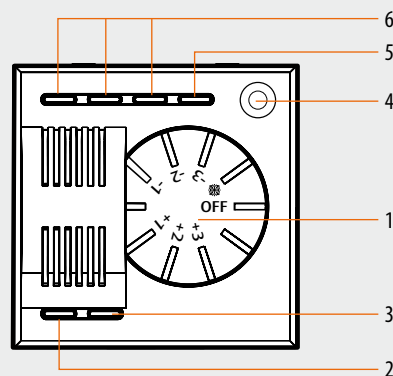
If there is a fault on the central unit, the probe works with the last settings received, thus continuously maintaining the last temperature determined with summer or winter setting.

If the probe selects the OFF mode this has priority even if the central unit is faulty, thus the zone controlled by the probe will remain OFF.

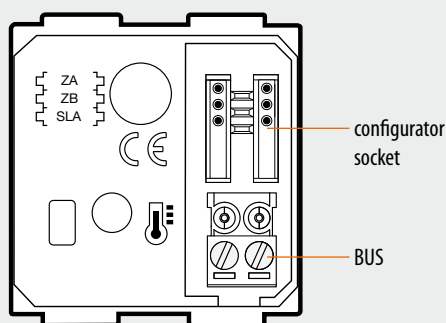
The probe can be used to control a zone with up to 9 actuators of the same type, and 8 slave probes (4693).

### Legend

1. Knob: for manual temperature setting ( $\pm 3^\circ\text{C}$ ), to select the antifrost/thermal protection (☼) mode and the OFF state (forced zone off).
2. Green LED: when it shines steadily it indicates that the device is active, when it flashes it indicates that the OFF or antifrost modes are set locally.
3. Yellow LED: when it shines steadily or it is OFF it signals the state of the devices in the corresponding zone, when it flashes it signals a fault.
4. Key used to enable virtual configuration, and for the switching of the mode and speed of the fan-coil. Use this key to select between "Automatic" (fan speed managed by the probe) and "Manual" (fan speed selected among minimum, medium, and maximum) mode.
5. Red LED: when on, it indicates that "Automatic" mode is active, when off, it indicates that "Manual" mode is active.
6. Red LEDs: they indicate the fan speed settings: from left to right, the speeds are: minimum, medium, maximum.



Front view



Rear view

## HD4692FAN - HC4692FAN - HS4692FAN L4692FAN - N4692FAN - NT4692FAN

### Configuration

This probe has been specifically designed to manage 3-speed fan-coils and Climaveneta fan-coils. The probe only has 3 configurator sockets: ZA, ZB, SLA. The ZA and ZB sockets must always be used for the configuration operations, connecting two configurators,

identifying the address of the device, and the number of the zone controlled by the probe itself.

The actuators controlled by the probes must be configured with the same zone address.

Socket	Function	Configurators
<b>ZA</b>	zone address	0 – 9
<b>ZB</b>	zone address	0 – 9
<b>SLA</b>	Master mode	0 – 8

The probe can be configured remotely with "Virtual Configuration".

When no physical configurators are available, a PC with Virtual Configurator software version 2.1 must be used.

### Programming

Using the "Configure zones" item of the "Maintenance" menu of the temperature control system central unit, it will be possible to define if the zone should manage a heating system, a cooling system, or a combined one.

Using the same menu item, also select the type of load to control, among the following: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL and GATEWAY. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

### Master and Slave probe

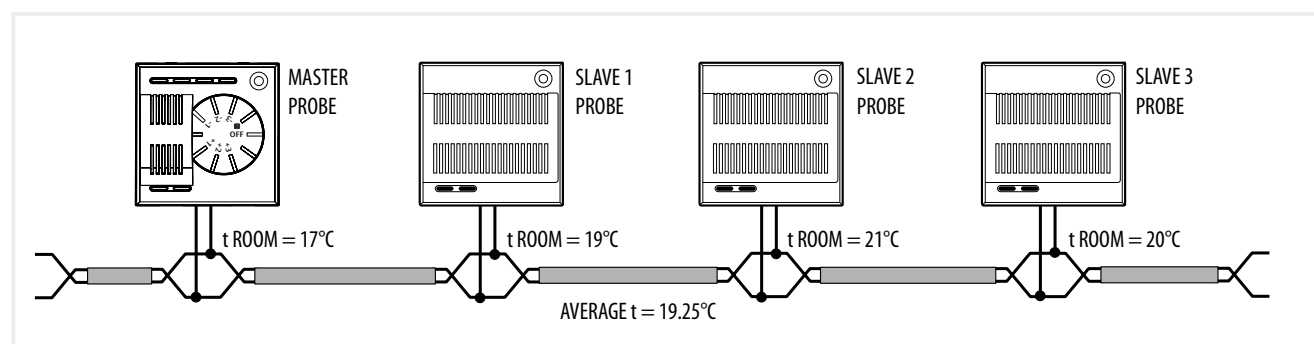
A probe can operate in conjunction with other probes so that an average temperature calculation can be performed, based on measurements taken from several points within the same zone. This function is useful for the management of very large areas, throughout which the temperature may change consistently. To activate this function, one probe must be configured as "Master", and one or more probes must be configured as "Slave" (max 8). The Master probe calculates the average between its own temperature, and the temperatures measured by the Slave probes, and then performs the appropriate

operations. The 4692FAN probe can only operate as Master. Therefore only probe 4693 may be used as Slave. To configure the Master probe, in addition to the zone address, it will be sufficient to connect to the SLA socket a numeric configurator indicating the number of Slave probes installed within the zone (max 8). To configure a Slave probe, connect the configurator marked as SLA to the MOD socket. Use the SLA socket to progressively assign a number to all Slave probes of the zone. During this numbering procedure, it is essential to start from no. 1, and that the sequence is respected, without missing any numbers.

### Example of configuration of a zone (address 59), with one Master, and three Slave probes.

To define the probes as belonging to zone 59, connect configurators 5 and 9 to the ZA and ZB sockets of the 4 devices. Connect configurator no. 3 to the SLA socket of the Master probe (there are three Slave probes inside the zone). The SLA configurator must

be connected to the MOD sockets of the three Slave probes (definition of Slave probes). Connect configurators no. 1, 2, and 3 respectively to the SLA socket of the three Slave probes (progressive number of the probe within the zone).



Master Probe (HC/HS/L/N/NT4692FAN)		Slave 1 probe (HC/HS/L/N/NT4693)		Slave 2 probe (HC/HS/L/N/NT4693)		Slave 3 probe (HC/HS/L/N/NT4693)	
Socket	Configurators	Socket	Configurators	Socket	Configurators	Socket	Configurators
<b>ZA</b>	5	<b>ZA</b>	5	<b>ZA</b>	5	<b>ZA</b>	5
<b>ZB</b>	9	<b>ZB</b>	9	<b>ZB</b>	9	<b>ZB</b>	9
<b>SLA</b>	3	<b>MOD</b>	SLA	<b>MOD</b>	SLA	<b>MOD</b>	SLA
		<b>SLA</b>	1	<b>SLA</b>	2	<b>SLA</b>	3

### Circulation pump

When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the temperature central unit. Through the "Pump" item, inside the "Maintenance" menu, select the zones that must be served by a circulation pump. Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supplies them. To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups. If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves.

In the following cases, pump control is not necessary:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in systems where the pump has simply not been installed (for example for air conditioning units or electric heating control).

### Probe calibration

Probes don't normally require calibration; however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.

Before performing the calibration operation, ensure the following:

- leave the probes connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near them;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

**Note:** For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.



## Probe without selector

HD4693 - HC4693 - HS4693  
L4693 - N4693 - NT4693

### Description

The device can be used to control the room temperature, based on daily rhythms, both in winter and in summer. On the front of the device are a green and a yellow LED. The green led indicates that the device is working correctly.

The yellow LED indicates the status of the actuators, and any possible fault on the same. The front of the item does not have any controls. This makes the device ideal for installation in public places, so that any improper intervention may be prevented. The anti-freeze/thermal protection and OFF modes can only be selected from the central unit.

### OFF mode

Set this mode to turn the corresponding zone off.

### Antifrost/thermal protection mode

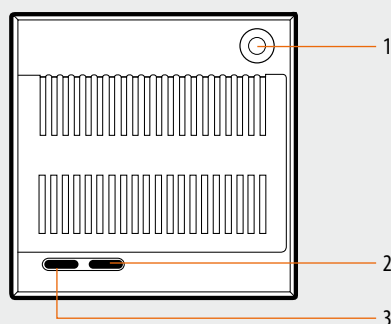
By selecting this mode, if the temperature control system is set for heating, the probe operates in anti-freeze mode. If the system is set for cooling, the probe operates in thermal protection mode. The probe can also operate together with other probes of the same type in "slave" or "master" configuration, to enable the central unit to calculate an average of the temperatures taken from several detection points. This function is useful for the management of very large areas, throughout which the temperature may change consistently. In case of central unit fault, the probe will continue to work implementing the last settings received, and therefore the last temperature set in the summer or winter programs. However, the OFF mode also has priority in case of central unit fault. Therefore, in this case the zone controlled by the probe will stay off. The probe can be used to control a zone with up to 9 actuators and 8 slave probes of the same type.

### Legend

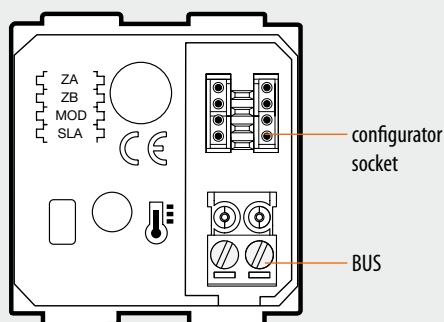
1. Key in the low position to enable virtual configuration
2. Yellow LED: when it shines steadily or it is OFF it signals the state of the actuators in the corresponding zone, when it flashes it signals a fault.
3. Green LED: when it shines steadily it indicates that the device is active.

### Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Absorption: 6 mA
- Operating temperature: 0 – 40 °C
- Size: 2 modules
- Installation height: 1500 m from the floor



Front view



Rear view

**NOTE:** compared with the previous version, the P and DEL configurator sockets have been removed.

## Configuration

The probe must always be configured by connecting two configurators to the ZA and ZB sockets, which identify the device address, and the number of the zone controlled

by the probe itself. The actuators controlled by the probes must be configured with the same zone address.

Socket	Function	Configurators
<b>ZA</b>	zone address	0 – 9
<b>ZB</b>	zone address	0 – 9
<b>MOD</b>	Master/Slave mode	0 - SLA
<b>SLA</b>	Master/Slave mode	0 – 8

The probe can be configured remotely with "Virtual Configuration". When no physical configurators are available, a PC with Virtual Configurator software version 2.1 must be used.

## Programming

Using the "Configure zones" item of the "Maintenance menu" of the temperature control system central unit, it will be possible to define if the zone should manage a heating system, a cooling system, or a combined one.

Using the same menu item, also select the type of load to control, among the following: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

## Master and Slave probe

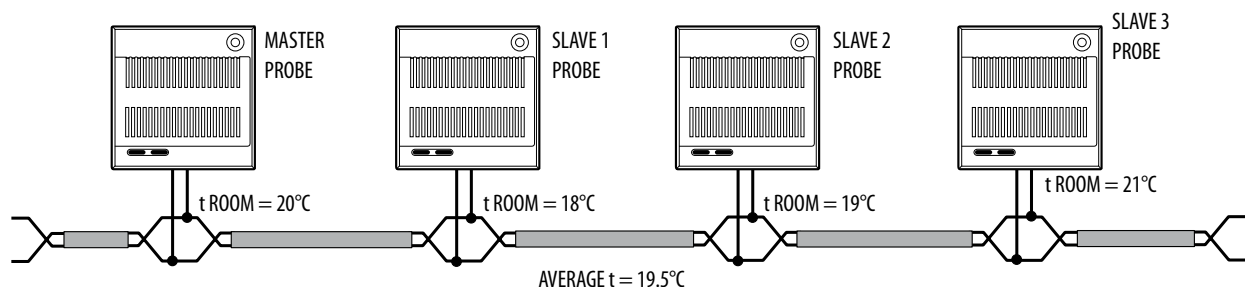
A probe can operate in conjunction with other probes so that an average temperature calculation can be performed, based on measurements taken from several points within the same zone. This function is useful for the management of very large areas, throughout which the temperature may change consistently. To activate this function, one probe must be configured as "Master", and one or more probes must be configured as "Slave" (max 8). The Master probe calculates the average between its own temperature, and the temperatures measured by the Slave probes, and then performs the appropriate

operations. The 4693 probe can operate as Master if configurator 0 is connected to the MOD socket, and a configurator indicating the number of SLAVE probes present inside the zone (max 8) is connected to the SLA socket. The same probe can operate as Slave if a configurator marked as SLA is connected to the MOD socket, and a configurator with the progressive SLAVE probe number within the ZONE is connected to the SLA socket. During this numbering procedure, it is essential to start from no. 1, and that the sequence is respected, without missing any numbers.

## Example of configuration of a zone (address 47), with one Master, and three Slave probes.

To define the probes as belonging to ZONE 47, connect configurators 4 and 7 to the ZA and ZB sockets of the 4 devices. Connect configurator no. 0 to the MOD socket of the Master probe. The SLA configurator must be connected to the MOD socket of the three Slave probes (definition of Slave probes). Connect configurator no. 3 to the SLA socket of

the Master probe (there are three Slave probes inside the zone); connect configurators no. 1, 2, and 3 to the SLA socket of the three Slave probes respectively (progressive number of the probe within the zone).



Master Probe (HC/HS/L/N/NT4693)		Slave 1 probe (HC/HS/L/N/NT4693)		Slave 2 probe (HC/HS/L/N/NT4693)		Slave 3 probe (HC/HS/L/N/NT4693)	
Socket	Configurators	Socket	Configurators	Socket	Configurators	Socket	Configurators
<b>ZA</b>	4	<b>ZA</b>	4	<b>ZA</b>	4	<b>ZA</b>	4
<b>ZB</b>	7	<b>ZB</b>	7	<b>ZB</b>	7	<b>ZB</b>	7
<b>MOD</b>	0	<b>MOD</b>	SLA	<b>MOD</b>	SLA	<b>MOD</b>	SLA
<b>SLA</b>	3	<b>SLA</b>	1	<b>SLA</b>	2	<b>SLA</b>	3

HD4693 - HC4693 - HS4693  
L4693 - N4693 - NT4693

### Circulation pump

In addition to controlling the zone valves, for some types of systems it will also be necessary to control one or more water circulation pumps. When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the central unit through the "Pump" item; inside the "Maintenance" menu, select the zones that must be served by a circulation pump. Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supplies them. To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups. If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves. In the following cases, pump control is not necessary:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in systems where the pump has simply not been installed (for example for air conditioning units or electric heating control).

### Probe calibration

Probes don't normally require calibration; however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.

Before performing the calibration operation, ensure the following:

- leave the probes connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near them;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

**Note:** For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.

### Pump switch-on delay

If necessary, it is also possible set the circulation pump to activate after a certain time delay, in relation to the opening of the zone valves. This selection depends on the type of valve installed, and enables the pump to only activate once the valve is fully open. If a time delay of 4 minutes is set, after closing the relay controlling the opening of the zone valve, the probe will wait 4 minutes before switching the pump on. A maximum delay of 9 minutes can be set, depending on the time needed for the valve to open. For the opening times refer to the official technical specifications issued by the solenoid valve manufacturer.

**NOTE:** for details of the programming operations to be performed from the central unit refer to the installation manual supplied with the central unit itself.



## 4-zone central unit

HD4695 - HC4695 - HS4695 - L4695  
N4695 - NT4695 - AM5875

### Description

This central unit can manage MY HOME temperature control systems with up to 4 zones, with a maximum of 9 circulation pumps. It can control heating or cooling systems and can set the system and modify the system operating mode.

The central unit is made up mechanically of two parts: a base to fasten on the supporting frame for wall mounted boxes to which the bus is connected and a removable front cover for easy programming with the settings required. The device communicates with and is supplied by the bus, while the two AA batteries supply power when the removable part is not inserted in the supporting frame. The central unit has a probe which already represents a system zone and the configuration sockets are in fact on the back part. Another three probes can be connected to reach the absolute number of zones which the system can manage in this case (a maximum of 4 zones in total). Coming with management software with guided menu shown on the display, it lets the user select the operating mode, display the temperatures of the various zones and display and modify the daily temperature profiles and the weekly programs; the maintenance menu, reserved to the installer and code protected, allows access to the system settings (zone configuration, system test, total reset, etc.).

The temperature central unit has a graphic display with blue back-lighting in the AXOLUTE series and green back-lighting in the LIVING, LIGHT, LIGHT TECH and Matic series. By means of the six keys on the device front cover all the functions can be used interacting with the various menu items. The complete programming of the central unit by PC can be activated through the serial connector and the TiThermo BASIC software.

### Legend

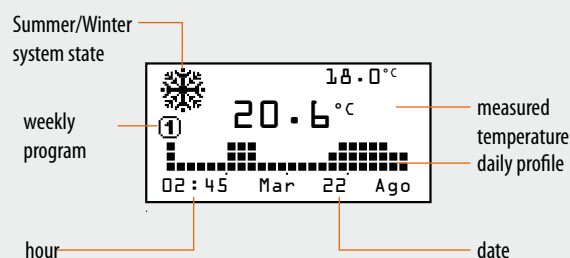
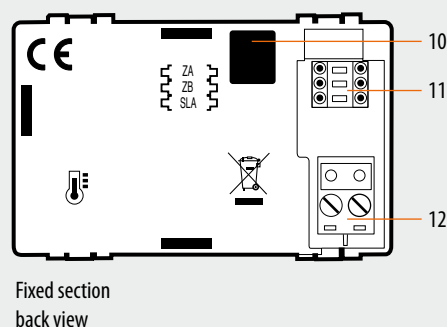
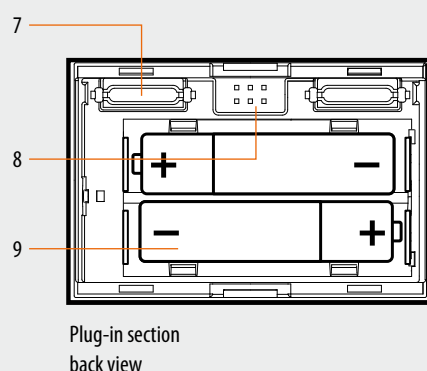
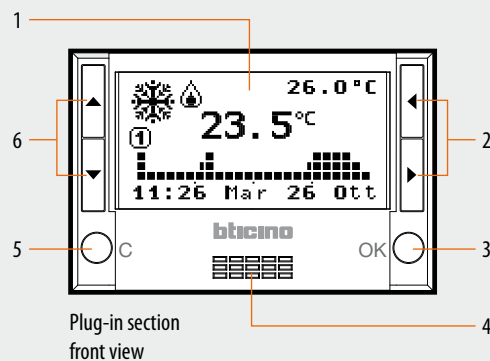
1. Graphic display: displays the system state and guides the programming operations.
2. Selection keys: can set the operating mode and select the functions.
3. OK key: to access the main menu or confirm the selection displayed.
4. Sensor: to measure the room temperature.
5. C key: to cancel the selection.
6. Scroll keys: to modify the temperature using the main screen; to scroll the menu items.
7. Connector: connection to the electronics in the back base.
8. Serial connector: for connection to the PC and use of TiThermo BASIC.
9. Battery compartment: socket for 2 AA 1.5V batteries.
10. Screw: to block central unit extraction.
11. Configurator socket: socket of the configurators for the combined probe.
12. BUS: connection for cable bus.

### Technical data

- Power supply from SCS BUS: 27 Vdc and 3 Vdc (2 AAA type, 1.5 V batteries)
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Absorption: 30 mA with the light on
- Absorption: 8.5 mA with the light off
- Operating temperature: 0 – 35 °C
- Size: 2 modules
- Installation height: 1500 m from the floor

### Graphic display

During normal operation the central unit graphic display shows the system basic information, while the screen light stays off. When a key is pressed, the display illuminates and the central unit is ready to implement any instructions entered by the user.



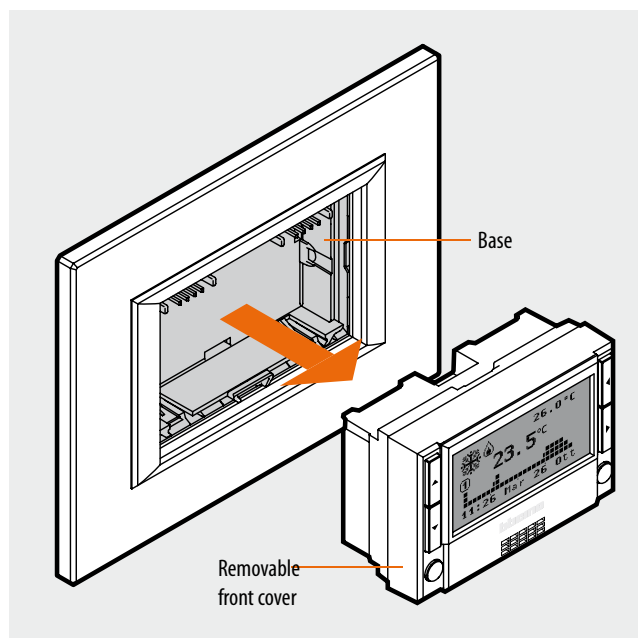
## HD4695 - HC4695 - HS4695 - L4695 N4695 - NT4695 - AM5875

### Removable system

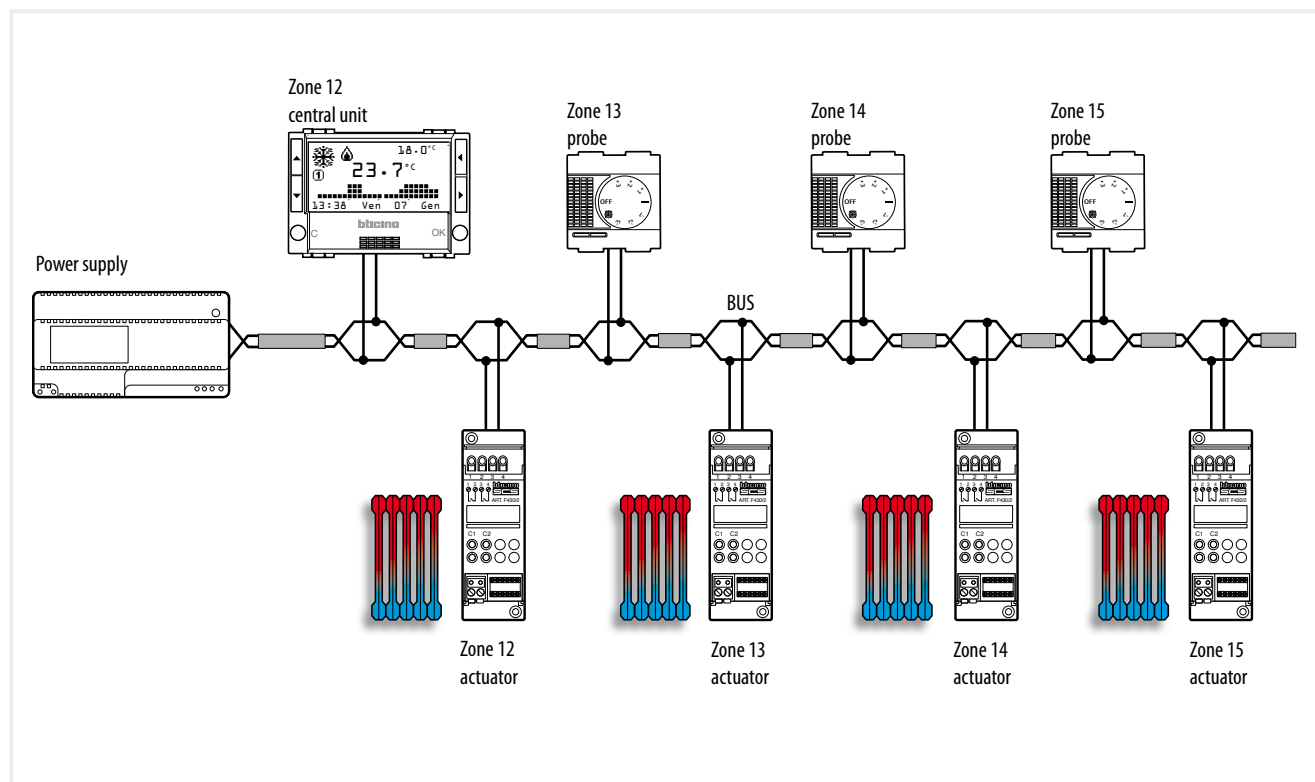
The central unit is made up of a base for the connection to the system bus cable and a removable front cover with batteries. The system so formed lets the user perform the programming operations and replace the batteries easily.

### Configuration

Differently from the 99 zone version, the 4 zone flush mounted central unit must be configured. This central unit is fitted with an integrated temperature probe, and therefore it must be configured. The configuration sockets on the back of the central unit are in fact intended and reserved for the integrated probe. They are: ZA, ZB and SLA. The ZA and ZB sockets must always be used for the configuration operations, connecting two configurators that identify the address, and the number of the zone controlled by the probe itself. It is not necessary to start with zone 01, although it is fundamental that the values of the subsequent zones are immediately after those of the central unit itself. The configuration procedure requires the completing of the operations using the "Configuration" menu of the central unit, and the activation of the "Learning" function. In fact, the search within the system is performed on 3 zone addresses that follow the one assigned to the central unit itself. The actuators controlled by the probes must be configured with the same zone address.



Socket	Function	Configurators
ZA	zone address	0 – 9
ZB	zone address	0 – 9
SLA	Master mode	0 – 8



Programming

The central unit must be used to set the operating mode of the integrated probe fitted inside. Using the "Configuration" item of the "Maintenance" menu, define if the zone should manage a heating system, a cooling system, or a combined one.

Using the same menu item, also select the type of load to control, choosing between: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL and GATEWAY. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

Master and Slave probe

A probe can operate in conjunction with other probes so that an average temperature calculation can be performed, based on measurements taken from several points within the same zone. This function is useful for the management of very large areas, throughout which the temperature may change consistently

To activate this function, one probe must be configured as "Master", and one or more probes must be configured as "Slave" (max 8). The Master probe calculates the average between its own temperature, and the temperatures measured by the Slave probes, and then performs the appropriate operations. The integrated probe fitted inside the central unit can only operate as Master. Therefore, for the slave function, only probe item 4693 may be used. In addition to the zone address, in order to configure the integrated probe as Master it will be sufficient to connect a numeric configurator to the SLA socket, which should indicate the number of Slave probes within the zone, up to 8 maximum.

To configure a Slave probe, connect the configurator marked as SLA to the MOD socket. Use the SLA socket to progressively assign a number to all Slave probes of the zone. During this numbering procedure, it is essential to start from no. 1, and that the sequence is respected, without missing any numbers.

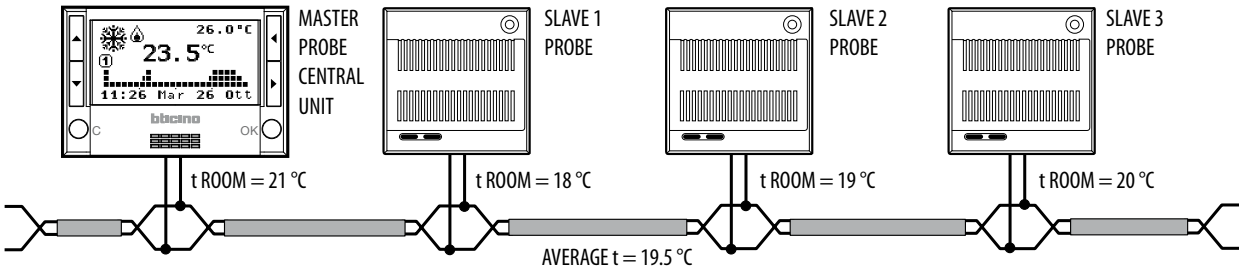
4 zone central unit calibration

The 4 zone central unit does not normally require calibration: however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.

Before performing the calibration operation, ensure the following:

- leave the 4 zone central unit connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near it;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

**Note:** For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.



Central unit/Master Probe (HC/HS/L/N/NT4695, AM5875)		Slave 1 probe (HC/HS/L/N/NT4693)		Slave 2 probe (HC/HS/L/N/NT4693)		Slave 3 probe (HC/HS/L/N/NT4693)	
Socket	Configurators	Socket	Configurators	Socket	Configurators	Socket	Configurators
ZA	4	ZA	4	ZA	4	ZA	4
ZB	7	ZB	7	ZB	7	ZB	7
SLA	3	MOD	SLA	MOD	SLA	MOD	SLA
		SLA	1	SLA	2	SLA	3

HD4695 - HC4695 - HS4695 - L4695  
N4695 - NT4695 - AM5875

### Circulation pump

In addition to controlling the zone valves, for some types of systems it will also be necessary to control one or more water circulation pumps. When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the central unit through the "Pump" item; inside the "Maintenance" menu, select the zones that must be served by a circulation pump. Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supplies them. To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups. If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves. In the following cases, pump control is not necessary, or needed:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in systems where the pump has simply not been installed (for example for air conditioning units or electric heating control).

### System with a circulation pump

The system shown only has one circulation pump, that only supplies two zones, controlled by two solenoid valves. The pump is managed by a dedicated actuator configured in zone 00. In the same way as the pump, also the two valves are controlled by two different actuators. The circulation pump will remain active until at least one of the two valves remains open and will stop when both valves are closed.

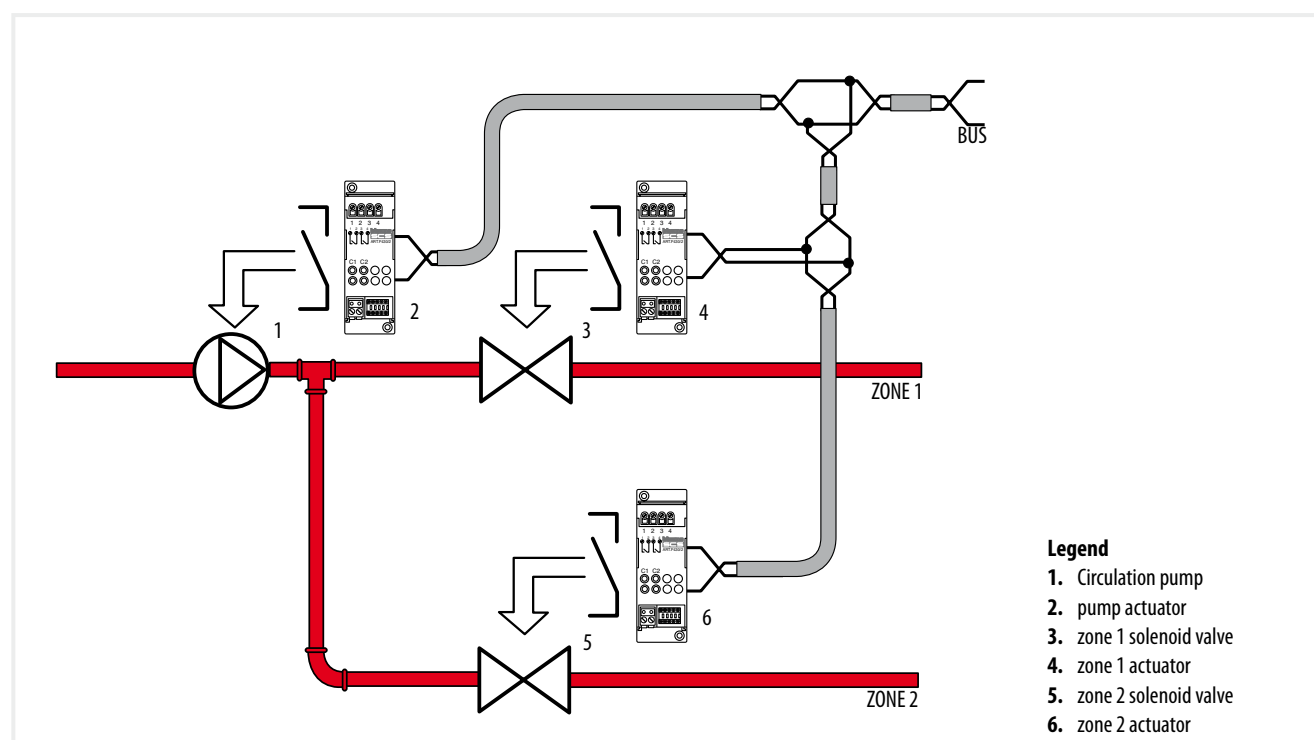
### 4 zone central unit calibration

The 4 zone central unit does not normally require calibration: however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.

Before performing the calibration operation, ensure the following:

- leave the 4 zone central unit connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near it;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

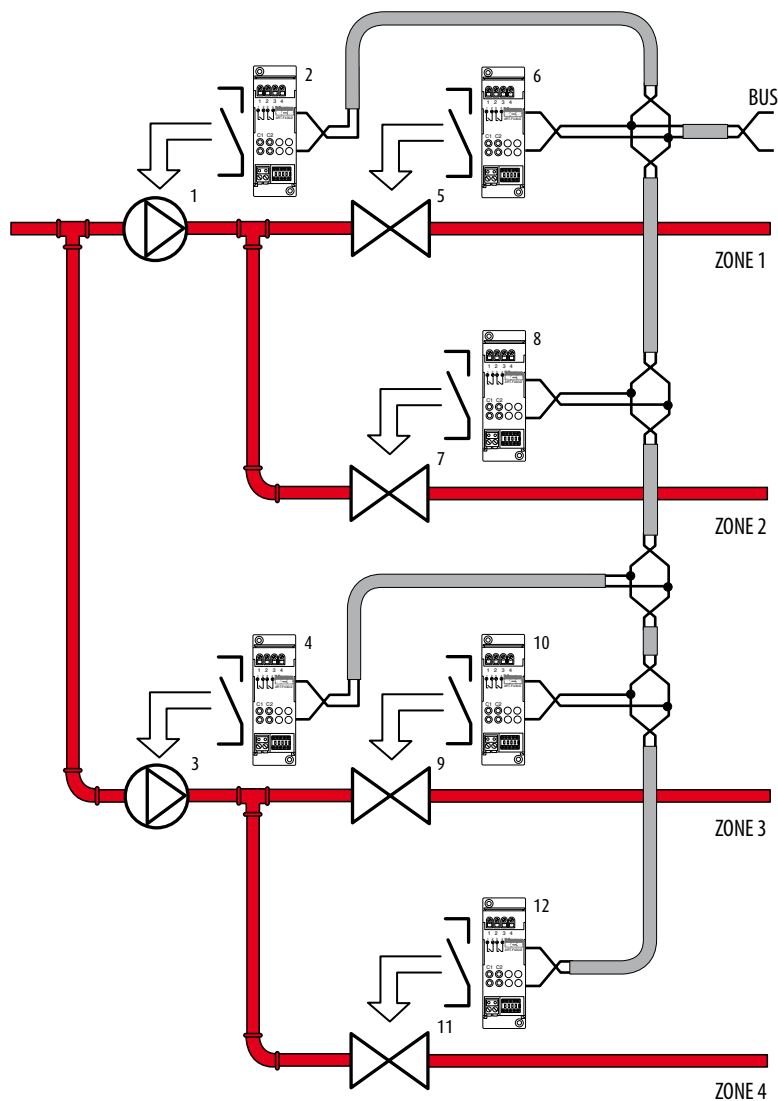
**Note:** For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.



### System with two circulation pumps

The system shown requires two circulation pumps that serve two different zone groups controlled by their own solenoid valves. The first group pump is managed by a dedicated actuator configured in zone 00 with progressive number equal to 1 ( $N=1$ ). Also the two valves that control ZONE1 and ZONE2 are managed by their own actuators. The circulation pump will remain active until at least one of the two valves remains open and will stop when both valves are closed.

The second group is similar to the first one, but the actuator controlling the pump of zones 3 and 4 is configured in zone 00 with progressive number equal to 2 ( $N=2$ ). Although belonging to the same system, the two pump/solenoid valve groups are totally independent from each other (see also actuator configuration).



### Legend

1. zone 1 and 2 circulation pump
2. pump actuator
3. zone 3 and 4 circulation pump
4. pump actuator
5. zone 1 solenoid valve
6. zone 1 actuator
7. zone 2 solenoid valve
8. zone 2 actuator
9. zone 3 solenoid valve
10. actuator zone 3
11. zone 4 solenoid valve
12. actuator zone 4

HD4695 - HC4695 - HS4695 - L4695  
N4695 - NT4695 - AM5875

### TiThermo Basic software

TiThermo Basic is the tool used for creating or changing, through a simple and logic graphic interface, the configuration to be sent to the temperature control system central unit, defining and customising the parameters of the temperature control system and the profiles of the various operating programs.

Thanks to a dedicated function, the software may also be used to update the central unit firmware.

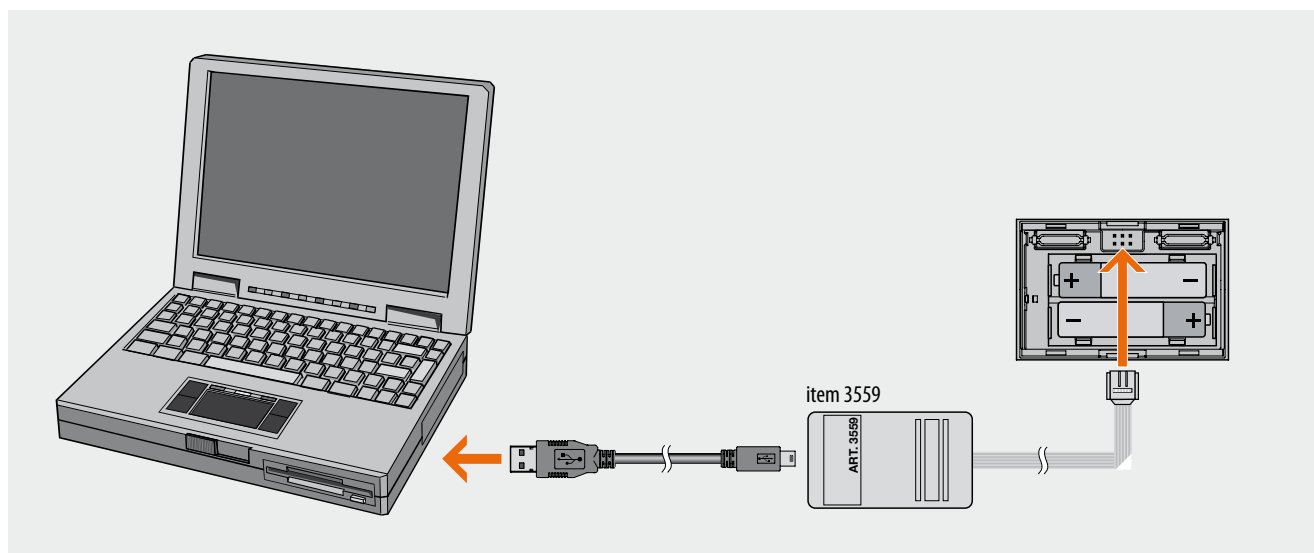
The software can be used to:

- customize the zones
- manage the actuators, selecting the type of function to be assigned (heating, cooling, heating+cooling, no function) and the type of load for the selected function (ON/OFF, Open/ Close, Fan-Coil, Gateway)

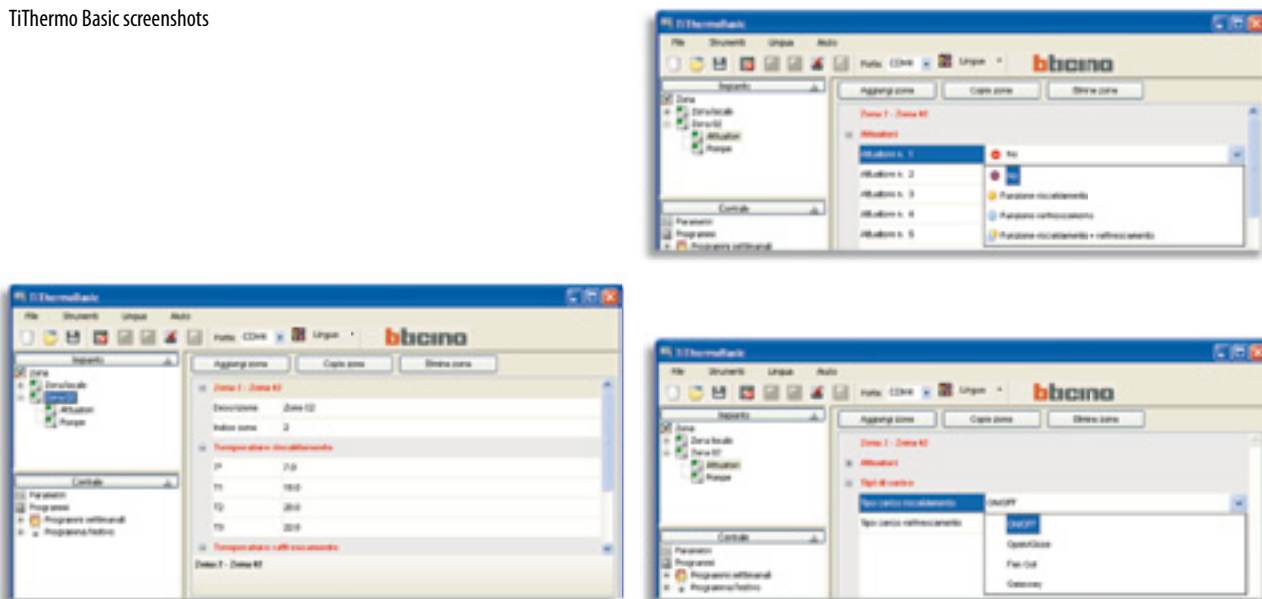
- manage the circulation pumps, selecting the type of function to be assigned (heating, cooling, heating+cooling, no function) and the tripping delays
- customise the configuration parameters and the operating programs of the central unit (e.g. weekly programs, holiday programs)
- export and/or import profiles and collections (as XML files).

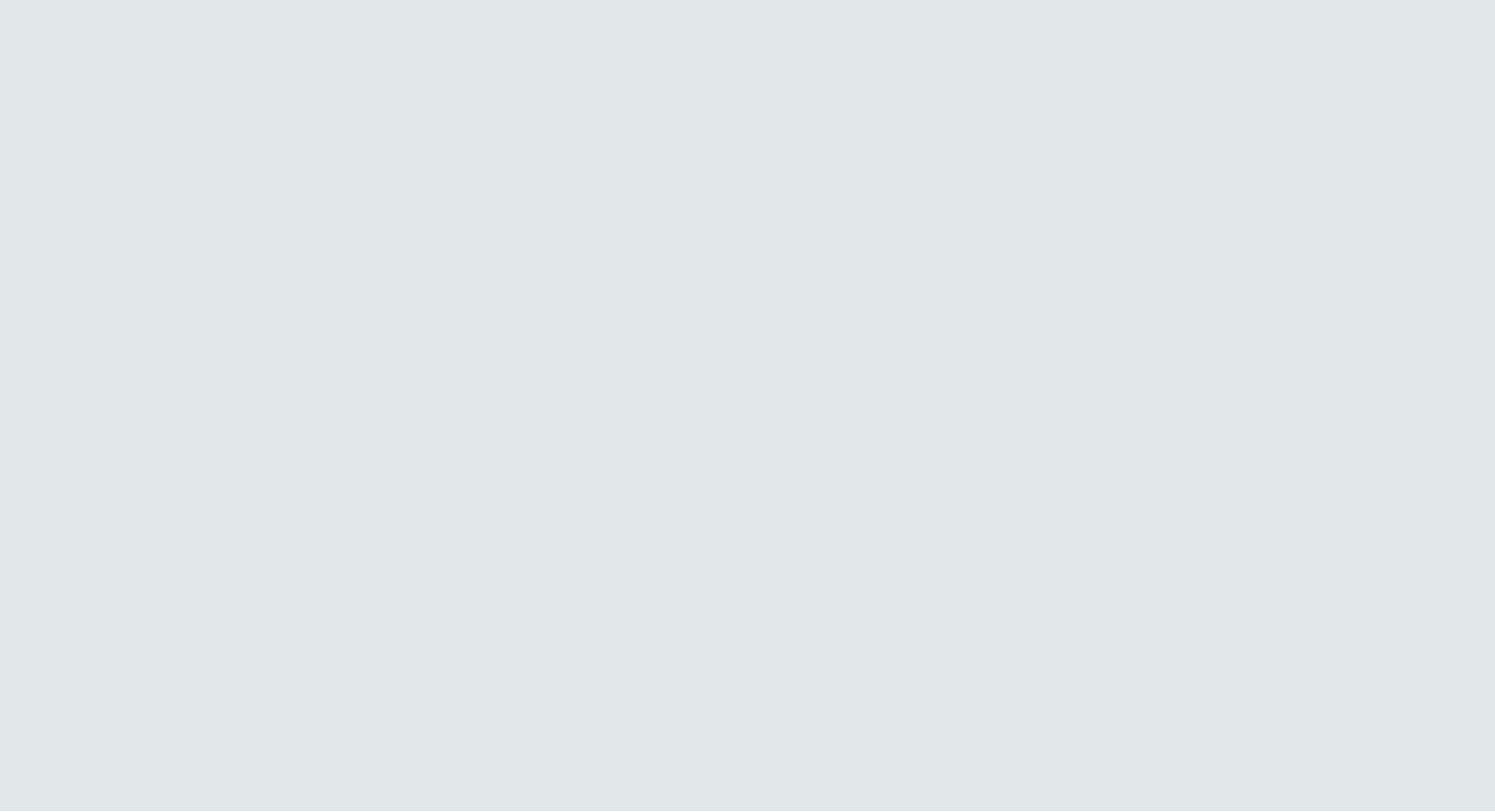
**NOTE:** for more information on the operation of the application see the manual supplied with the products.

The central unit is connected to the PC using cable item 335919 or with item 3559 (see figure). This accessory is not included with the central unit, and must therefore be purchased separately.



### TiThermo Basic screenshots





1008	MY HOME	Technical sheets - Sound system	
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## CONTENTS

Technical sheets – Sound system



# Insulator for sound sources

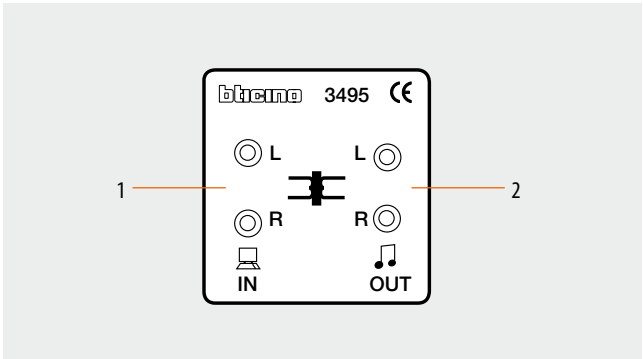
3495

## Description

The insulator for sound sources is a device which can adapt the audio signal from the external sound sources to the Sound system keeping the BUS with SELV features. The insulator for sound sources must always be used when the sound source is not battery powered. The device is made up of 4 female RCA clamps divided between "IN" and "OUT". Connect the external sound source on the "IN" clamps, and connect the stereo interface to the "OUT" clamps, (RCA input item HC/HD/HS/L/N/NT4560 - AM5740).

## Technical data

"IN" clamps:	RCA female impedance 680 $\Omega$
"OUT" clamps:	RCA female impedance 680 $\Omega$
Response in frequency at mW/600 $\Omega$ :	60 Hz-20 kHz
Response in frequency at mW/600 $\Omega$ :	30 Hz-20 kHz
IN/OUT insulation:	1500 Vrms



## Legend

1. RCA female connectors for stereo audio input
2. RCA female connectors for stereo interfaces (inputs RCA).  
RCA-RCA cable supplied.

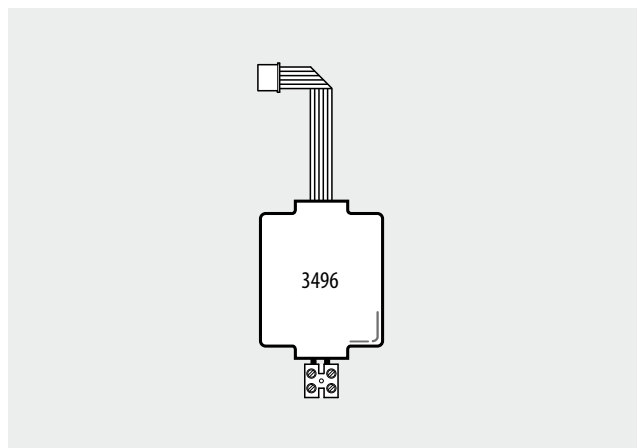


## IP Touch Screen adapter

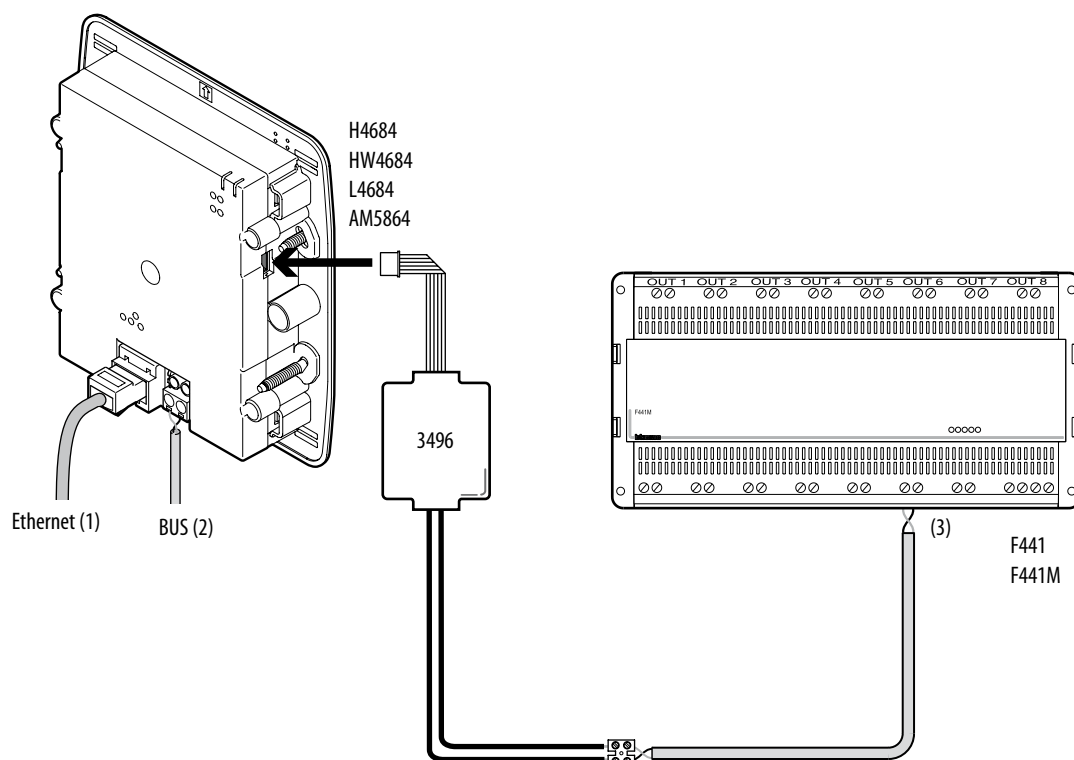
3496

### Description

This accessory, to be used in conjunction with L4684, H4684, HW4684 or AM5864 TOUCH SCREENS can be used to play remote audio files found on the server (e.g. on the PC connected to the local network), or audio IP Contents (e.g. radio streaming), through 2 wire stereo sound systems. By using the RJ45 connection of the TOUCH SCREEN, and connecting this to the local network linked to the PC, server etc., the TOUCH SCREEN adapter sends the audio files of the various devices towards the Sound System.



### Installation mode



**NOTE:** (1) cable connection to the local LAN network.

(2) the BUS line output must be connected to the mixers item F441 or item F441M, or to the power supply line of the BUS themselves. In case of integration with the Automation system, it may be connected to the automation BUS.

(3) when connected to the F441M matrix, the device cannot be wired to the "S1" clamp of the sound sources.



# Radio tuner

F500N

## Description

The radio tuners item F500N can receive FM radio stations. The front pushbuttons and the backlit display adjust the device locally, save 15 radio stations and display RDS messages and the tuned frequency.

It is also capable of performing two types of station searches: manual and automatic. The device can be managed (switching ON and OFF, frequency change, etc.) both locally and remotely (via the SCS BUS) using the flush mounted amplifier, or the MY HOME control devices (e.g. Touch Screen and Local Display).

In order to receive the radio channels correctly the type of antenna used must be selected: if the F500N is installed in a zone of the building with sufficient signal strength, the wire antenna can be used. If the signal strength inside the building is not sufficient, the external antenna can be used (e.g. antenna installed on the roof), using the coaxial connector and the appropriate adapter cable. The type of antenna is selected using the configurator.

## Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Max. absorption:	20 mA @27 V – 25 mA @18 V
Absorption in stand-by:	5 mA @27 V – 9 mA @18 V
Dissipated power:	0.5 W
Operating temperature:	5 - 45 °C
FM reception band:	87.5 – 108 MHz

## Antenna to be connected

Maximum level (*):	70 dBμV
Minimum level (*):	40 dBμV (mono) - 50 dBμV (stereo)

(\*) The maximum and minimum levels that must be guaranteed at the antenna socket for correct FM band reception.

## Dimensional data

4 DIN modules

## Configuration

⊙	⊙	⊙	⊙	⊙	⊙
S	MEM	ANT			
⊙	⊙	⊙	⊙	⊙	⊙

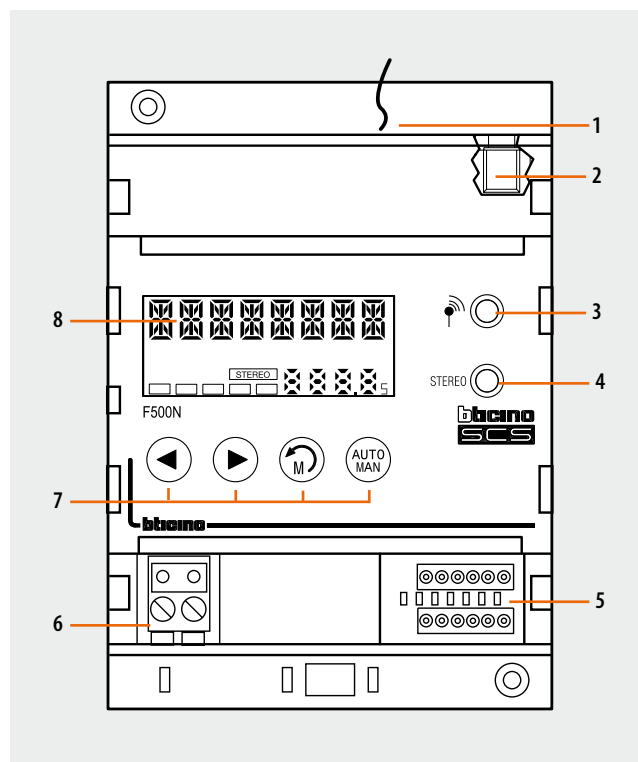
S: 1 – 4 local address of the source

MEM: number of stations that can be stored

Configurator	No. of stations
–	5
2	10
3	15

ANT: this indicates the type of antenna used by the radio

Configurator	Type of antenna
–	Indoor (wire)
1	Outdoor (Coax)



## Legend

- Wire antenna
- MCX connector for the outdoor antenna (e.g. roof antenna) (\*)
- Green LED on steady: good quality signal reception
- Red LED on steady: stereo reception (mono reception when off)
- Configurator socket
- Removable 2 pole connector for the connection to the SCS BUS of the sound system
- Radio tuner programming and radio program scanning keys
  - ⏮ Frequency decrease
  - ⏭ Frequency increase
  - ⌂ Selection/storage of stations (short/extended pressure)
  - ⏺ Frequency scanning mode: manual/automatic
  - ⏺ ⏺ Press at the same time for 5 seconds to store the station in the memory
- LED backlit display for the display of frequency, RDS messages, and stored stations

(\*) Cable with MCX-F connector supplied as standard.



## Amplifier for DIN rail

F502

### Description

This amplifier, fitted with hooking device for installation on DIN rail, is particularly suited for non residential applications, or in more general terms, where there are no space constraints inside distribution boards/switchboards. Directly powered by the power line voltage, the low level of current consumption on the BUS makes multiple installations possible (max. 40 amplifiers and 80 loudspeakers). Depending on its configuration, a stereo or a mono signal can be set on the output towards the loudspeakers. Loudspeakers with both 8  $\Omega$  and 16  $\Omega$  impedance may be connected to the amplifier. The device may be controlled using either its own keys, the TOUCH SCREEN, or special controls.

### Technical data

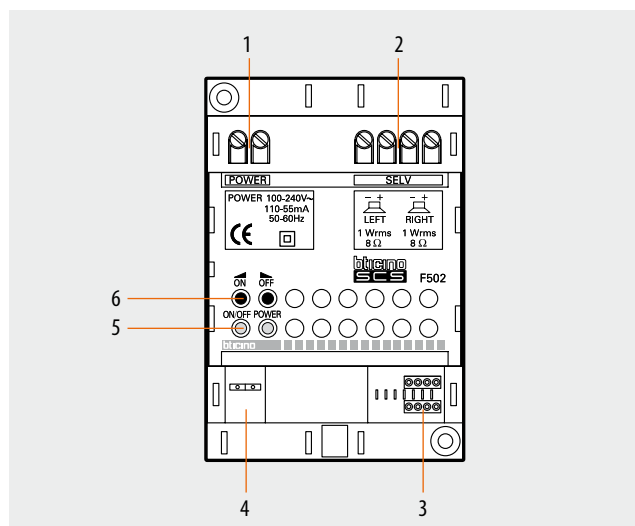
BUS voltage:	18-27 Vdc
Power supply:	110-230 Vac (50 – 60 Hz)
Absorption on the BUS:	5 mA
Absorption on the line:	110 mA (at 110 Vac) – 56 mA (at 230 Vac)
Dissipated power:	2 W
Operating temperature:	5 - 45 °C
Power (on 8 $\Omega$ ):	2 Wrms (1 Wrms+1 Wrms) 16 Wpmo (8 Wpmo+8 Wpmo)
TYP channel balancing:	$\pm 0.5$ dB
MIN channel balancing:	$\pm 1.5$ dB
Frequency range @ -3 dB:	20 Hz–20 kHz (su 8 $\Omega$ )

### Dimensional data

Size: 4 DIN modules

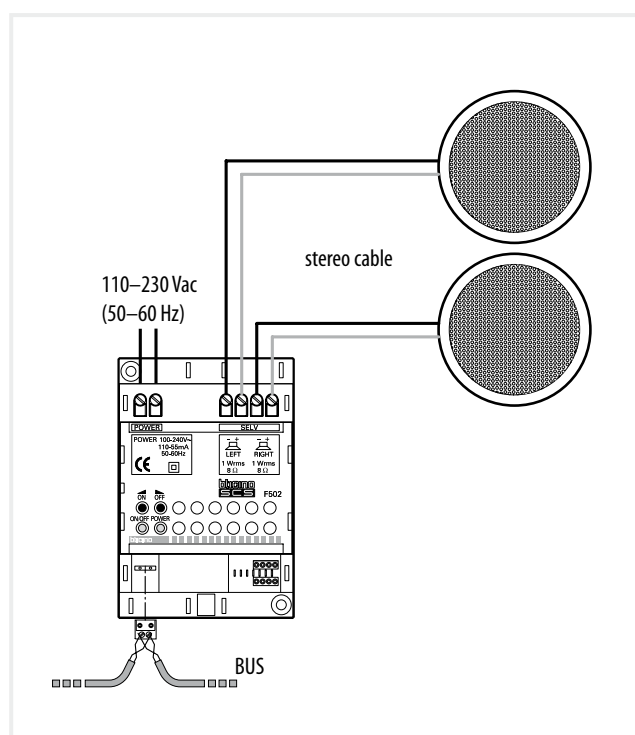
### Configuration

- A:** 1-9 address of the amplifier room
- PF:** 0-9 amplifier address
- M1\*:** - (no configurator) volume level equal to 20% and "MUTE" mode: in this mode, when the video door entry system is being used the volume of the sound sources will be decreased
- 1 volume level equal to 20% but "MUTE" mode not available"
  - 2 volume level equal to 50% and "MUTE" mode: in this mode, when the video door entry system is being used the volume of the sound sources will be decreased
  - 3 volume level equal to 50% but "MUTE" mode not available
  - 4 volume level equal to 100% and "MUTE" mode: in this, mode, when the video door entry system is being used the volume of the sound sources will be decreased
  - 5 volume level equal to 100% but "MUTE" mode not available
- M2:** - (no configurator) when the amplifier is switched on, the last source which was on is activated, "FOLLOW ME" mode
- 1-4 when the amplifier is switched on, the source with the same configuration as that set on the device itself switches on (example amplifier with M2=2, in this case the source with S=2 will switch on), "NO FOLLOW ME" mode.
- M3** - (no configurator) working correctly
- 1 both the outputs reproduce the signal received on the LEFT channel
  - 2 both the outputs reproduce the signal received on the RIGHT channel
  - 3 the amplifier reproduces a monophonic signal on both the loudspeaker outputs
- \* this mode can only be activated when the Sound System is integrated with the 2-wire audio and video door entry system. This combination allows the "pager" function and the volume level is set via the configurators.



### Legend

1. clamp for connection of the power supply
2. clamps for loudspeaker connection
3. configurator socket
4. removable clamp for BUS connection
5. the LED under "ON/OFF" indicates the amplifier state: if it is off there is no BUS, if it is green the device is in Stand-By, if it is orange the amplifier is on. The LED under "POWER" indicates: when off, no power line voltage is detected, if it is RED the amplifier is powered.
6. pushbuttons for local switching on or off of the amplifier (simple touch), and for volume adjustment (prolonged pressure).



BT00015-d-UK



# Power amplifier

F503

## Description

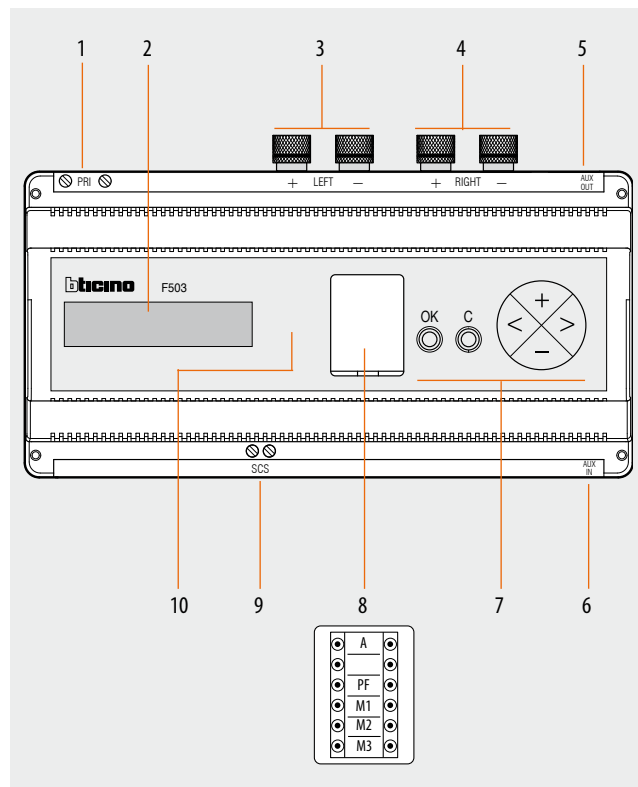
The stereo amplifier, item F503, ensures accurate reproduction of the sound signal, both from the SCS/BUS and, in alternative, from the AUX input (MP3 or CD player, etc.). The wide range of adjustments of high and low tones available, the 10 preset equalisation levels, as well as the additional 10 levels that can be customised by the customer, the virtual surround, to name a few, ensure pleasurable listening in each room, following the taste of the user. Each parameter can be displayed on the OLED graphic display. All the adjustments are performed using the keys of the amplifier, or remotely using the Touch Screen devices.

## Technical data

BUS voltage:	18 – 27 Vdc
Power supply (PRI):	110 – 240 Vac @ 50 – 60 Hz
Absorption on the BUS:	12 mA
Absorption on the line:	85 mA (at 110 Vac) – 45 mA (at 230 Vac)
Dissipated power:	stand-by 3.5 Wmax - ON: 13 Wmax @ 1 kHz input tone
Operating temperature:	5 – 45 °C
Potenza (su 8 Ω):	60 Wrms (3 Wrms + 30 Wrms) 480 Wpmpo (240 Wpmpo + 240 Wpmpo)
Low tones adjustment:	±20 dB max
High tones adjustment:	±20 dB max
Frequency range @ -3 dB:	20 Hz–20 kHz (on 8 Ω)
AUX input:	1 Vrms max
AUX Output:	1 Vrms max, @Rout = 600 Ω
Equalisation adjustment:	±8 dB max

## Dimensional data

10 DIN modules



## Legend

1. 110 – 230 Vac power supply clamps
2. Graphic OLED display
3. Left channel loudspeaker connectors
4. Right channel loudspeaker connectors
5. AUX audio output (for the connection use a 3.5 mm stereo jack)
6. AUX audio input (for the connection use a 3.5 mm stereo jack)
7. Selection and navigation keys
8. Configurator socket
9. SCS audio input (sound system BUS/SCS)
10. Status LEDs\*

\* The LEDs are under the plastic front cover plate, and can only be seen when the device is on:  
- Upper LED (power supply status), blue for STAND BY/ purple for ACTIVE  
- Lower LED (110 to 230 Vac power supply), blue for power supply PRESENT

## Description

To access the configurator sockets remove the protection cover. A description of the configurators is printed on the inside of the cover.

⊙	⊙	⊙	⊙	⊙	⊙
A		PF	M1	M2	M3
⊙	⊙	⊙	⊙	⊙	⊙

**A:** 1-9 address of the amplifier room

**PF:** 1-9 address of the amplifier sound source:

**M1\*\*:** - (no configurator) volume level equal to 20% and "MUTE": mode: this mode, when the video door entry system is being used the volume of the sound sources will be decreased

1 volume level equal to 20% but "MUTE" mode not available"

2 volume level equal to 50% and "MUTE" mode: in this mode, when the video door entry system is being used the volume of the sound sources will be decreased

3 volume level equal to 50% but "MUTE" mode not available

4 volume level equal to 100% and "MUTE" mode: in this, mode, when the video door entry system is being used the volume of the sound sources will be decreased

5 volume level equal to 100% but "MUTE" mode not available

SLA amplifier slave operation mode:

**M2:** - (no configurator) when the amplifier is switched on, the last source which was on is activated, "FOLLOW ME" mode

1-4 when the amplifier is switched on, the source with the same configuration as that set on the device itself switches on (example amplifier with M2=2, in this case the source with S=2 will switch on), "NO FOLLOW ME" mode.

**M3** - (no configurator) working correctly

1 both the outputs reproduce the signal received on the LEFT channel

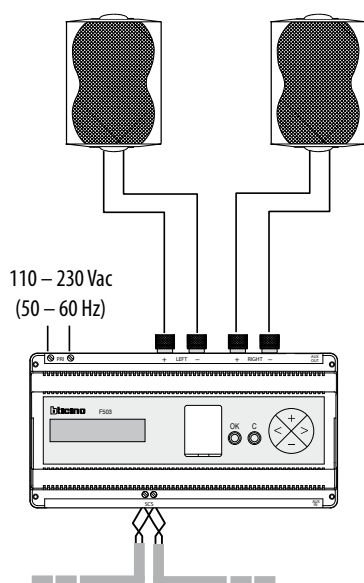
2 both the outputs reproduce the signal received on the RIGHT channel

3 the amplifier reproduces a monophonic signal on both the loudspeaker outputs

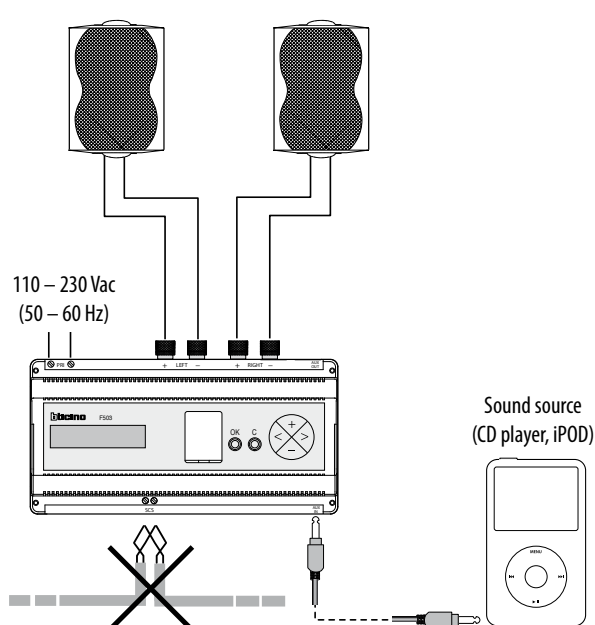
\*\* This mode can only be activated when the Sound System is integrated with the 2-wire audio and video door entry system. This combination allows the "pager" function and the volume level is set via the configurators.

## Wiring diagrams

Wiring diagram with SCS BUS connected (the power amplifier plays back the sources from the 2-wire sound system).



Wiring diagram with SCS BUS disconnected (the power amplifier is independent from the SCS BUS and plays back the source connected to the AUX IN input).



**Note:** The desired input, SCS or AUX IN, must be selected using the local keys (see the installation manual for the correct procedures).



## Flush mounted loudspeakers

H4570

### Description

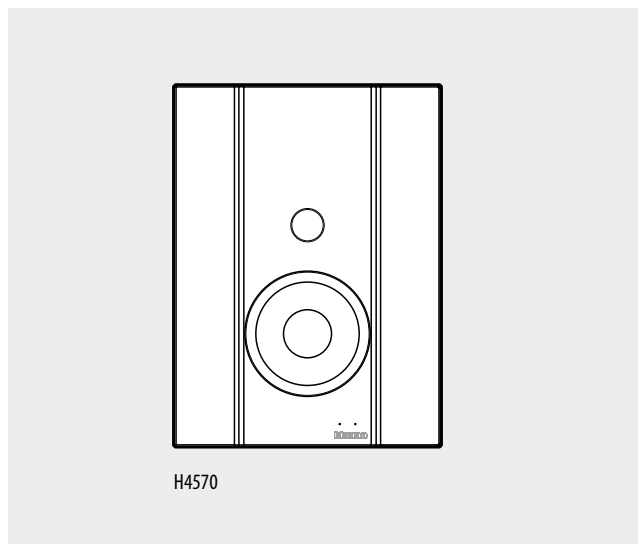
100 W, 8  $\Omega$  impedance, flush mounted loudspeaker, for installation inside MULTIBOX boxes, item 16104, with AXOLUTE series finish.  
Preset for back installation of a DIN amplifier, item F502.

### Technical data

Type:	2 separate ways
Power:	50 Wrms/100 W musical
Impedance:	8 $\Omega$
Frequency range:	50 - 20 kHz
Sensitivity:	88 dB (1 W/1 m)
Feature:	loudspeaker to be installed in flush mounted boxes item 16104. The loudspeaker has a compartment for the installation of the DIN item F502 amplifier.
Weight:	1.74 kg

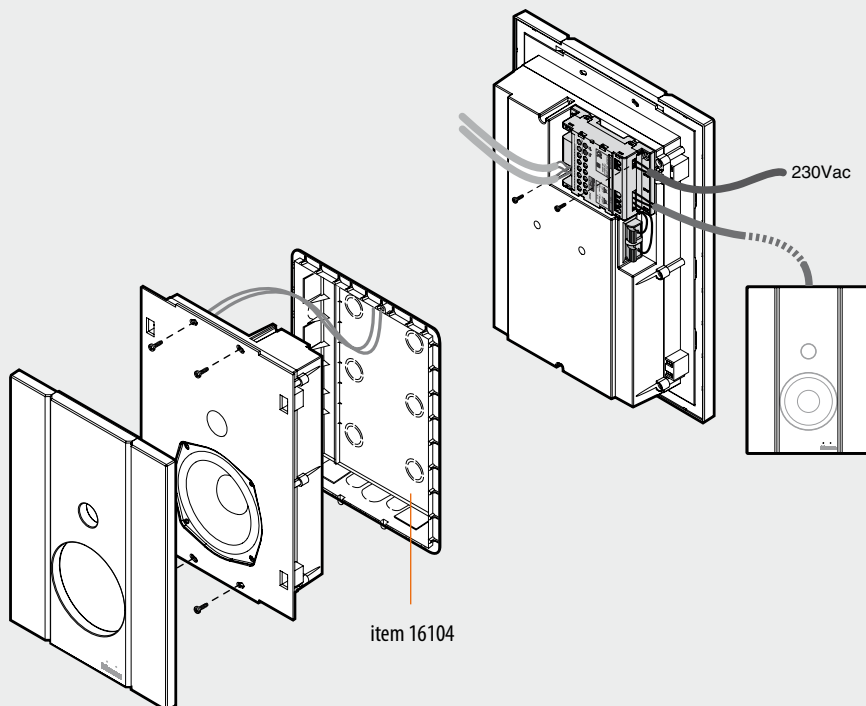
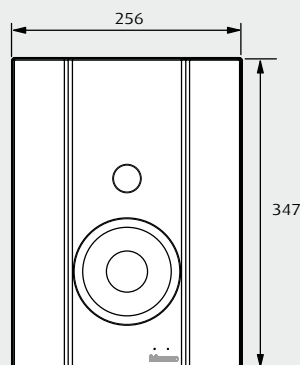
### Dimensional data

Size:	256x347x82 mm (l x h x d)
Depth of the flush mounted box:	80 mm



H4570

### Dimensions and installation mode





## RCA input

L4560 - N4560 - NT4560  
HC4560 - HD4560 - HS4560 - AM5740

### Description

The device allows the interfacing and adaptation of the signal level of an external stereo audio source. It is connected with the audio signal by means of two RCA female connectors (red = right channel; white = left channel) on the front of the device. There is also a knob to adjust the input signal sensitivity and two LEDs to indicate the device state (ON/STANDBY) and the correct adjustment.

Connections:

- directly to the RCA input, if the sound source is battery powered
- through the sound source insulator (item 3495), if the sound source is powered by the mains network (230 Vac or 127 Vac).

### Technical data

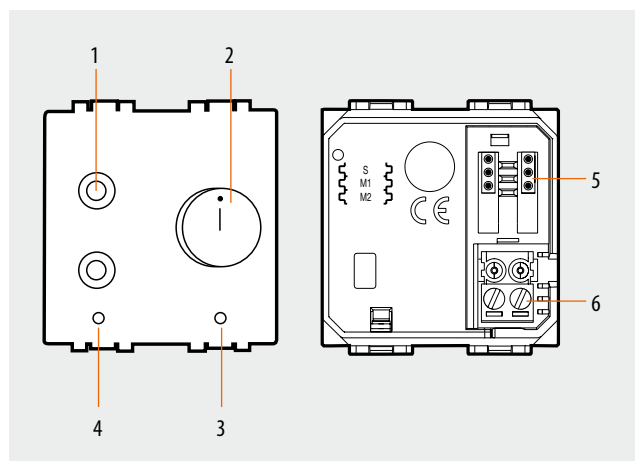
Power supply:	18-27 Vdc from BUS
Max. absorption:	30 mA
Absorption in stand-by:	12 mA
Operating temperature:	5 °C-45 °C
RCA input impedance:	14 kΩ
Input sensitivity:	100 mVrms-1 Vrms
TYP channel balancing:	± 0.5 dB
MIN channel balancing:	± 1.5 dB
Frequency range @ -3 dB:	20 Hz-20 kHz

### Dimensional data

Size: 2 DIN modules

### Configuration

S: 1-4 local address of the source



### Legend

1. RCA female connectors for stereo audio input
2. adjustment knob for the audio output to the BUS
3. LED for audio adjustment on the BUS:
  - off: no audio signal
  - green: signal with minimum level
  - flashing orange: best adjustment
  - steady orange: signal too high
4. state indication LED:
  - green: standby
  - orange: device ON
5. configurator socket
6. removable clamp for BUS connection



## Flush mounted loudspeakers

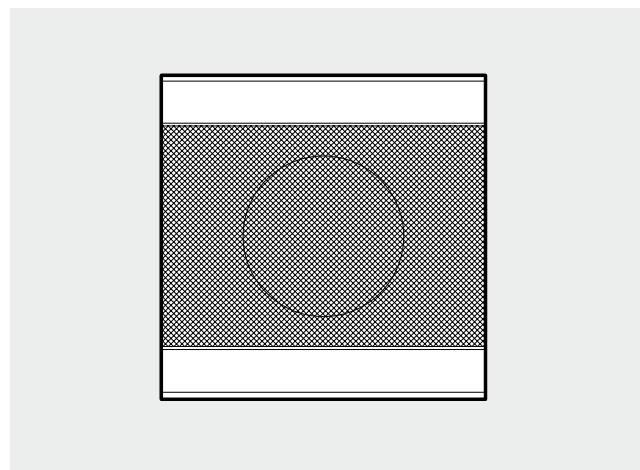
HC4565 - HD4565 - HS4565  
L4565 - N4565 - NT4565

### Description

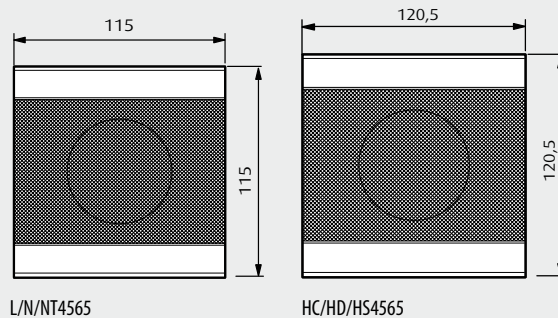
Flush mounted loudspeakers to be used with the AXOLUTE, LIVING, LIGHT and LIGHT TECH series. The loudspeakers must be installed inside item 506E, PB526 boxes. They do not need support and are supplied complete with all that's needed.

### Technical data

Type:	wide band
Power:	6 Wrms/12 W musical
Impedance:	16 $\Omega$
Frequency range:	160 - 16 kHz
Sensitivity:	80 dB (1 W/1 m)
Feature:	loudspeaker for installation inside flush mounted boxes, item 506E, PB526



### Dimensions





## Stereo control

L4561N

### Description

The device manages and interfaces an external stereo audio source (e.g. Hi-Fi system) with infrared remote control and only one IR detector.

The device can save and reproduce the controls given by the stereo source remote control. The controls saved by the stereo control are sent to the external stereo control through a cord with infrared transmitter (supplied). In this way one can, by means of the various control devices (special controls and Touch Screen, etc...) and the amplifiers, manage the switching on of the saved stations and activation of a CD reader and change the CD track. On the front of the stereo control there are pushbuttons which, with the aid of an indication LED, adjust the audio signal entering the device.

Stereo control must be programmed using the configuration software supplied with the product. During normal operation of the stereo control, when the device activates the Hi-Fi, the loudspeakers directly connected to the system also come on. When the last amplifier goes off, following an OFF control, the loudspeakers also go off, but the HI-FI system remains active for one minute.

### Technical data

Power supply:	18-27 Vdc
Max. absorption:	40 mA
Absorption in stand-by:	12 mA
Operating temperature:	5 °C - 45 °C
Signal learning capacity:	20 kHz-80 kHz
RCA input impedance:	14 kΩ
Input sensitivity:	20 mVrms-1 Vrms
TYP channel balancing:	± 0.5 dB
MIN channel balancing:	± 1.5 dB
Frequency range @ -3 dB:	20 Hz-20 kHz

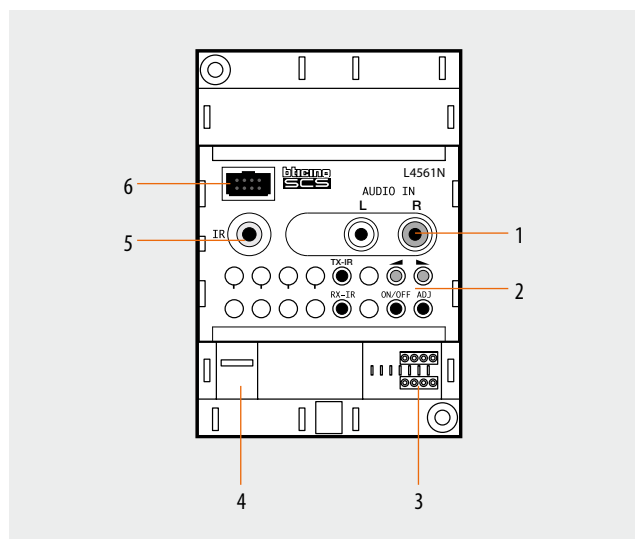
### Dimensional data

Size: 4 DIN modules

### Configuration

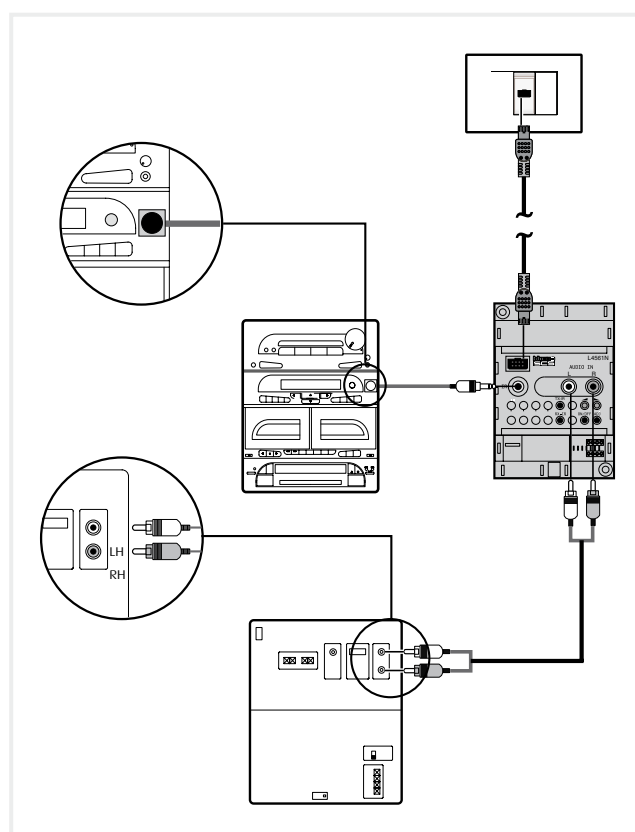
- S1:** 1-4 local address of the source  
**M1:** 1-4 Configuration of how many devices must be controlled inside the same device, Max 4 (example HI-FI systems with radio, cd reader etc...).
- M2:** 1-6 time which elapses between a control and the next during the source switching on sequence (see instruction sheet).

When using the multichannel matrix, item F441M, the configuration must be M=1 (management of one source only).



### Legend

1. RCA female connectors for stereo audio input
2. Keys, LED and sensors to adjust the output audio on the BUS
3. configurator socket
4. Mini-USB input for device programming
5. Jack input for connection of cable with IR detector (supplied)
6. Clamp for connection of the stereo control to the BUS by patch cord





# Flush mounted stereo amplifier

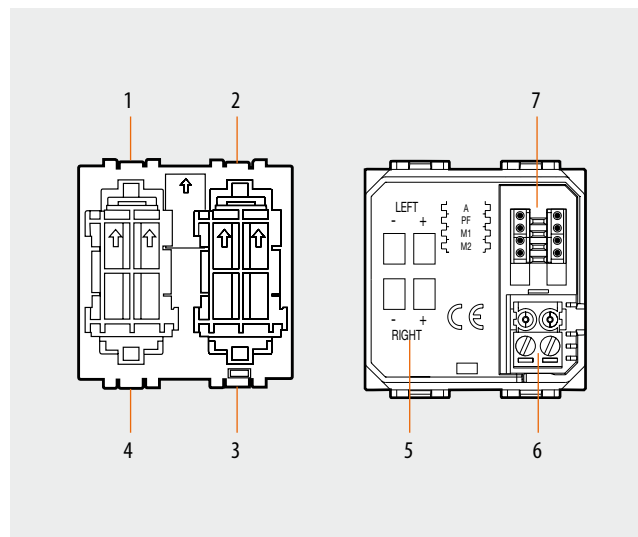
L4562 - H4562 - AM5742

## Description

This device amplifies the stereo signal on the BUS and controls up to two loudspeakers with impedance between 8-16  $\Omega$ . On the front the amplifier has two pushbuttons which can: switch the loudspeakers ON/OFF, adjust the volume in output, change the audio source and cycle the saved stations (for the radio) or change the CD tracks. Correctly configured the amplifier can have two modes:

- "FOLLOW ME" mode: function which allows the same music in another room after the amplifier of the room previously occupied has been switched off and switching on the amplifier on the room you are now in.
- "NO FOLLOW ME" mode: when another amplifier is switched on, on changing room, the source configured the same as the configurator (inserted on M2) inserted on the amplifier switches ON, not necessarily the source which was being listened to before.

The device is completed by appropriate 1 module key covers, item L/N/NT4911... (item L4562) or item HC/HD/HS4911... (item H4562). By using the "+" input of one channel and the "-" input of the other channel, it is possible to install only one loudspeaker and create a monophonic system.



## Technical data

Power supply:	18-27 Vdc
Max. absorption:	250 mA with 8 $\Omega$ loudspeaker on 2 L-R outputs 130 mA with 8 $\Omega$ loudspeaker on 1 L-R output 130 mA with 16 $\Omega$ loudspeaker on 2 L-R outputs 90 mA with 16 $\Omega$ loudspeaker on 1 L-R outputs 40 mA (MUTE)*
Absorption in stand-by:	6 mA
Operating temperature:	5 °C - 45 °C
Power (on 8 $\Omega$ ):	2 Wrms (1 Wrms+1 Wrms) 16 Wpmpo (8 Wpmpo+8 Wpmpo)
TYP channel balancing:	$\pm 0.5$ dB
MIN channel balancing:	$\pm 1.5$ dB
Frequency range @ -3 dB:	20 Hz-20 kHz
TYP distortion:	0.1%
Noise signal ratio:	68 dB

\*take into account this value when the Sound system is integrated with the 2-WIRE video door entry system.

## Dimensional data

Size: 2 modules

## Configuration

- A:** 1-9 address of the amplifier room
- PF:** 0-9 amplifier address
- M2:** - (no configurator) when the amplifier is switched on, the last source which was on is activated, "FOLLOW ME" mode
- 1-4 when the amplifier is switched on, the source with the same configuration as that set on the device itself switches on (example amplifier with M2=2, in this case the source with S=2 will switch on), "NO FOLLOW ME" mode.

## Legend

1. control to switch on the amplifier (simple touch) and increase the volume (extended pressure)
2. control to cycle and activate the available stereo sources
3. control to scan the stations saved (for the radio)
4. control to switch off the amplifier (simple touch) and decrease the volume (extended pressure)
5. screw clamps for connection of the loudspeakers
6. removable clamp for BUS connection
7. configurator socket



## False ceiling mounted loudspeakers

L4566/10

### Description

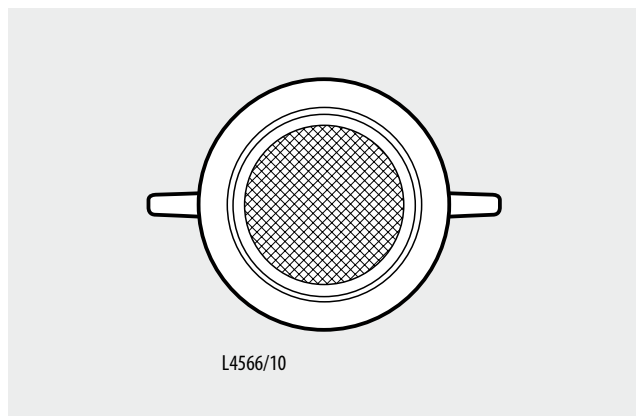
20 W ceiling mounted loudspeakers. Thanks to its small size (diameter 10 cm) and easy hooking (by springs) the loudspeaker can be installed with just a few operations.

### Technical data

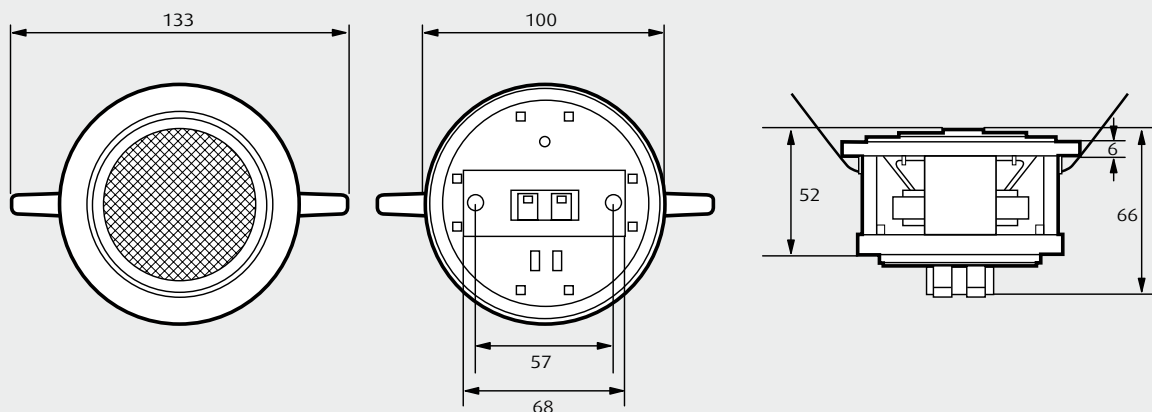
Type:	wide band
Power:	10 Wrms/20 W musical
Impedance:	8 $\Omega$
Frequency range:	200 - 20 kHz
Sensitivity:	86 dB (1 W/1 m)
Feature:	loudspeaker to be installed on the ceiling
Weight:	400 g

### Dimensional data

Mounting hole diameter:	90 mm
External diameter:	100 mm
Depth:	57 mm



### Dimensions





## False ceiling mounted loudspeakers

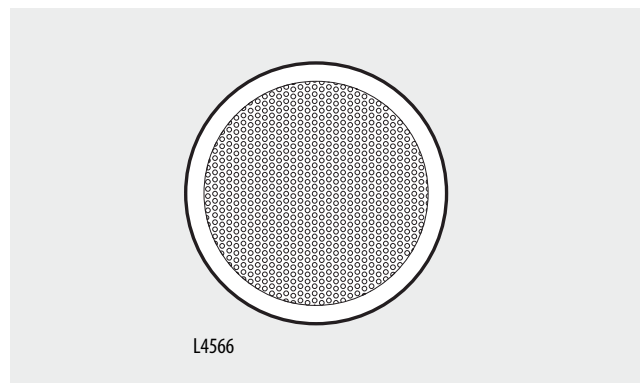
L4566

### Description

100 W loudspeaker for false ceiling installation, suitable for installation in large rooms.

### Technical data

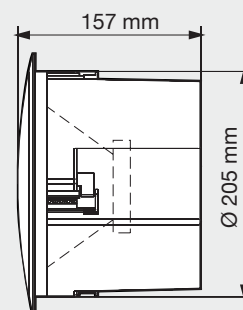
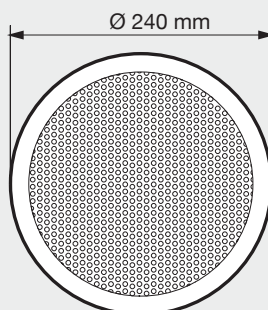
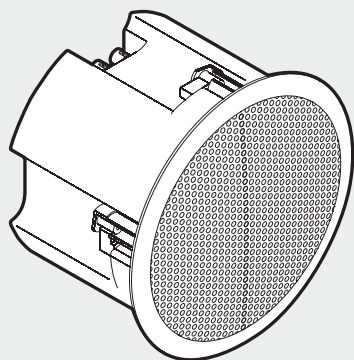
Type:	2 way coaxial
Power:	50 Wrms/100 W musical
Impedance:	8 $\Omega$
Frequency range:	50 - 20 kHz
Sensitivity:	88 dB (1 W/1 m)
Feature:	loudspeaker to be installed on the ceiling
Weight:	1.7 kg



### Dimensional data

Mounting hole diameter:	210 mm
External diameter:	240 mm
Depth:	140 mm

### Dimensions





## Wall mounted loudspeakers

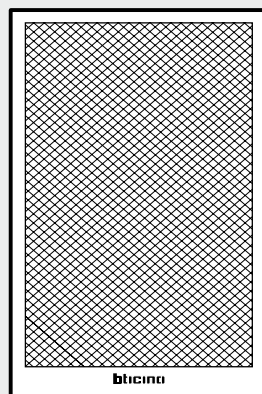
L4567

### Description

Reduced thickness loudspeakers (37 mm thickness only), for direct wall installation.

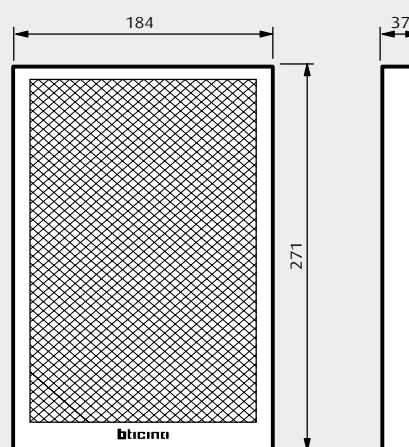
### Technical data

Type:	2 ways
Power:	20 Wrms/40 W musical
Impedance:	8 $\Omega$
Frequency range:	75 - 20 kHz
Sensitivity:	88 dB (1 W/1 m)
Feature:	shallow loudspeaker to be installed on the wall (complete with fastening screws and 4 m of cable)
Weight:	1 kg



L4567

### Dimensions





## False ceiling mounted loudspeakers

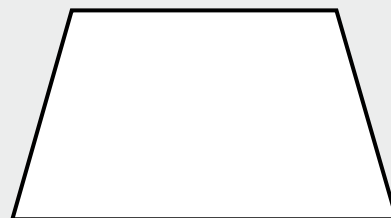
L4568

### Description

The dimensions, the same as a false ceiling panel (60x60 cm), make it particularly suitable for rooms of the service sector. This ultra-flat (only 5 mm thickness) and light loudspeaker has a power of 50 W.

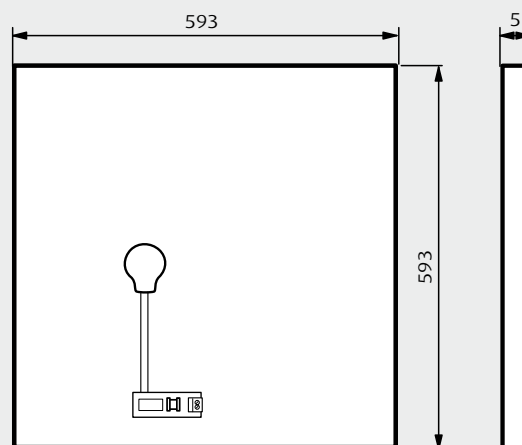
### Technical data

Type:	acousticPanel® DML
Power:	25 Wrms/50 W musical
Impedance:	8 Ω
Frequency range:	90 - 18 kHz
Sensitivity:	87 dB (1 W/1 m)
Feature:	loudspeaker to be installed on the false ceiling, replacing the false ceiling panel (60x60 cm)
Weight:	1.74 kg



L4568

### Dimensions



L4568



## Outdoor loudspeakers

L4569

### Description

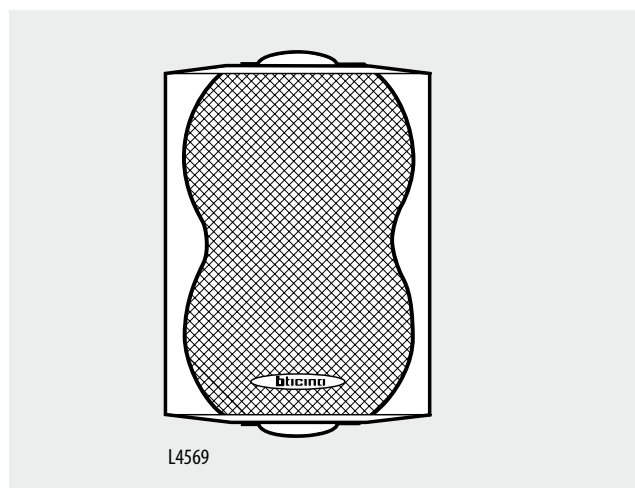
2 way loudspeaker with IPx4 protection index, black colour, impedance 8  $\Omega$ , power 140 W. This particular loudspeaker may be installed outdoor using the brackets provided.

### Technical data

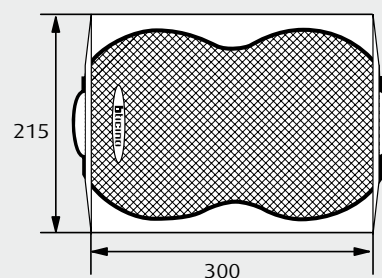
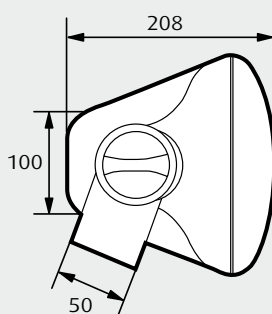
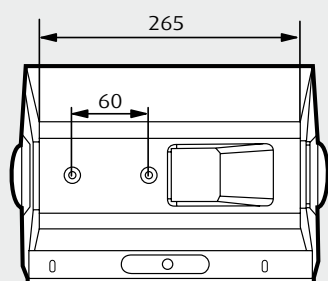
Type:	2 separate ways
Power:	70 Wrms/140 W musical
Impedance:	8 $\Omega$
Frequency range:	45 - 20 kHz
Sensitivity:	88 dB (1 W/1 m)
Feature:	outdoor loudspeaker
Weight:	4.4 kg
Protection index:	IPx4

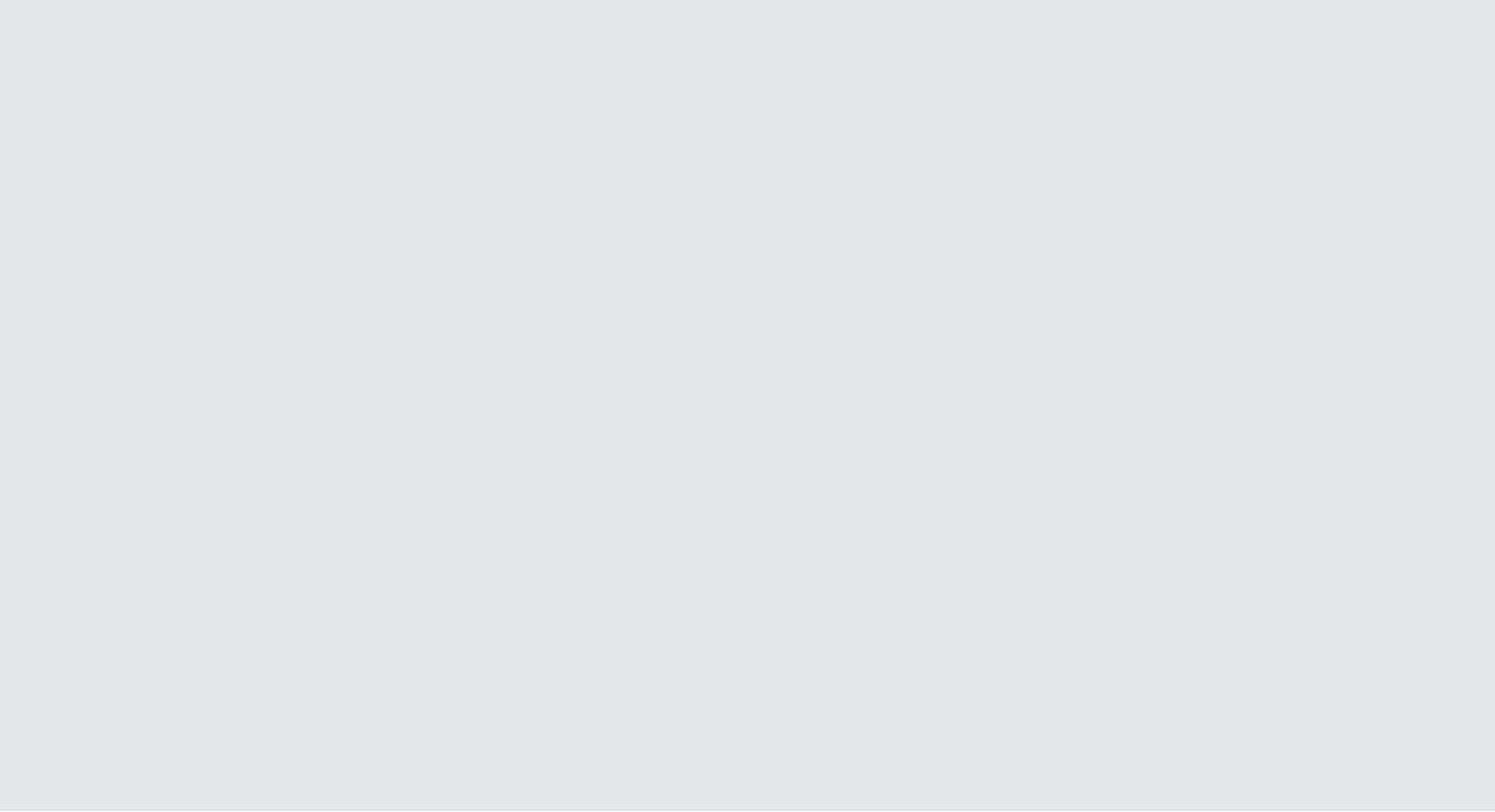
### Dimensional data

Size: 300x215x208 mm (lxhxd)



### Dimensions





## CONTENTS

Technical sheets – Video door entry system



# SCS AV cable

336904

## Description

The white BUS-SCS cable has been purposely designed and produced for the installation of Video door entry systems and Sound Systems. However, it is also suitable for use in Automation, Temperature Control and Burglar Alarm Systems.

This cable is used for the distribution of the power supplies and the operating signals to all BUS system devices.

The cable consists of a white external sheathing and two twisted flexible conductors with a section of 0.5 mm<sup>2</sup>, one brown and one brown/white.

The cable is sold in 200 m coils.

It is thus suitable to be used:

- in the open air, inside trunkings, passage-ways and pipes
- laid underground by means of suitable pipes
- inside walls with suitable pipes.

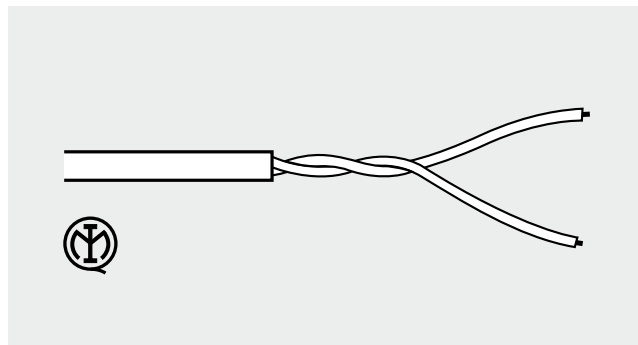
## Technical data

Insulation voltage:	450/750 V
Can be buried:	YES (see installation notes)
External sheath colour:	white (RAL 9010)
External sheath diameter:	5.0 +/- 0.1 mm
External sheath thickness:	0.7 mm
External sheath material:	PVC (RZ)
Number of internal conductors:	2 unshielded twisted flexible conductors with sheath
Colour of internal conductors:	brown – brown/white
Sheath thickness of internal conductors:	0.40 mm
Sheath diameter of internal conductors:	1.70 mm
Sheath material of internal conductors:	XLPE polyethylene
Conductor material:	red electrolytic copper
Conductor section:	0.50 mm <sup>2</sup> (16 x 0.20 mm <sup>2</sup> )
Operating temperature:	(-15) – (+70) °C
Coil length:	200 m

## Standards, Certifications, Marks

Reference standards: - It complies with the tests required by the following standards: EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396 as described in the IMQ CPT 062 document.

Marks obtained: 



## Installation notes

### Underground cable installation

The 336904 BUS SCS cable can be installed underground (protected using appropriate piping), together with other signalling cables, provided the voltage is <50V. It is however strictly forbidden to install the 336904 cable in the same conduit as power supply cables with voltages >50V. Failure to comply with the installation requirements will relieve BTicino of all responsibilities for the operation of the system installed.

### Installation together with other cables

Although the construction of the white cable guarantees the necessary electrical insulation level for installation together with 450/750 V system cables, it is however not capable of guaranteeing immunity from any electromagnetic disturbances that may occur when installed in the same conduits used for the power supply cables. It is therefore strongly recommended that the white BUS/SCS cable and the power supply cables are installed in separate conduits.



# SFERA speaker module with 2 call pushbuttons

342170

## Description

Speaker module for 2 WIRE system.

The following devices can be connected to the speaker module:

- Colour camera module to realize the video systems item 342550
- Black and white camera module to realize video systems item 342510
- Nameplate module item 342200
- Pushbuttons module item 342240
- Numeric digital call module item 342610
- Alphanumeric digital call module item 342600

All the described modules are connected to the speaker module by means of the appropriate multi-cables. The speaker module allows to make systems of up to 100 handsets and the opening of an electric door lock directly connected between clamps S+ S- (18 V 4 A impulsive, 250 mA holding current). The door lock can be locally supplied by a transformer or using the actuators item 346230 or item 346260.

## Related items

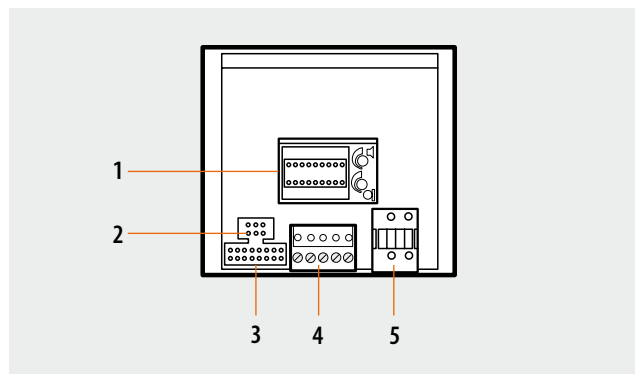
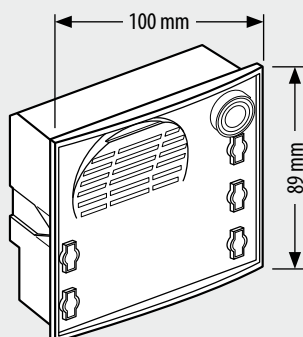
- 332111 (speaker module front cover, 1 pushbutton - Allmetal)
- 332112 (speaker module front cover, 1 pushbutton - White)
- 332113 (speaker module front cover, 1 pushbutton - Alugray)
- 332121 (speaker module front cover, 2 pushbuttons - Allmetal)
- 332122 (speaker module front cover, 2 pushbuttons - White)
- 332123 (speaker module front cover, 2 pushbuttons - Alugray)

For the use of monobloc front covers refer to the catalogue.

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc  
Stand by absorption: 25 mA  
Max. operating absorption: 75 mA  
Operating temperature: (-25)-(+70)°C

## Dimensional data



## Legend

- 1 - Socket for configurators and potentiometers to adjust the microphone and loudspeaker volume, jumper for adaptation to the type of door lock and the alphanumeric call module.
- 2 - Connection socket for the camera connector.
- 3 - Socket for the connection of the nameplate module, the pushbuttons module or the digital call module
- 4 - Removable connector for the connection of the BUS, the electrical door lock, and the entrance hall door lock release pushbutton.
- 5 - Removable connector for the connection of the additional power supply

## Configuration

The device must be configured as follows:

### P - entrance panel number

The configurator in socket P of the speaker module assigns to this a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

### N - call number

Assigns the correspondence between the entrance panel pushbuttons and the audio handsets or video handsets. In common entrance panels made using pushbutton modules, 1 must be inserted in N of the speaker module. The number of the first riser handset must be inserted in the local entrance panels. When the entrance panel is made with speaker module and digital call module (item 342630 or item 342610) no configurator must be inserted in N.

### T - door lock relay timing

configurator number

0= No configurator	1	2	3	4*	5	6	7
4 sec.	1 sec.	2 sec.	3 sec.	as pushbutt.	6 sec.	8 sec.	10 sec.

\* **Operation as pushbutton for 10 sec. max.**, after which standby mode is activated. To extend operation time over 10 seconds, use actuator item 346200 configured with **MOD=5**.

### S - type of call signal

The configuration of S determines the call tone of SPRINT handsets. One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal

Configurator	0	1	2	3
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

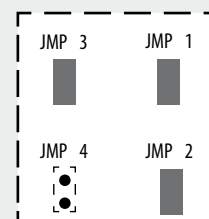
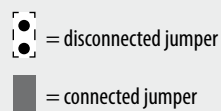
For the SWING, PIVOT, POLYX and AXOLUTE handsets, the **S configurator** associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different bells. In one-family systems **S=9 to configure the general call**.

### JUMPERS (JMP1) and (JMP2) - Critical door lock power supply:

Remove the JMP1 and JMP2 jumpers to connect to the speaker module a door lock with independent power supply.

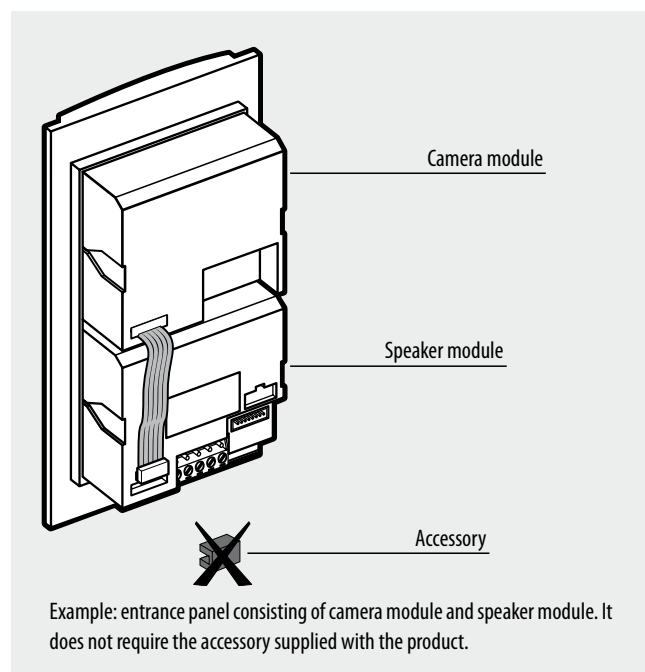
### JUMPER (JMP3) - EP local power supply

Remove the JMP3 jumpers when the speaker module is powered by an additional power supply.

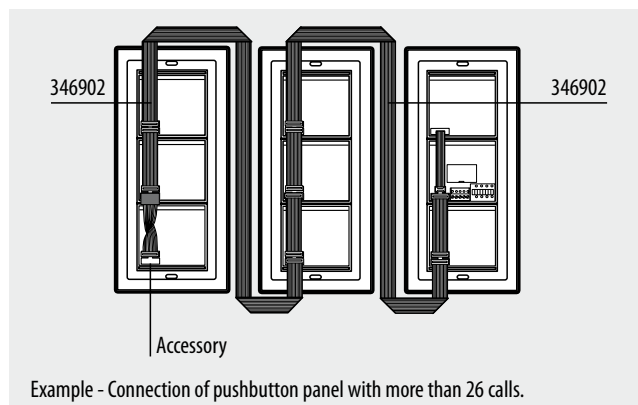
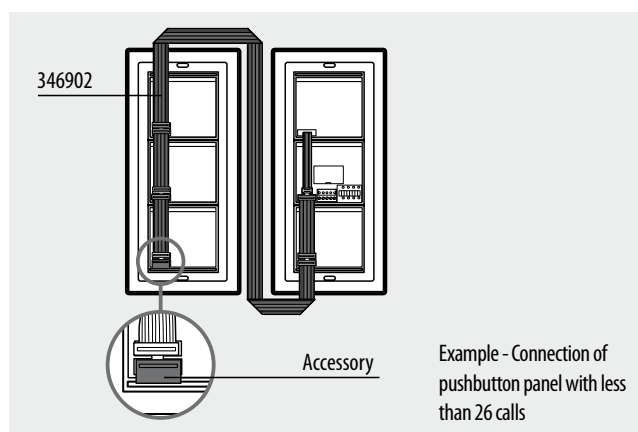
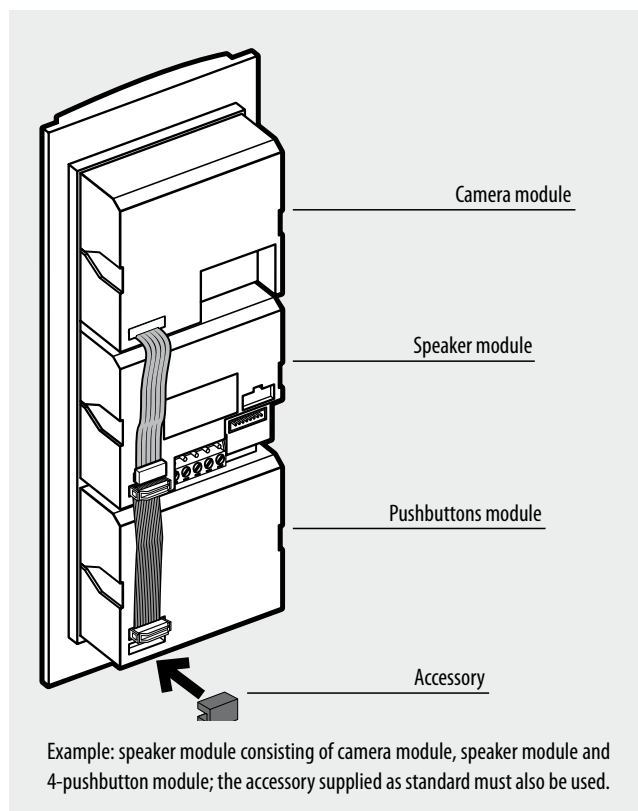
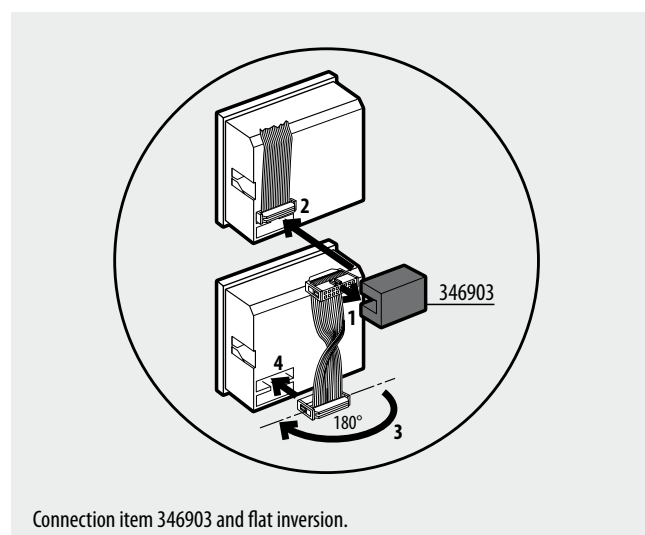


## Installation and connection

Supplied as standard with the speaker module is a closing accessory with connector. The accessory must be fitted in the last pushbutton module of the pushbutton panel, after connecting the modules to each other using the multicables with connectors. It must not be used if the pushbutton panel only consists of a 1 or 2 pushbutton speaker module, in addition to a camera module that may be installed.



- With entrance panels with less than 26 calls, it is necessary to connect the modules in a vertical position on several columns using item 346902, and to fit in the last pushbutton module the accessory supplied as standard.
- For entrance panels with more than 26 calls it is necessary to connect the modules in a vertical position on several columns using item 346902. After the sixth key module (or after 26 calls), fit item 346903 and invert the flat supplied as standard. In the last key module fit the accessory supplied as standard.





# SFERA

## Nameplate module

342200

### Description

SFERA nameplate module which can be used to enter the street number or any other information. Can be used to enter a caption in pushbutton panels with numerical call module item 342610. To be used with the "Nameplate" modular front cover. Nameplate lighting by green LEDs. A flat-cable for the connection to other modules is supplied.

**The device must not be configured.**

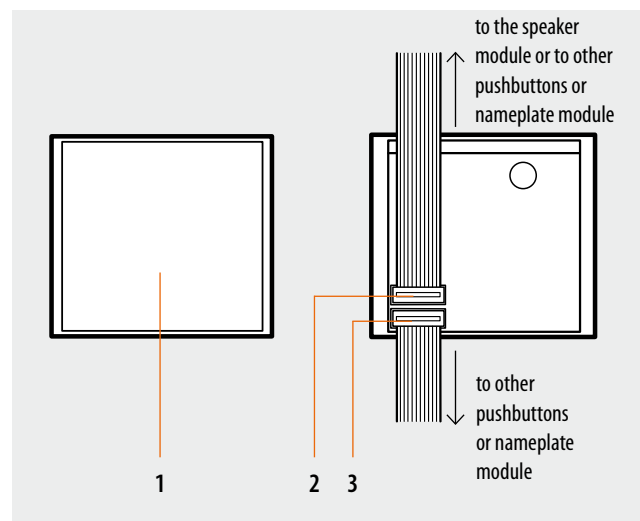
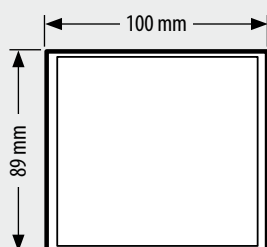
### Related items

332201 (Allmetal nameplate front cover)  
332202 (White nameplate front cover)  
332203 (Alugray nameplate front cover)

### Technical data

Power supply from SCS BUS: 18-27 Vdc  
Max. operating absorption: 15 mA  
Stand by absorption: 15 mA  
Operating temperature: (-25)-(+70)°C

### Dimensional data



### Legend

- 1 - Namecard for address number, legend of call addresses or other information.
- 2 - Input socket for connection with other modules.
- 3 - Connector socket for output connection with other modules, and housing for the electronic card supplied as standard with the speaker module (to be used on the last nameplate module only)



# SFERA, Colour camera module

342550

## Description

SFERA swivel colour camera module  
 CCD technology, fitted with white LEDs so that it can be used in poorly lit surroundings. To be used together with 2-wire speaker modules (connection using a multicable).  
 During installation it is possible to swivel the lens horizontally and vertically.

**The device must not be configured.**

## Related items

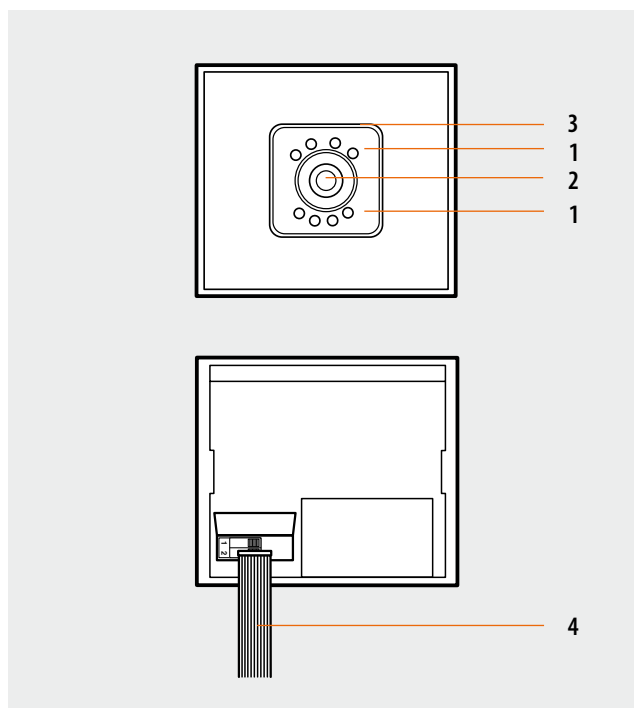
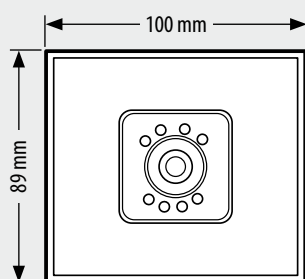
342170 (Speaker module with 2 call pushbuttons)  
 342350 (Speaker module with 4 call pushbuttons)  
 342630 (Speaker module with Graphic display)  
 332511 (modular camera front cover - Allmetal)  
 332512 (modular camera front cover - White)  
 332513 (modular camera front cover - Alugray)

For the use of monobloc front covers refer to the catalogue.

## Technical data

Power supply from SCS BUS: 18-27 Vdc  
 Max. operating absorption: 165 mA  
 Stand by absorption: 15 mA  
 Operating temperature: (-25)-(+70)°C  
 Camera sensor: 1/4"  
 Lens: f : 2.8 mm; F : 3 mm  
 Interlace: 2:1  
 Horizontal resolution: > 330 lines  
 Vertical resolution: 400 lines  
 Night lighting: white LEDs  
 Brightness adjustment: automatic (linear)

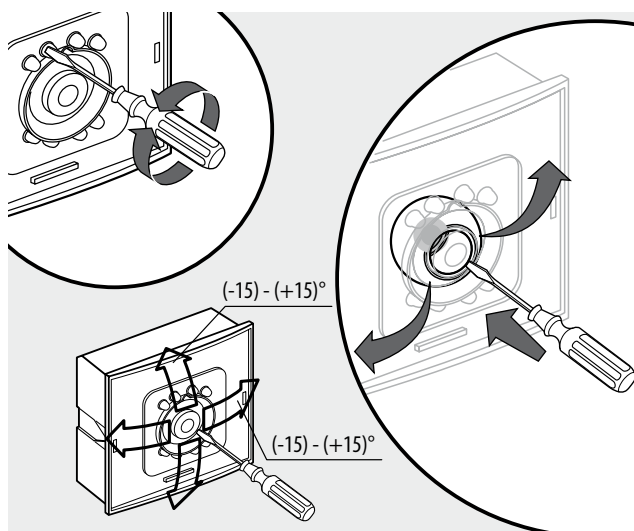
## Dimensional data



## Legend

- 1 - White LEDs for night lighting
- 2 - Lens
- 3 - Lens slant adjustment
- 4 - Multicable for connection to speaker module

## Lens adjustment



BT00122-b-UK



# SFERA audio video speaker module

342560

## Description

Audio/video speaker module for 2 wire system fitted with colour camera with LED lighting for night viewing.

Camera with slant adjustment horizontally and vertically by  $\pm 20^\circ$ .

The connections to the system are made by wiring the removable clamp supplied; the nameplates are illuminated by green LEDs. A closing card to be inserted in the last pushbutton module is supplied.

To be completed with the modular "Audio/video" front covers.

The speaker module allows to make systems of up to 100 handsets and the opening of an electric door lock directly connected between the clamps S+ S- (18 V 4 A impulsive, 250 mA holding current). The door lock can be locally supplied with a transformer, or using the actuators item 346230 or item 346260.

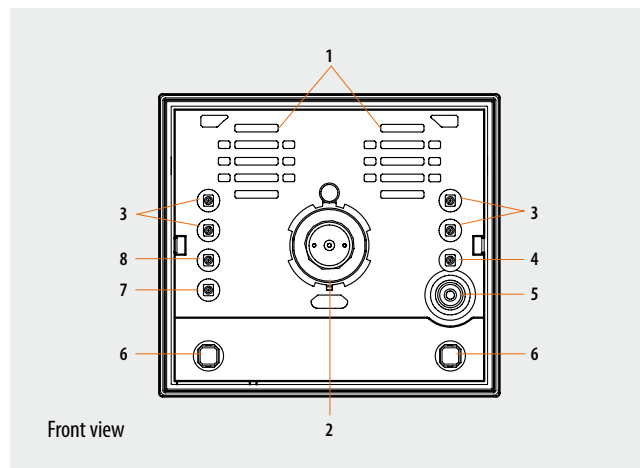
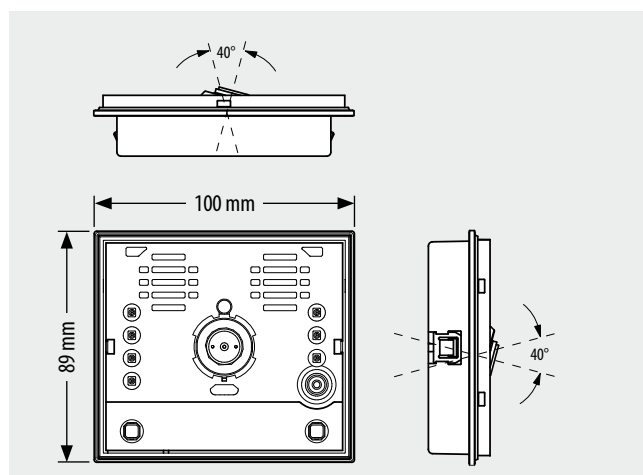
## Related items

- 342461 (modular A/V front cover without call pushbuttons - Allmetal)
- 342462 (modular A/V front cover without call pushbuttons - White)
- 342463 (modular A/V front cover without call pushbuttons - Alugray)
- 342471 (modular A/V front cover with 1 call pushbutton - Allmetal)
- 342472 (modular A/V front cover with 1 call pushbutton - White)
- 342473 (modular A/V front cover with 1 call pushbutton - Alugray)
- 342481 (modular A/V front cover with 2 call pushbutton - Allmetal)
- 342482 (modular A/V front cover with 2 call pushbutton - White)
- 342483 (modular A/V front cover with 2 call pushbutton - Alugray)

## Technical data

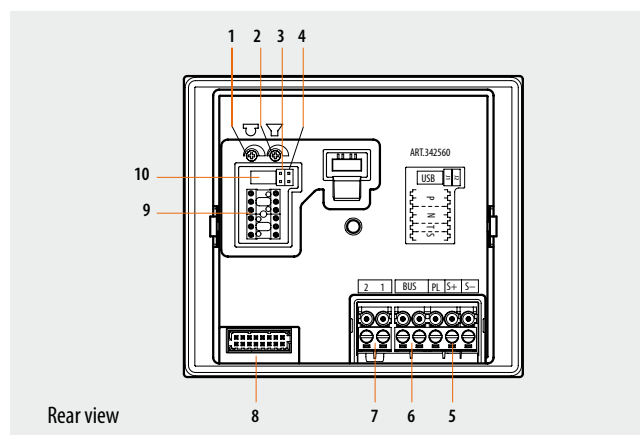
- Power supply from SCS BUS: 18 – 27 Vdc
- Stand by absorption: 40 mA
- Max. operating absorption: 160 mA
- Operating temperature:  $(-25) - (+70)^\circ\text{C}$
- Lens: F: 1.5 mm ; f: 4.3 mm
- Sensor: 1/3"
- Interlace: 2:1
- Horizontal resolution: 330 lines
- Night lighting: white LEDs
- Brightness adjustment: automatic

## Dimensional data



## Legend

- 1 - Loudspeakers
- 2 - Colour camera
- 3 - White LEDs for night lighting
- 4 - Green LED for door status notification
- 5 - Microphone
- 6 - Call pushbuttons
- 7 - Green LED: put through call notification  
Red LED: busy system notification
- 8 - Green LED: active communication notification



## Legend

- 1 - Microphone volume adjustment
- 2 - Loudspeaker volume adjustment
- 3 - J1: remove to enable additional power supply
- 4 - J2: when connected, two columns of call pushbuttons are active, when disconnected only one column is active
- 5 - Door lock connection and local open door pushbutton
- 6 - Connection to the 2 wire BUS
- 7 - Connection to the additional power supply
- 8 - Connection to the additional pushbuttons
- 9 - Configurator socket
- 10 - USB connector for PC connection

## Configuration

The device must be configured as follows:

### P - entrance panel number

The configurator in seat P of the speaker module assigns to it a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

### N - call number

Assigns the correspondence between the entrance panel pushbuttons and the audio handsets or video handsets. In the common entrance panels made with pushbutton modules, 1 must be inserted in N of the speaker module. The number of the first riser audio and video handset must be inserted in the local entrance panels in N.

### T - door lock relay timing

configurator number

0= No configurator	1	2	3	4*	5	6	7
4 sec.	1 sec.	2 sec.	3 sec.	as pushbutt.	6 sec.	8 sec.	10 sec.

\* **Operation as pushbutton for 10 sec. max**, after which standby mode is activated. To extend operation time over 10 seconds, use actuator item 346200 configured with **MOD=5**.

### S-type of call signal with entrance panel door lock opening notification beep

The configuration of S determines the call tone of the SPRINT handsets. One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal

Configurator	0	1	2	3
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

For the SWING, PIVOT, POLYX and AXOLUTE handsets, the S configurator associates the Entrance panel to the bell programmed in the same apartment. It is possible to choose between 16 different bells. In one-family systems, S=9 configures the general call and the handsets ring, the same as with the S=0.

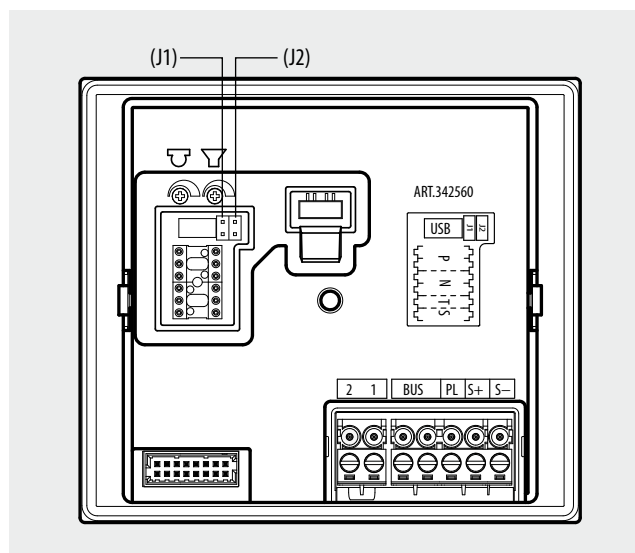
### S-type of call signal without entrance panel door lock opening notification beep

The configuration of S determines the call tone of the SPRINT handsets. One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal

Configurator	4	5	6	7
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

For the SWING, PIVOT, POLYX and AXOLUTE handsets, the S configurator associates the Entrance panel to the bell programmed in the same apartment. It is possible to choose between 16 different bells. In one-family systems, S=8 configures the general call and the handsets ring, the same as with the S=0.

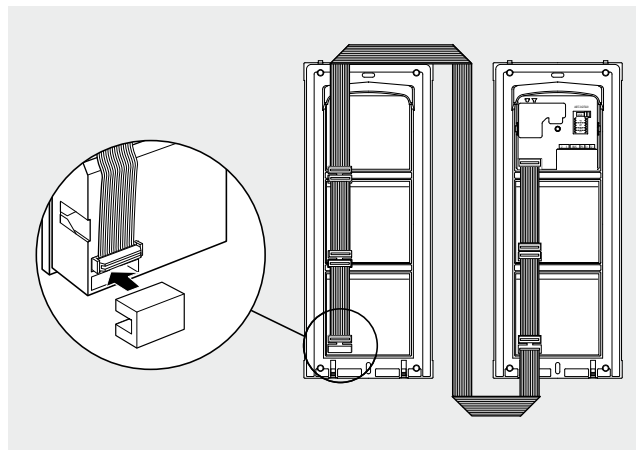


### J1 - EP local power supply

Remove the JMP1 jumpers when the speaker module is supplied by a dedicated power supply.

### J2 - activation of pushbutton columns

When connected, two columns of call pushbuttons are active, when disconnected only one column is active.



Supplied as standard with the audio and video speaker module, is a closing accessory with connector. The accessory must be fitted in the last pushbutton module of the entrance panel, after connecting the modules to each other using the multicables.

### Camera installation notes

The camera must not be installed facing strong light sources, or in locations where the area being shot is strongly backlit. In order to resolve these problems, we recommend that the camera is installed at a height of 180 cm, instead of the usual 160-165 cm, with the lens pointing down. This will improve image quality. In low light situations, the colour rendition of the image displayed by the colour camera may decrease. This is to ensure that the person being displayed can be better recognised. To ensure optimum vision in low light conditions, the installation of an additional light source is recommended.



# Wall mounted LINEA 2000 METAL entrance panel

342991-342992

## Description

Wall mounted 2-wire pushbutton panel with Zamak front cover, colour camera, and night viewing white LED light. One and two-family version available. The camera can be swivelled by  $\pm 15^\circ$ , both horizontally and vertically. It provides the possibility of opening an electrical door lock connected directly to clamps S+ and S- (18 V 4 A impulsive, 250 mA holding current). Blue LED backlit name plate

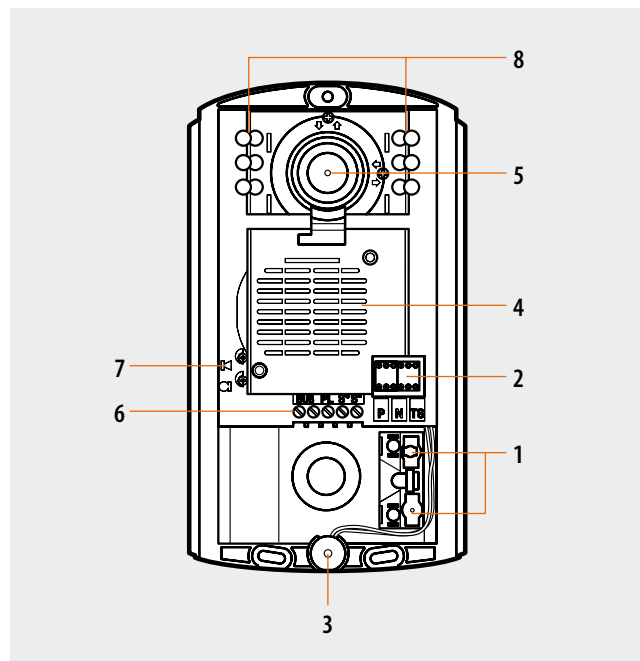
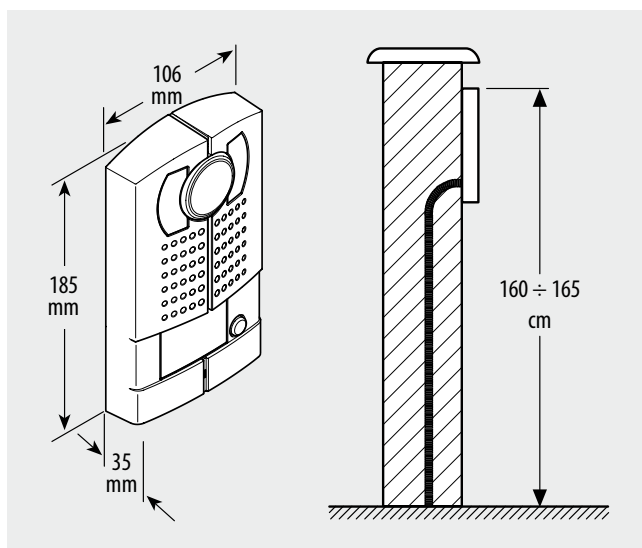
## Related items

346250 (gate release relay module)

## Technical data

Power supply from SCS BUS: 18 - 27 Vdc  
Stand by absorption: 20 mA  
Max. operating absorption: 240 mA  
Operating temperature:  $(-25) - (+70)^\circ\text{C}$   
PI against mechanical impact: IK07

## Dimensional data



## Legend

- 1 - Call keys
- 2 - Configurator socket
- 3 - Microphone
- 4 - Loudspeaker
- 5 - Colour camera with camera slant adjustment horizontally and vertically by  $\pm 15^\circ$
- 6 - Clamps for BUS and door lock connection: the module allows to control an electric door lock directly connected to the clamps S+ S- (18 V 4 A impulsive - 250 mA holding current 30 Ohm max)
- 7 - Microphone and loudspeaker volume adjustment
- 8 - White LEDs for night lighting

342991-342992

## Configuration

The device must be configured as follows:

### P - entrance panel number

The configurator in seat P of the speaker module assigns to it a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

### N - call number

Assigns the correspondence between the entrance panel pushbuttons, and the audio or video handsets.

In common entrance panels made using pushbutton modules, 1 must be inserted in N of the speaker module. In secondary entrance panels, the number of the first riser handset must be inserted in N.

### T - door lock relay timing

configurator number							
0= No configurator	1	2	3	4	5	6	7
4 sec.	1 sec.	2 sec.	3 sec.	as pushbutt.	6 sec.	8 sec.	10 sec.

### S - type of call signal

The configuration of S determines the call tone of the SPRINT handsets. One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal

Configurator	0	1	2	3
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

For the SWING, PIVOT, POLYX and AXOLUTE handsets, the **S configurator** associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different bells. In one-family systems **S=9 configure the general call**.



# Flush mounted LINEA 2000 METAL entrance panel

343001-343002

## Description

Flush mounted 2-wire audio and video speaker module with Zamak front cover, colour camera and night viewing white LED light. One and two-family version available. The camera can be swivelled by  $\pm 20^\circ$ , both horizontally and vertically. It provides the possibility of opening an electrical door lock connected directly to clamps S+ and S- (18 V 4 A impulsive, 250 mA holding current). Flush mounted box supplied as standard.

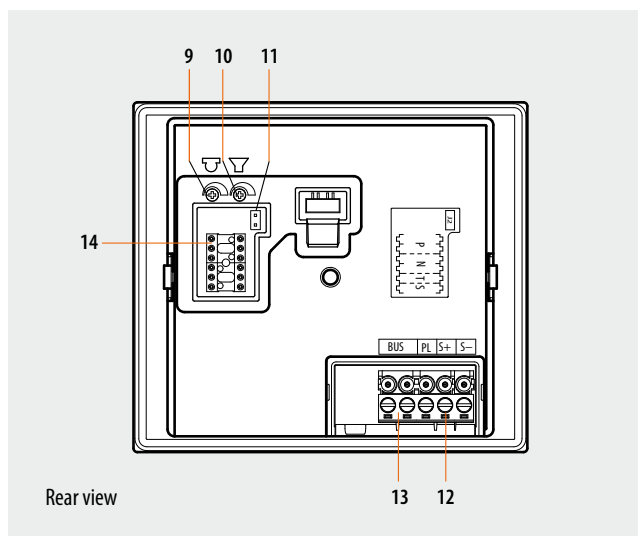
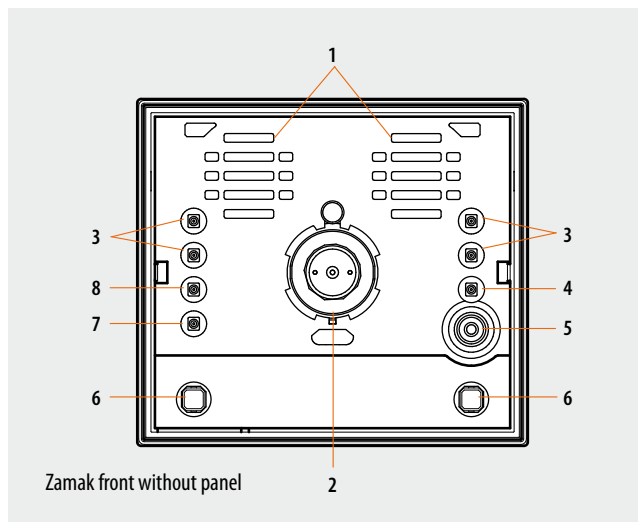
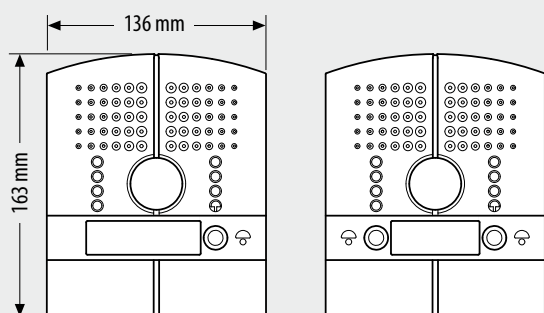
## Related items

346250 (gate release relay module)

## Technical data

Power supply from SCS BUS: 18 - 27 Vdc  
Stand by absorption: 40 mA  
Max. operating absorption: 160 mA  
Operating temperature:  $(-20) - (+70)^\circ\text{C}$   
PI against mechanical impact IK10  
Sensor: 1/3"  
Lens: f: 4,3 mm; F: 1.5 mm  
Interlace: 2:1  
Resolution: 330 horizontal lines  
Night lighting: white LEDs  
Brightness adjustment: automatic

## Dimensional data



## Legend

- 1 - Loudspeakers
- 2 - Colour camera
- 3 - White LEDs for night lighting
- 4 - Green LED for door status notification
- 5 - Microphone
- 6 - Call keys
- 7 - Green LED: put through call notification  
Red LED: busy system notification
- 8 - Green LED: active communication notification
- 9 - Microphone volume adjustment
- 10 - Loudspeaker volume adjustment
- 11 - J2: when connected, two columns of call pushbuttons are active, when disconnected only one
- 12 - Door lock connection and local open door pushbutton
- 13 - Connection to the 2-wire SCS BUS.
- 14 - Configurator socket

## Configuration

The device must be configured as follows:

### P - entrance panel number

The configurator in seat P of the speaker module assigns to it a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

### N - call number

Assigns the correspondence between the entrance panel pushbuttons and the audio handsets or video handsets. In the common entrance panels made with pushbutton modules, 1 must be inserted in N of the speaker module. The number of the first riser handset must be inserted in the local entrance panels in N.

### T - door lock relay timing

configurator number

0= No configurator	1	2	3	4*	5	6	7
4 sec.	1 sec.	2 sec.	3 sec.	as pushbutt.	6 sec.	8 sec.	10 sec.

\* **Operation as pushbutton for 10 sec. max**, after which standby mode is activated. To extend operation time over 10 seconds, use actuator item 346200 configured with MOD=5.

### S-type of call signal with entrance panel door lock opening notification beep

The configuration of S determines the call tone of the SPRINT handsets.

One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal

Configurator	0	1	2	3
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

For the SWING, PIVOT, POLYX and AXOLUTE handsets, the S configurator associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different bells. In one-family systems, S=9 configures the general call and the handsets ring, the same as with the S=0.

### S-type of call signal without entrance panel door lock opening notification beep

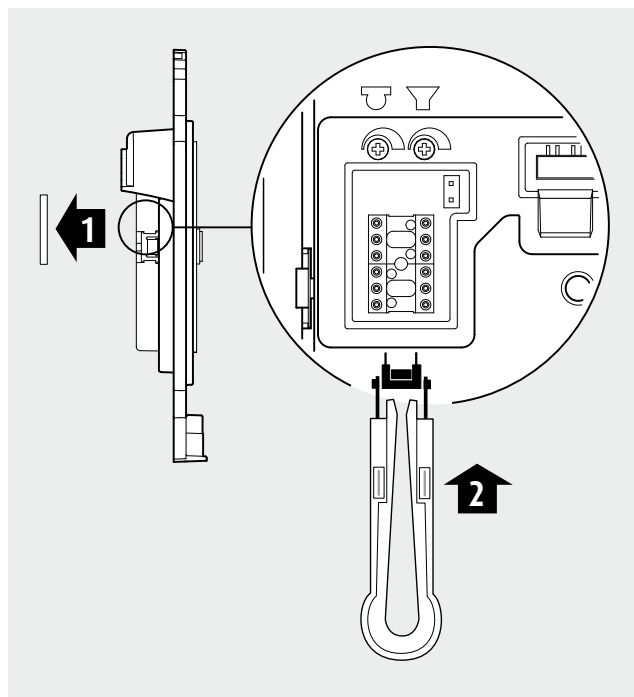
The configuration of S determines the call tone of the SPRINT handsets.

One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal

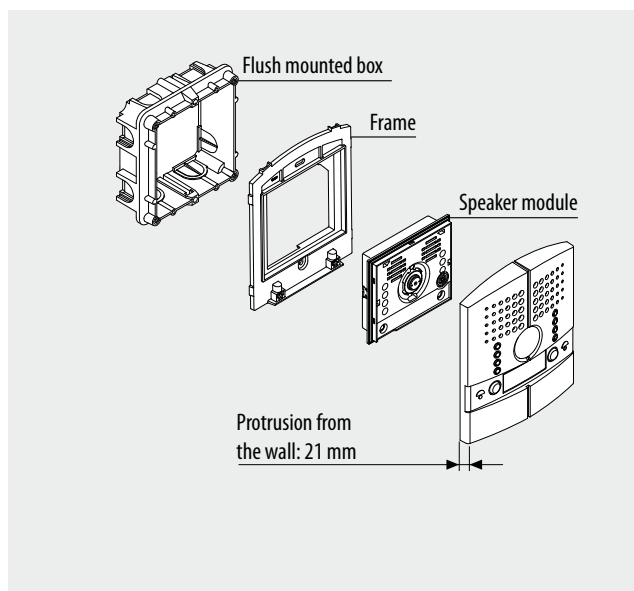
Configurator	4	5	6	7
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

For the SWING, PIVOT, POLYX and AXOLUTE handsets, the S configurator associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different bells. In one-family systems, S=8 configures the general call and the handsets ring, the same as with the S=0.



## Installation

The camera must not be installed in front of intense light sources, or in locations where the subject might be backlit. To avoid these problems try to change the installation height of the camera, normally from 160-165 cm, to a height of 180 mm, and to direct the lens downwards so that the shooting quality may be improved. In low light conditions, the picture of the colour camera may be reproduced with a lower colour rendition, in order to ensure the possibility to better identify the subject. For optimum rendition, it is however recommended that an extra light sources is installed in scarcely illuminated locations.





# Audio Polyx

344082

## Description

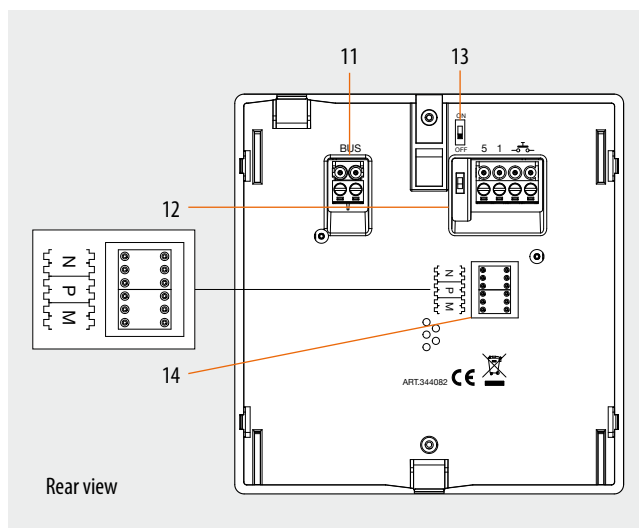
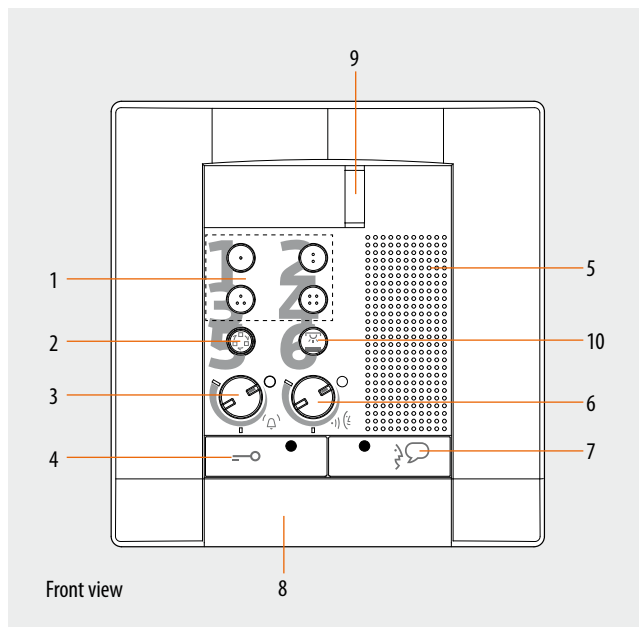
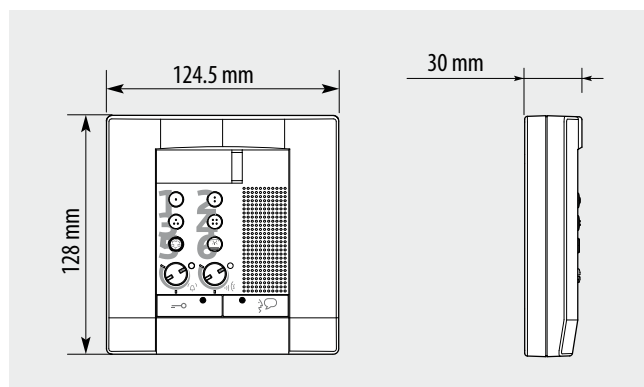
2 WIRE handsfree handset for wall mounted installation.

It's fitted with keys for: EP activation/cycling, door lock release, staircase light switching on and 4 programmable keys, which operating mode is set through the configuration. Specific audible and visual signals mean that it is also suitable for use by disabled people. Fixing bracket supplied.

## Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	5 mA
Max. operating absorption:	55 mA
Operating temperature:	5 - 40°C

## Dimensional data



## Legend



- 1 - 4 programmable keys (through configuration)
- 2 - EP Activation/cycling
- 3 - Bell volume adjustment and exclusion + LED
- 4 - Door lock key + LED
- 5 - Loudspeaker
- 6 - Loudspeaker volume adjustment
- 7 - Connection key+ LED
- 8 - Microphone
- 9 - Call signalling LED
- 10 - Staircase light key
- 11 - Clamps for the connection to the 2 WIRE BUS
- 12 - Clamps for the connection of the Floor call auxiliary services and extra bell
- 13 - Line termination ON/OFF micro-switch
- 14 - Configurator socket

## Configuration







### N - handset number


Assigns to each handset an identification number within the system. The handsets must be configured in progressive order. Handsets with parallel connection (max 3 are allowed inside apartments without item 346850) must be configured using the same N configurator.


### P - entrance panel association

The P configurator identifies the entrance panel associated, or the first entrance panel on which the audio is activated when the  key is pressed, as well as which door lock is activated when the key  is pressed while the handset is idle.

### M - Operating mode of the keys

In addition to the door lock opening key  and the staircase light key , the handset also has 4 programmable keys (, , , ). These keys may be associated to different operating modes (e.g. activation of external actuators, intercom, activation of additional EPs, etc., based on the type of configurator connected to M).

Configurator in P	key  function
0-9	Entrance panel audio activation (configured with P=0÷9)

Configurator in P	key function 
0-9	Opening of the EP door lock (configured with P=0-9)





The handset offers the possibility to select among 16 types of bells with pre-programmed ringtones, which can be associated to the following type of calls:

- Calls from the entrance panel (configured with S=0)
- Calls from the entrance panel (configured with S=1)
- Intercom call
- Call to the floor

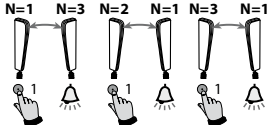
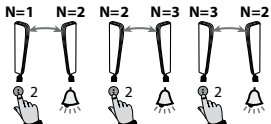
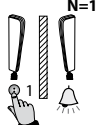
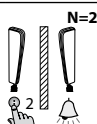
**(See the bell programming table in the following pages)**


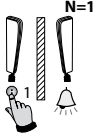

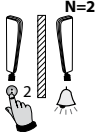

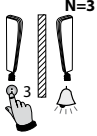

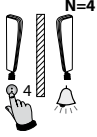



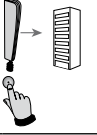

### Configuration

Below are the various operating modes that can be assigned to the 4 programmable keys:

MODE	KEY	FUNCTION	NOTES
MOD = 		<b>1 Intercom</b> on itself, it sends the call to all handsets with the same address.	
		<b>EP activation</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=9)	
		<b>EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
		<b>EP door lock release</b> (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	
MOD = 		<b>1 Intercom</b> on itself, it sends the call to all handsets with the same address.	
		<b>2 Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
		<b>3 EP activation</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=9)	
		<b>EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
MOD = 		<b>1 Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
		<b>2 Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
		<b>3 EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
		<b>EP door lock release</b> (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	

MODE	KEY	FUNCTION	NOTES
MOD = 3	1	<b>Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
	2	<b>Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
	3	<b>Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
	4	<b>Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
MOD = 4	1	<b>EP activation</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=9)	
	2	<b>Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
	3	<b>EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	<b>EP door lock release</b> (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	
MOD = 5	1	<b>EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	2	<b>EP door lock release</b> (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	
	3	<b>EP door lock release</b> (configured with P+3), directly, without call, or activation of the actuator, item 346200 (configured with P+3 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+3)	
	4	<b>EP door lock release</b> (configured with P+4), directly, without call, or activation of the actuator, item 346200 (configured with P+4 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+4)	

MODE	KEY	FUNCTION	NOTES
MOD = 6	1	Activation of the scenario saved in the scenario module	(SCENARIO 1)
	2	Activation of the scenario saved in the scenario module	(SCENARIO 2)
	3	<b>EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	<b>EP door lock release</b> (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	
MOD = 7	1	<b>Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
	2	<b>Intercom</b> inside the apartment, in systems with apartment interface item 346850, or <b>intercom</b> among apartments without apartment interface.	
	3	Activation of the scenario saved in the scenario module	(SCENARIO 1)
	4	Activation of the scenario saved in the scenario module	(SCENARIO 2)
MOD = 8	1	Activation of the scenario saved in the scenario module	(SCENARIO 1)
	2	Activation of the scenario saved in the scenario module	(SCENARIO 2)
	3	Activation of the scenario saved in the scenario module	(SCENARIO 3)
	4	Activation of the scenario saved in the scenario module	(SCENARIO 4)
MOD = 9	1	General <b>Intercom</b> , sends a call to all the handsets of the system.	
	2	<b>EP activation</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=9)	
	3	<b>EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	<b>EP door lock release</b> (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	
MOD = 12	1	<b>Intercom</b> between apartments, in systems with apartment interface, item 346850	
	2	<b>Intercom</b> between apartments, in systems with apartment interface, item 346850	
	3	<b>EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	<b>EP door lock release</b> (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	

MODE	KEY	FUNCTION	NOTES
MOD = <b>13</b>		<b>1 Intercom</b> between apartments, in systems with apartment interface, item 346850	
		<b>2 Intercom</b> between apartments, in systems with apartment interface, item 346850	
		<b>3 Intercom</b> between apartments, in systems with apartment interface, item 346850	
		<b>4 Intercom</b> between apartments, in systems with apartment interface, item 346850	
MOD = <b>16</b>		<b>1</b> Activation of the scenario saved in the scenario module	(SCENARIO 1)
		<b>2</b> Activation of the scenario saved in the scenario module	(SCENARIO 2)
		<b>3</b> General <b>Intercom</b> , sends a call to all the handsets of the system.	
		<b>4</b> <b>EP door lock release</b> (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	

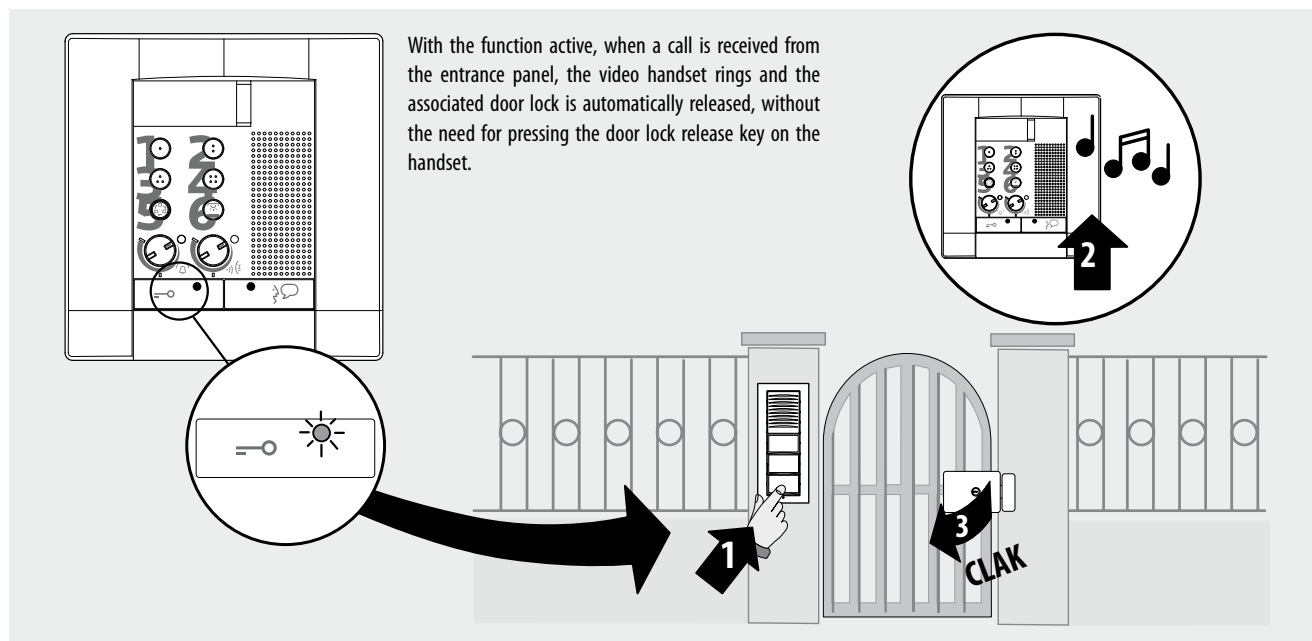
&lt;&lt; PREVIOUS

### Configuration

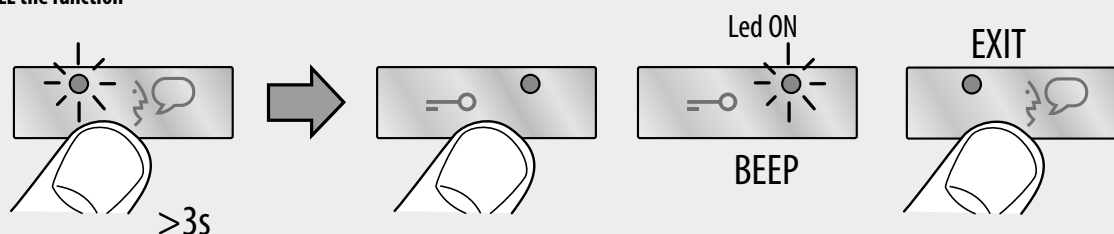
A			B	C	D	E
0	0	+  20 = B 40 = C 60 = D 80 = E	20	40	60	80
1	0		30	50	70	90
0	1		21	41	61	81
0	2		22	42	62	82
1	2		32	52	72	92
0	3		23	43	63	83
1	3		33	53	73	93
0	4		24	44	64	84
0	5		25	45	65	85
0	6		26	46	66	86
1	6		36	56	76	96
0	7		27	47	67	87
0	8		28	48	68	88

- Ⓐ Configuration selected for the operation of the keys (see previous pages)
- Ⓑ Configuration selected for the operation of the keys + **OFFICE** function
- Ⓒ Configuration selected for the operation of the keys + **PAGING** function
- Ⓓ Configuration selected for the operation of the keys + **HANDSFREE** function
- Ⓔ Configuration selected for the operation of the keys, **OFFICE** and **PAGING** function

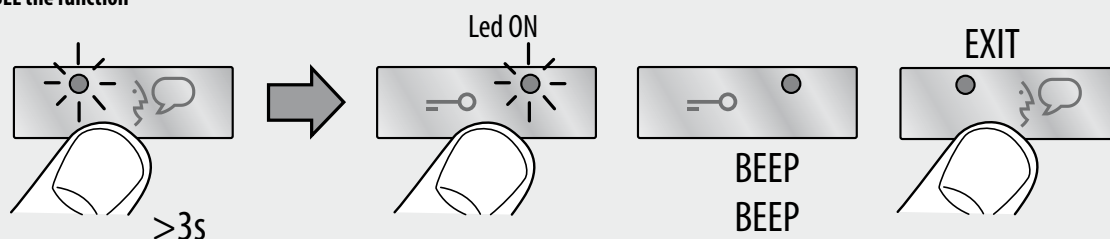
## OFFICE function detail



## To ENABLE the function



## To DISABLE the function



**WARNING:** the "OFFICE" function cannot be activated together with the "DOOR STATUS" function.

### DOOR status function

This function notifies the status of the door lock. If open, the "door lock LED" flashes, if closed, the LED stays off.

**NOTES:** it can only be enabled if the enabling option is included in the system; It CANNOT be activated together with the OFFICE function.

### PAGING function

This function can be used to send voice messages using the microphone of the device through the speakers of the sound system. To activate briefly press the "Connection" key while the device is in the idle condition. The activation of the function is confirmed by the green LED coming on. To DISABLE the function press the "Connection" key again.

### PUSH TO TALK function

If the entrance panel is in a particularly noisy position, during the conversation it will be possible to enable the "PUSH TO TALK" function, which will provide a better quality of communication.

To enable the PUSH TO TALK function during the conversation proceed as follows:

- Press the Connection key for at least 2 seconds, to enable the communication with the entrance panel.

**The LED stays green.**

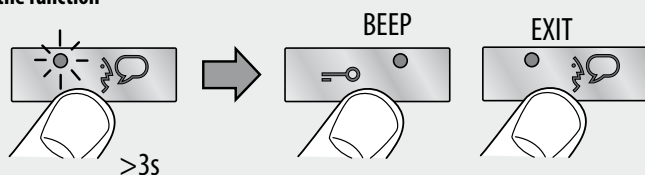
- Release the key to listen to the entrance panel. **The LED turns red.**

- To end the connection press the Connection key briefly. **The LED turns off.**

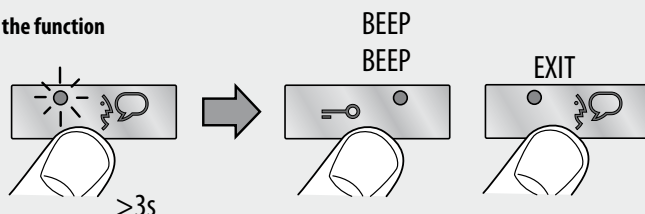
### HANDSFREE function

The HANDSFREE function automatically activates the microphone and the loudspeaker when a call is received, without the need for pressing the Connection key to answer (the connection is automatically established when the call is received).

#### To ENABLE the function



#### To DISABLE the function



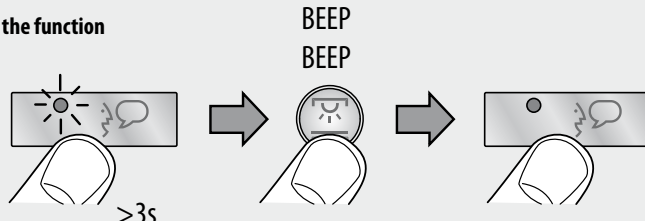
### Enable/disable key sound

In the base configuration, when a key is pressed, a beep is emitted. This function may be disabled/enabled with the following procedure:

#### To ENABLE the function

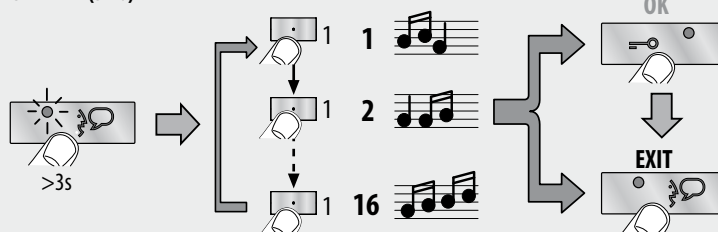


#### To DISABLE the function

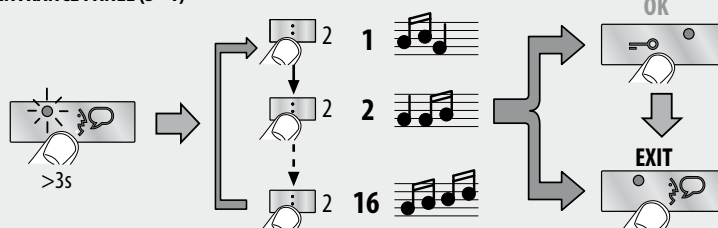


## Programming of bells

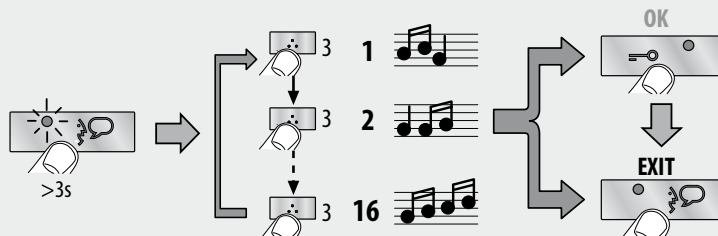
### Bell selection from MAIN ENTRANCE PANEL (S=0)



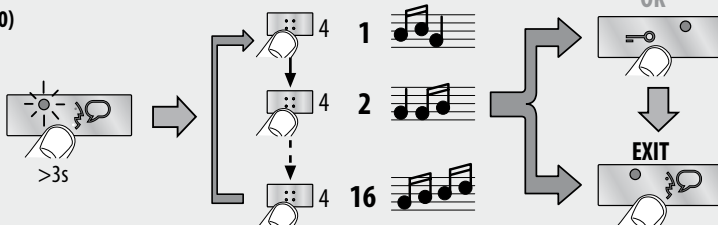
### Bell selection from SECONDARY ENTRANCE PANEL (S=1)



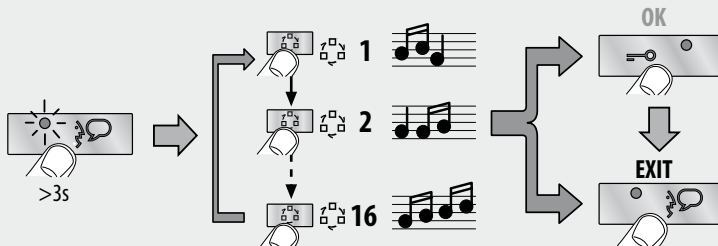
### INTERCOM CALL bell selection



### EXTERNAL INTERCOM CALL bell selection (only with interface item 346850)



### FLOOR CALL bell selection





# POLYX MEMORY DISPLAY

344163

## Description

2 WIRE wall mounted speaker phone video handset with audio and video memory. With 3.5" colour LCD display with PC customisable icons OSD navigation menu for the management of the following MY HOME applications: Video door entry system, temperature control, sound system, scenarios, burglar alarm. With video door entry system answering machine with call memory function.

LED signalling for: call exclusion, door status, connection with entrance panel, and answering machine status. It can be wall mounted using the appropriate bracket (supplied).

Programming and configuration using the TiPolyxMemoryDisplay software supplied with the product.

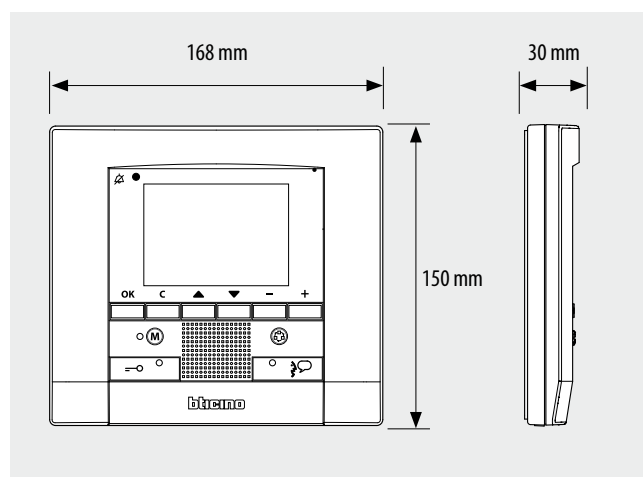
## Related items

346020 (additional 2 DIN modules power supply) - optional, for local powering of the video handset, when maximum installation distances are necessary.

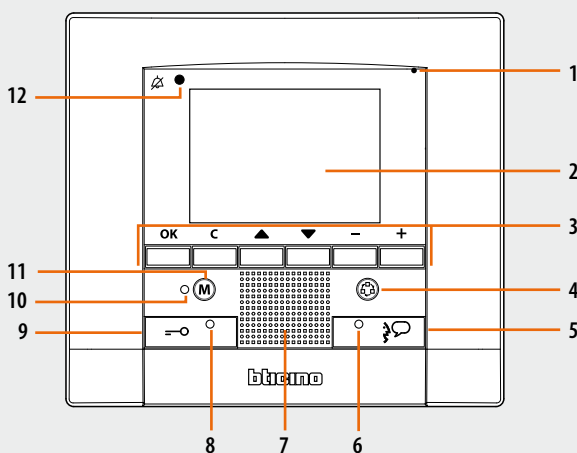
## Technical data

Power supply dal SCS BUS: 18 – 27 Vdc  
Stand by absorption: 10 mA  
Max. operating absorption: 330 mA  
Operating temperature: 0 - 40 °C

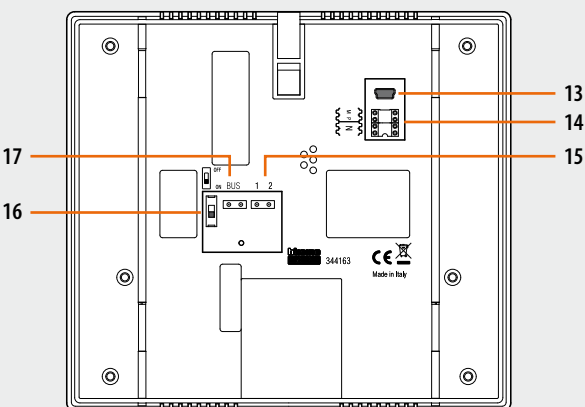
## Dimensional data



Front view



Retro



## Legend

1. Microphone
2. 3.5" LCD colour display
3. Navigation and confirmation keys in the icon menu
4. Entrance panel/camera cycling activation key
5. Audio connection activation/deactivation key
6. Connection status LED
7. Loudspeaker
8. Door lock status LED
9. Door lock activation key
10. Audio video answering machine status LED
11. Answering machine key: enable/disable the answering machine function (if enabled by the menu)
12. Bell exclusion notification LED
13. Mini USB connector for connection to the PC
14. Configurator socket
15. Additional power supply connector (1-2)
16. Line termination ON/OFF micro-switch
17. 2 WIRE SCS/BUS connection

## Configuration

Polyx Memory Display can be configured in two different modes:

- **Quick configuration** (with physical configurator connection);
- **Advanced configuration** (using the TiPolyxMemoryDisplay software supplied).

The quick configuration enables the user to access the video door entry system function menu. This is the standard configuration with configurators to be connected to their own sockets on the back of the device itself.

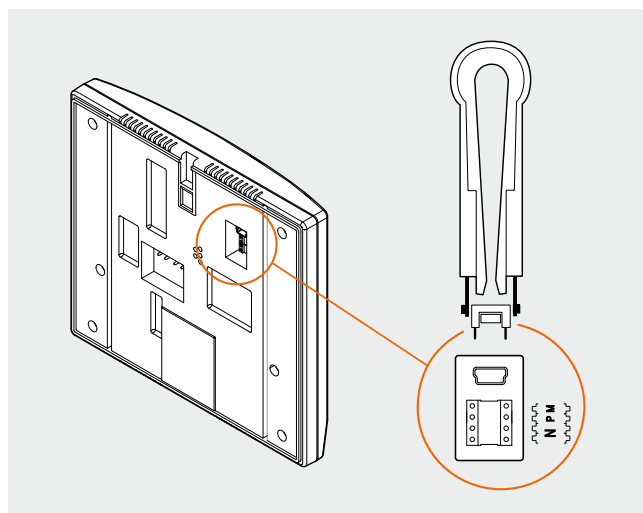
If the apartment interface, item 346850, is installed inside the apartment, configuration of the video handset using the software supplied is recommended.

The PC advanced configuration using the software (CD supplied), provides the user with the highest degree of customisation, with the possibility of:

- create customized menus;
- customize text messages;
- access all home automation functions.

### Connection to the PC



To transfer the configuration performed using the TiPolyxMemoryDisplay software or to update the firmware, connect POLYX MEMORY DISPLAY to the PC using the USB-miniUSB cable.



#### N – handset number

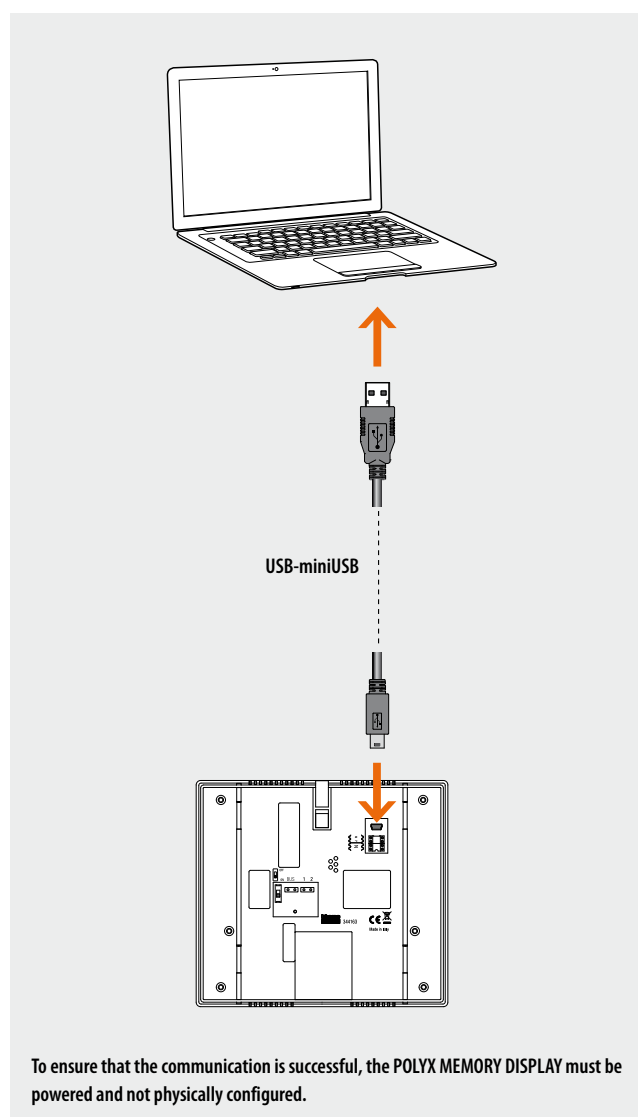
The N configurator assigns to each video handset an identification number within the system. The handsets must be configured in progressive order. Handsets with parallel connection (max 3 are allowed inside apartments without item 346850) must be configured using the same N configurator. In parallel with the main video handset, additional handsets, video handsets and/or bells may be installed.

#### P – entrance panel association

The P configurator identifies the entrance panel associated, or the first entrance panel to activate before pressing the key  and which door lock is activated when the key  is pressed while the video handset is idle.

#### M – Operating mode

The M configurator identifies the main menu page and therefore the preset functions that may be used (see manual supplied with the product).



To ensure that the communication is successful, the POLYX MEMORY DISPLAY must be powered and not physically configured.



# Inductive LOOP module

344165

## Description

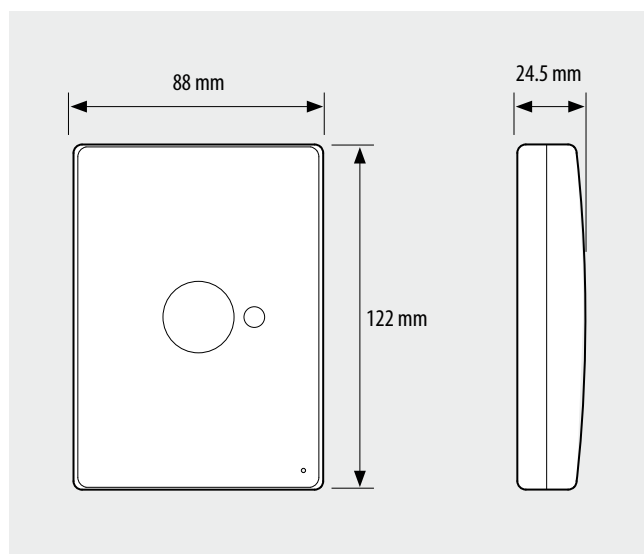
2 WIRE inductive LOOP module to be used with Polyx Memory Display 344163 video handset, to enable use by people wearing hearing aids (fitted with T selector). The device must be configured with the same address (N) of the corresponding video handset. Wall mounted installation without the need of accessories.

**WARNING:** The inductive loop module must only be activated AFTER establishing the connection of the associated video handset to the entrance panel.

## Technical data

Power supply dal SCS BUS: 18 – 27 Vdc  
Stand by absorption: 5 mA  
Max. operating absorption: 200 mA  
Operating temperature: 5 - 40 °C

## Dimensional data



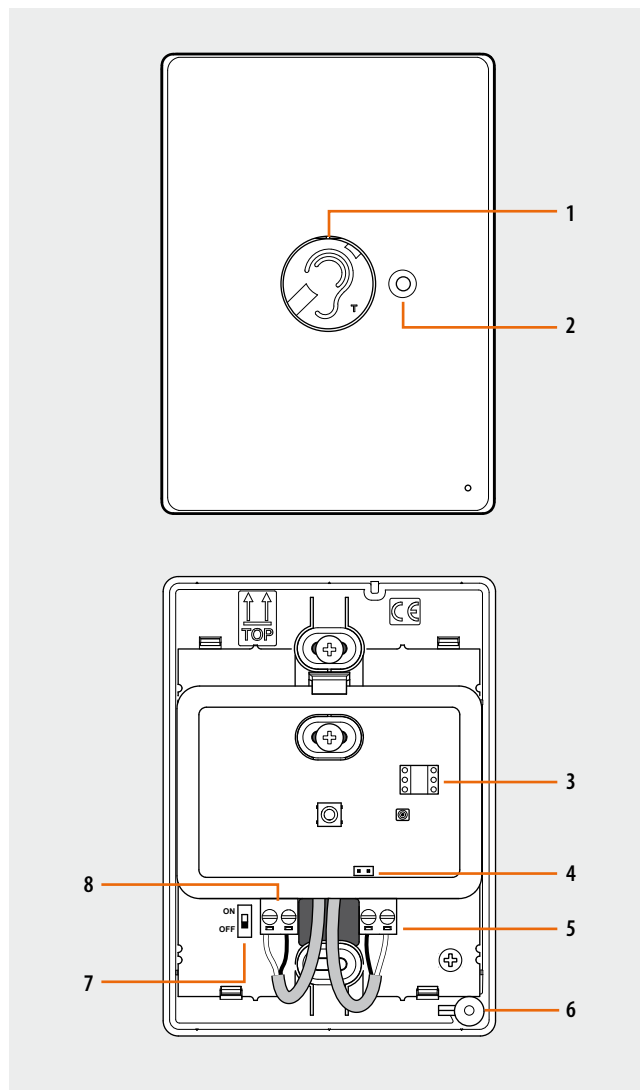
## Configuration

⊙	⊙	⊙
N	*	
⊙	⊙	⊙

**N = associated video handset number**

The N configurator assign to the device the same number of the handset of the associated video handset (**configure with the same N of the video handset**).

(\*) = NOT USED



## Legend

1. Activation key
2. Status signalling LED: green flashing = call notification  
green steady = connection established
3. Configurator socket
4. Jumper, to be removed to enable additional power supply connection
5. Additional power supply connection clamps
6. Microphone
7. Line termination ON/OFF micro-switch
8. 2 WIRE SCS/BUS connection clamps



# AV Power supply 230 V

346000

## Description

2-wire system power supply to be used in audio systems with 2-wire speaker modules or with the universal speaker unit item 346991, for the creation of systems with up to 100 handsets (up to 56 when using item 346991), and in video systems with item 346830, with the audio/video node item F441, or the matrix item F441M.

The power supply must also be used for powering the sound systems. It can be used as local power supply - additional power supply (output 1 – 2) – for video door entry system advanced handsets. On the output it supplies 27 Vdc continuous low voltage, with a maximum current of 1.2 A. It's electronically protected (without fuses) against short circuit and overload. It is a double insulation safety device in accordance with CEI. The power supply unit is inside a 8 DIN modules rail enclosure, and its installation must be in accordance with the regulations of the country of use.

The device must not be configured.

## Technical data

PRI (Power supply Vac input):

Rated voltage:	220 – 240 Vac
Rated current:	230 – 250 mA
Working voltage range:	207 – 253 Vac
Working frequency range:	50 – 60 Hz
Input power at full load:	44.9 W (max)
Dissipated power:	11 W (max)
Input power without load:	4.2 W (max)
Operating temperature:	5 – 40 °C
Protection index:	IP30

SEC (Vdc output):

Rated voltage (BUS):	27 Vdc +/- 0.1 Vdc
Rated voltage (1-2):	27 Vdc +/- 0.1 Vdc
Rated current:	0 – 1.2 A
Rated power:	32.4 W

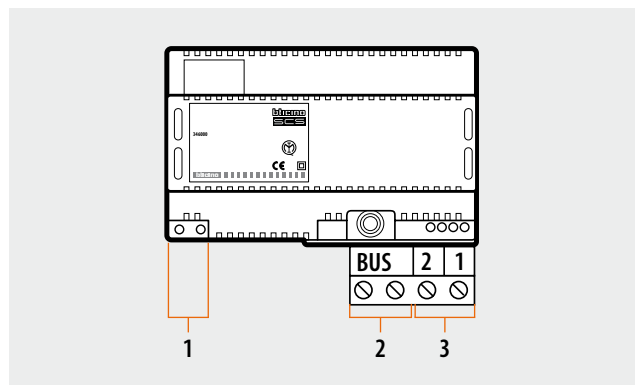
## Standards, Certifications, Marks

Standards: CEI EN60065 - CEI 64-8-4 (par. 411.1.2.5)

Marks obtained:     

## Dimensional data

8 DIN modules



## Legend

- 1 - 230 Vac input connection clamps
- 2 - SCS BUS output connection clamps
- 3 - Output 1—2 connection clamps

## Assembly, Installation

Comply with the following installation requirements:

- The power supply must always be installed in appropriate enclosures.
- It must be kept away from water drips and sprays.
- Do not to obstruct the air vents.
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used both to disconnect the power supply from the electric network, and to protect it.



# Additional power supply 230 V

346020

## Description

2 DIN module devices which allows to:

- locally supply the single video door entry handsets and entrance panels.
- supply some accessories of the Communication and MY HOME catalogues (ex: Web server, A/V server, scenario programmers, 2 WIRE/IP interface, switch 10/100, ADSL modem router, Hub-TV and SCS modulator).

It is a double insulation safety device in accordance with CEI.

The power supply is enclosed by a 2 DIN module plastic rail enclosure, and its installation must be in accordance with the regulations of the country of use.

The device must not be configured.

## Technical data

### PRI (AC power supply input)

Rated voltage:	220 – 240 Vac
Rated current:	180 – 190 mA
Working voltage range:	187 – 265 V
Working frequency range:	47 – 63 Hz
Input power at full load:	20 W max
Dissipated power:	3.8 W (max.)
Performance at full load:	80% typ.
Power in stand by:	< 1 W
Operating temperature:	5 – 40 °C
Integrated fuse (PRI side):	F1 T2A 250V (CANNOT BE REPLACED)

### 1 - 2 (DC output):

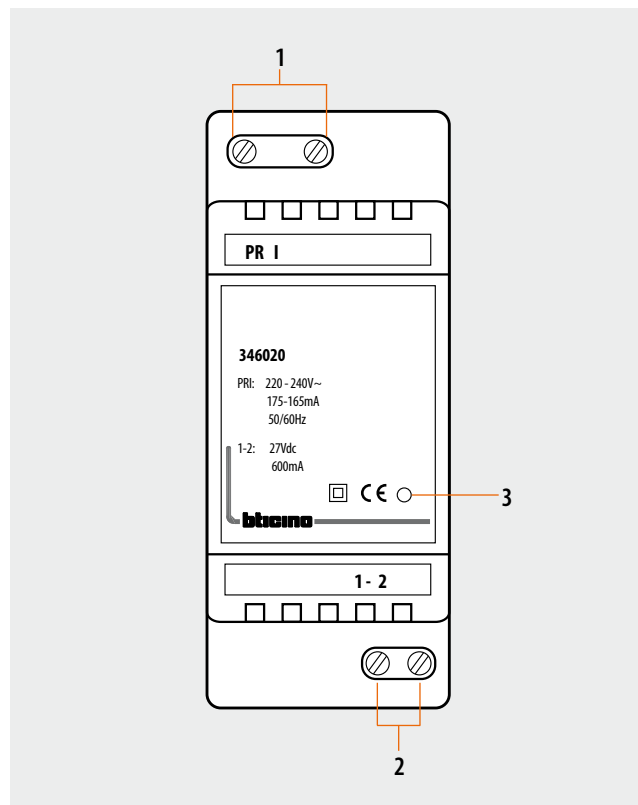
Rated voltage:	27 V +/- 100 mV
Rated current:	0 – 0.6 A
Rated power:	16.2 W

## Standards, Certifications, Marks

Standards: **CEI EN60065**

## Dimensional data

2 DIN modules



## Legend

- 1 - 230 Vac input connection clamps
- 2 - Output 1 – 2 connection clamps
- 3 - Operating status notification LEDs:  
(GREEN ON) – normal operation of the power supply  
(RED ON) – output current overload

## Assembly, Installation

Comply with the following installation requirements:

- The power supply must always be installed in appropriate enclosures
- It must be kept away from water drips and sprays.
- Do not obstruct the air vents.
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.



# Mini power supply 230 V

346030

## Description

2 DIN module device for:

- basic video door entry systems (e.g. apartment intercom)
- mini SOUND SYSTEMS (absorption up to 600 mA).

It is a double insulation safety device.

The power supply is inside a module plastic rail enclosure, and its installation must be in accordance with the regulations of the country of use.

The device must not be configured.

## Technical data

### PRI (power supply input AC):

Rated voltage:	220 – 240 Vac
Rated current:	200 - 190 mA
Working voltage range:	187 – 265 V
Working frequency range:	47 – 63 Hz
Input power at full load:	21.5 W max
Dissipated power:	5.3 W (max.)
Performance at full load:	80% typ.
Power in stand by:	< 1 W
Operating temperature:	5 – 40 °C
Integrated fuse (PRI side):	F1 T2A 250V (CANNOT BE REPLACED)

### SCS A-V; SCS:

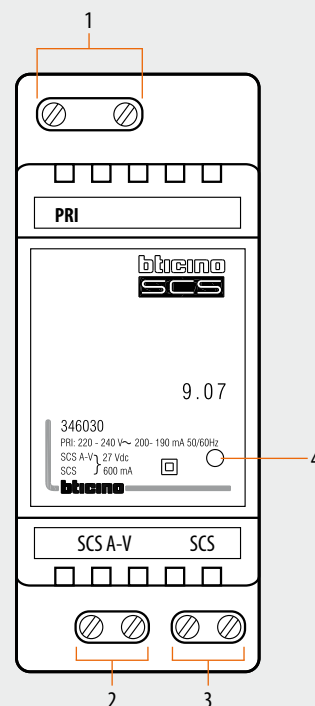
Rated voltage:	27 V +/- 100 mV
Rated current:	0 – 0.6 A
Rated power:	16.2 W

## Standards, Certifications, Marks

Standards: CEI EN60065 - CEI 64-8-4

## Dimensional data

2 DIN modules



**WARNING: THE (SCS A-V) AND (SCS) OUTPUT CANNOT BE USED AT THE SAME TIME**

## Legend

- 1 - 230 Vac input connection clamps 50-60 Hz
- 2 - SCS AV output connection clamps (27 V)
- 3 - SCS output connection clamps (BUS 27V)
- 4 - Operating status notification LEDs:  
(GREEN ON) - normal operation of the power supply  
(RED ON) - output current overload

## Assembly, Installation

Comply with the following installation requirements:

- The power supply must always be installed in appropriate enclosures.
- It must be kept away from water drips and sprays.
- Do not obstruct the air vents.
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used both to disconnect the power supply from the electric network, and to protect it.



# Actuator

346200

## Description

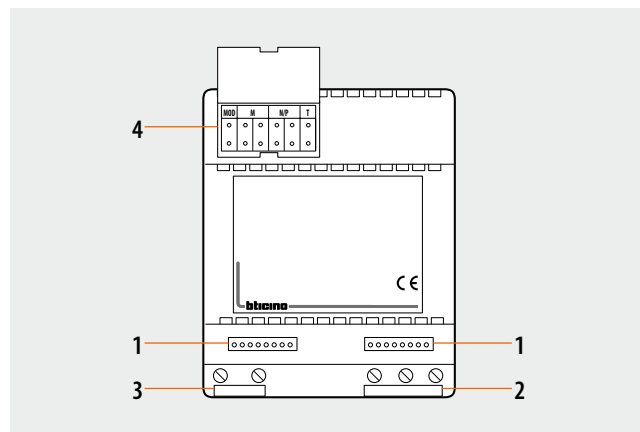
Relay actuator for digital systems. It allows to switch on lights, to open gate door locks, to control other devices and to repeat call on bell (badenia type).

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc  
 Stand by absorption: 15 mA  
 Max. operating absorption: 300 mA  
 Operating temperature: 5 – 40 °C  
 Contact output: 230 Vac - 6 A resistive - 2 A inductive ( $\cos\varphi = 0.5$ )  
 SELV device

## Dimensional data

4 DIN modules



## Legend

- 1 - Clamps for the connection of the 2-wire BUS and power supply 1 - 2
- 2 - Clamps for the connection of the load to be controlled
- 3 - Clamps for the connection of an additional pushbutton
- 4 - Configurator socket

## Configuration

The device must be physically configured in terms of:

### MOD = Operating mode

The configurator in MOD establishes the operating mode of the actuator (see following tables)

### M = number of the riser

In systems with several risers, it identifies on which riser the actuation must be performed

### N/P = Handset/Entrance panel number

It defines the association with the Handset or the EP address from which the actuation must be performed.

### T = relay closure time delay

The configurator connected to T sets the relay closing time delay (see corresponding table).

### MOD = 0 - Staircase light from any handset and EP

- The actuator is enabled by pressing the light pushbutton of the handset and the light key on the entrance panel
- Customize the time through the configurator T.

MOD	M	N/P	T
0	0	0	0
0	0	0	0

T = 0 closes the contact for 30"

### MOD = 1 - Sundry services (door lock/open the gate/staircase light) from handset unit

- The actuator is enabled by pressing the light pushbutton of the handset belonging to a group
- Customize the time through the configurator T.
- Insert in M the ten and the units of the first handset of the group
- Insert in N/P the ten and the units of the last handset of the group

**NOTES:** a group is a sequence set of handsets.

MOD	M	N/P	T
1	0	0	1
1	0	0	1

Tens Unit Tens Unit

Example

MOD	M	N/P	T
1	1	1	1
1	1	1	1

Door lock control from the light key of the handsets configured from 1 to 12

T = 1 closes the contact for 1"

### MOD = 2 - Staircase lights from all riser handsets

- The actuator is enabled by pressing the staircase light key of all riser handsets
- Customize the time through the configurator T.
- Connect the M configurator of the system expansion interface, item 346851 (configured with MOD = 5) to M

MOD	M	N/P	T
2	0	0	0
2	0	0	0

Tens Unit

Example

MOD	M	N/P	T
2	1	9	0
2	1	9	0

Staircase light control from all handsets of the riser 19

T = 0 closes the contact for 30"

### MOD = 2 - Staircase lights from all entrance panel (if fitted with the corresponding key)

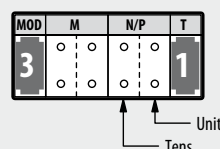
- With (MOD = 2) the actuator activates when the light pushbutton of any (preset) entrance Panel is pressed
- Customize the time through the configurator T.

MOD	M	N/P	T
2	0	0	0
2	0	0	0

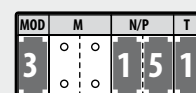
Not inserting the configurator corresponds to insert 0

**MOD = 3 - Sundry services from single handset**

- The actuator is enabled by pressing the light pushbutton of only one handset.
- Customize the time through the configurator T.
- Put in N/P the ten and the units of the handset that controls the relay



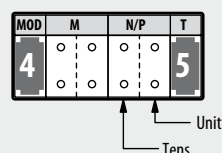
Example



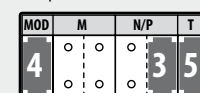
Door lock control from the light key of the handset configured with 15  
T=1 closes the contact for 1 s

**MOD = 4 - Staircase light from EP**

- With (MOD = 4) the actuator is enabled by pressing the light pushbutton of only one entrance panel.
- Customize the time through the configurator T.
- Put in N/P the ten and the units of the handset that controls the relay



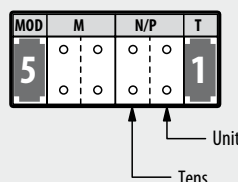
Example



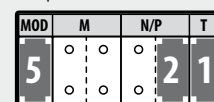
Door lock control from the light key of the handset configured with P=3  
T=5 closes the contact for 1 min

**MOD = 5 - Door lock control from all handsets**

- Direct door lock opening with handset in pause. The actuator is enabled by pressing the door lock pushbutton of all handsets.
- Customize the time through the configurator T.
- Put in N/P the ten and the units of the associated entrance panel that controls the door lock.



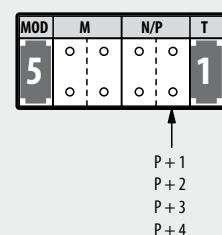
Example



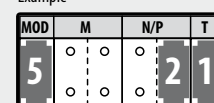
Door lock control of the entrance panel configured with P=2 from the door lock pushbutton of all the associated handsets  
T=1 closes the contact for 1 s

**MOD = 5 - Door lock control from PIVOT/SWING/POLYX handsets additional keys**

- Direct door lock opening with handset in pause.
  - Customize the time through the configurator T.
  - Insert in N/P the address that the actuator must take inside the system.
- The N/P value inserted in the actuator must be between P + 1 and P + 4 of the P configurator P inserted in the handset which controls the door lock. For further information on the configurations of the SWING/POLYX handsets and the 4 additional keys set for PIVOT make reference to the relating technical sheets.



Example

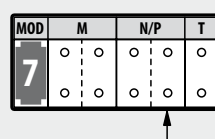


Door lock control by pressing the key 2 of the 4 keys set for PIVOT (PIVOT configured with P = 0)  
T=1 closes the contact for 1 s

**MOD = 7 - Light on for illumination of the viewing field**

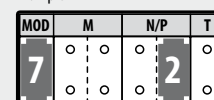
At the same time as sending a call from the entrance panel or activating a camera (N/P configuration), the actuator also closes the contact, keeping it closed until:

- if the call is answered, the contact opens when the communication is terminated or the conversation timeout activates (<1 min.)
- if the call is not answered, the contact opens after 30 seconds (at the end of the call forwarding timeout).



The number of the EP or camera to associate to the actuator

Example



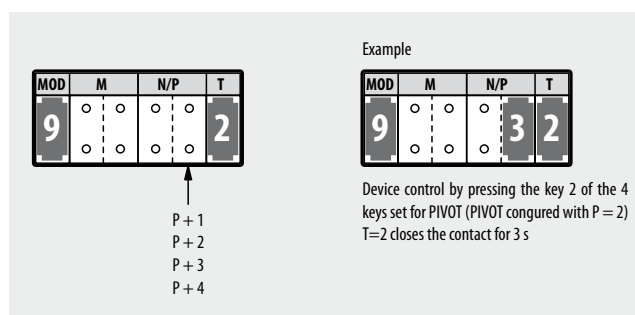
Closing of contact upon call from the EP configured with P=2.  
The contact opens after the call is terminated or after 30 seconds (if there is no answer)

### MOD = 9 - Sundry services (door lock/open the gate/staircase light) from PIVOT/SWING/POLYX handsets additional keys

- Direct door lock opening with handset in pause.
- Customize the time through the configurator T.
- Insert in N/P the address that the actuator must take inside the system.

The N/P value inserted in the actuator must be between  $P + 1$  and  $P + 4$  of the P configurator P inserted in the handset which controls the service.

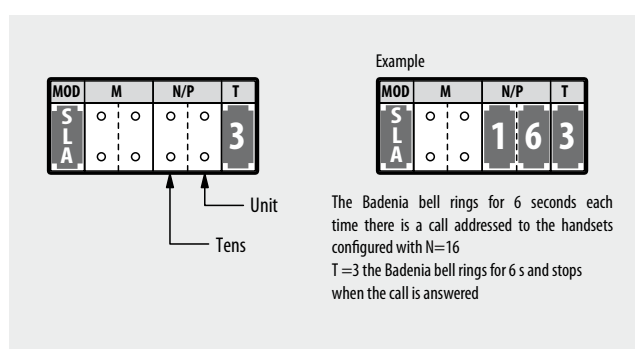
For further information on the configurations of the SWING/POLYX handsets and the 4 additional keys set for PIVOT make reference to the relating sections configurations.



### MOD = SLA - Call repetition on Badenia bell

- Repeat the calls coming from the entrance panel on Badenia bell.
- Customize the time through the configurator T. (with configurators 0 (-), 5, 6, 7, 8, the bell rings for 30 s max)
- Insert in N/P the tens and units of the handset associated to the function.

\* The SLA configurator must be bought separately from the configurator kit (item 3501K). Item code for SLA configurator: item 3501/SLA.



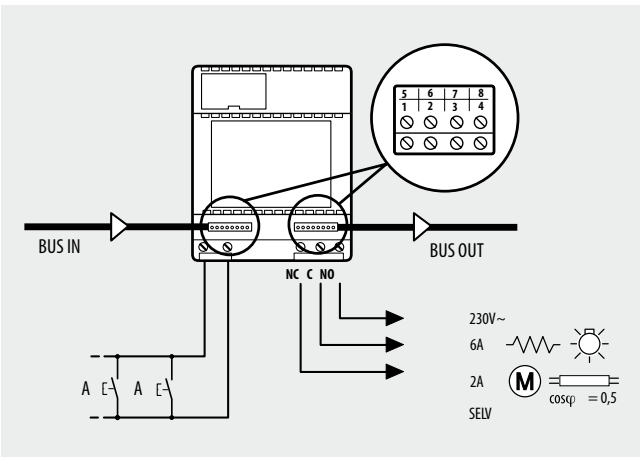
### T configuration (timing)

The T values mentioned in the examples are only an indication of the times commonly used for the different applications.

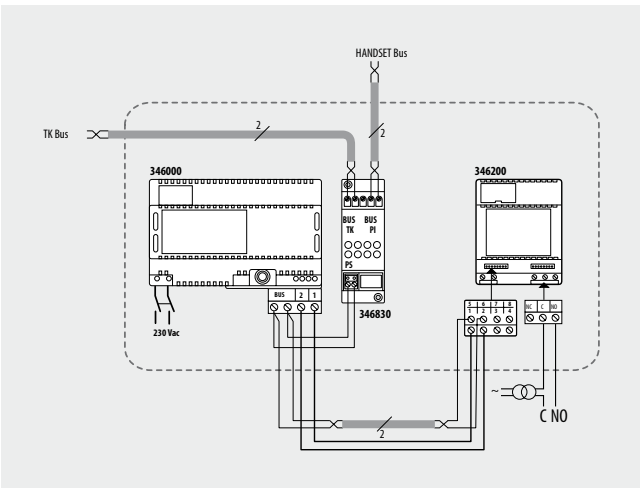
By inserting in the T socket a configurator (as mentioned in the table) the relay door locking time can be customized.

T configurator	Time
none	3 min.
1	1 sec.
2	3 sec.
3	6 sec.
4	10 sec.
5	1 min.
6	6 min.
7	10 min.
8	pushbutton
9	cyclic (ON/OFF)

Wiring diagram



2-wire standard wiring diagram





# Door lock actuator

346230

## Description

2-wire system door lock actuator.

It can be used to actuate an electrical door lock without the need for a local transformer, activated by a dedicated handset key.

In systems with handsets with specific LED, it enables to perform the "LOCK STATUS" function when a CISA ELETTRIKA door lock is used.

## Related items

346240 CISA ELETTRIKA door lock accessory

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc  
 Stand by absorption: 10 mA  
 Max. operating absorption: 300 mA  
 Operating temperature: 5 – 40 °C  
 Contact load (PL/S+): 6 A – 24 Vac max (cosφ=1)

## Dimensional data

2 DIN modules

## Configuration

The device must be physically configured in terms of:

### P - Associated entrance panel number

A configurator like the one connected to P of the entrance panel must be connected to this socket. When the actuator is associated to the main entrance panel, no configurator must be connected to P.

### T - Door lock relay timing

The configurator connected to T sets the relay closing time delay as shown in the following table:

configurator number	1	2	3	4	5	6	7
0= No configurator							
4 sec.	1 sec.	2 sec.	3 sec.	as pushbutt.	6 sec.	8 sec.	10 sec.

### M - Operating mode

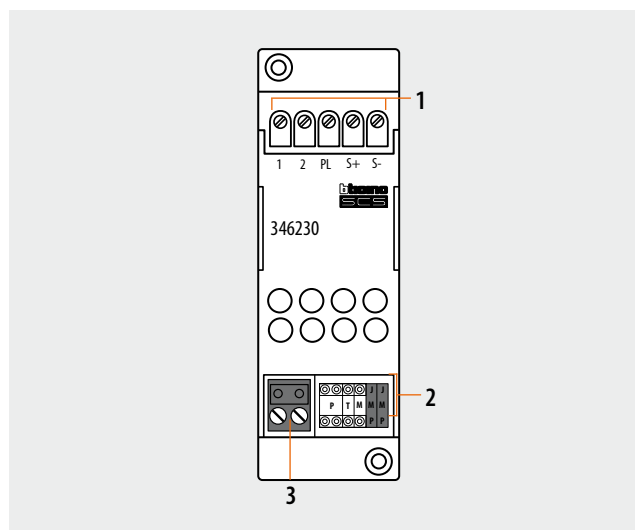
**M=0** - Door lock relay standard operation

**M=1** - Door lock relay operation + "door lock status control" – only with handsets fitted with door lock status LED and specific CISA ELETTRIKA door lock with Accessory item 346240.

**M=4** - With interface 349410 only it enables:

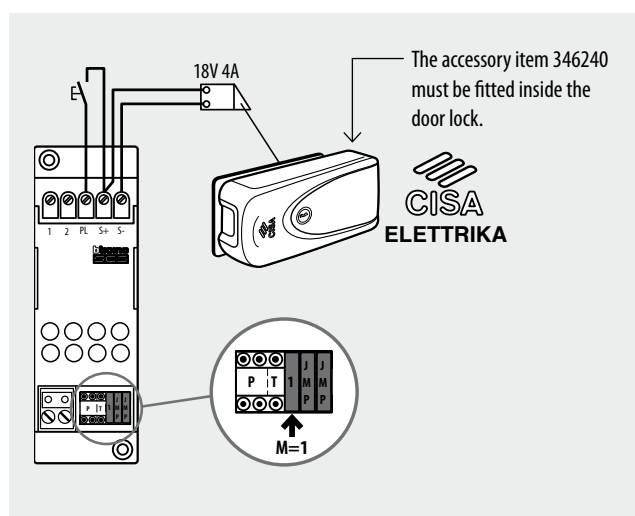
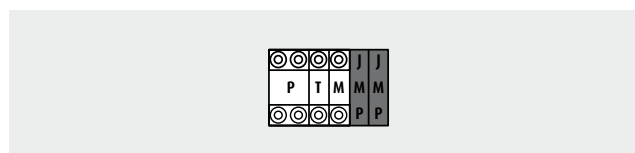
- with analogue system and audio Tersystem, the direct control of the electrical door lock
- with videoporter 2000, the call to the switchboard

**JMP** - Jumpers to be removed when an auxiliary transformer is used (4A max.)

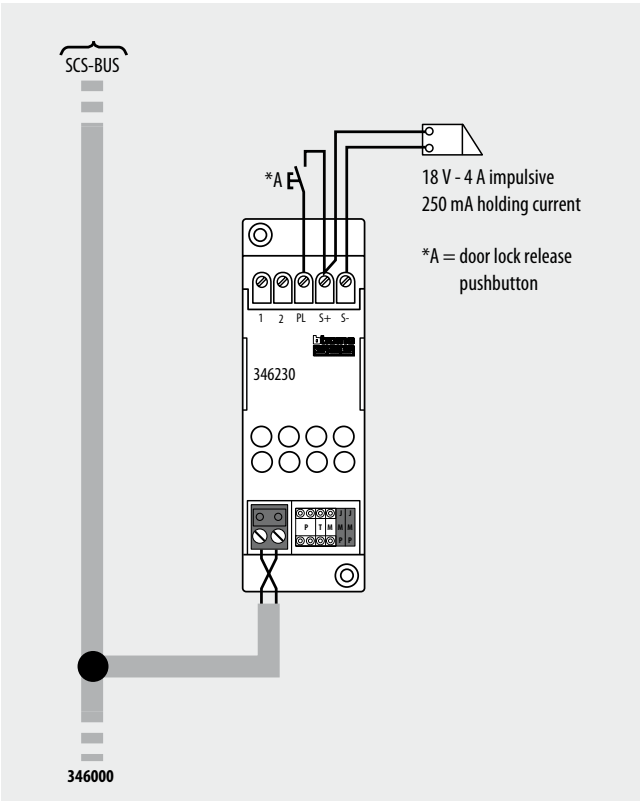


## Legend

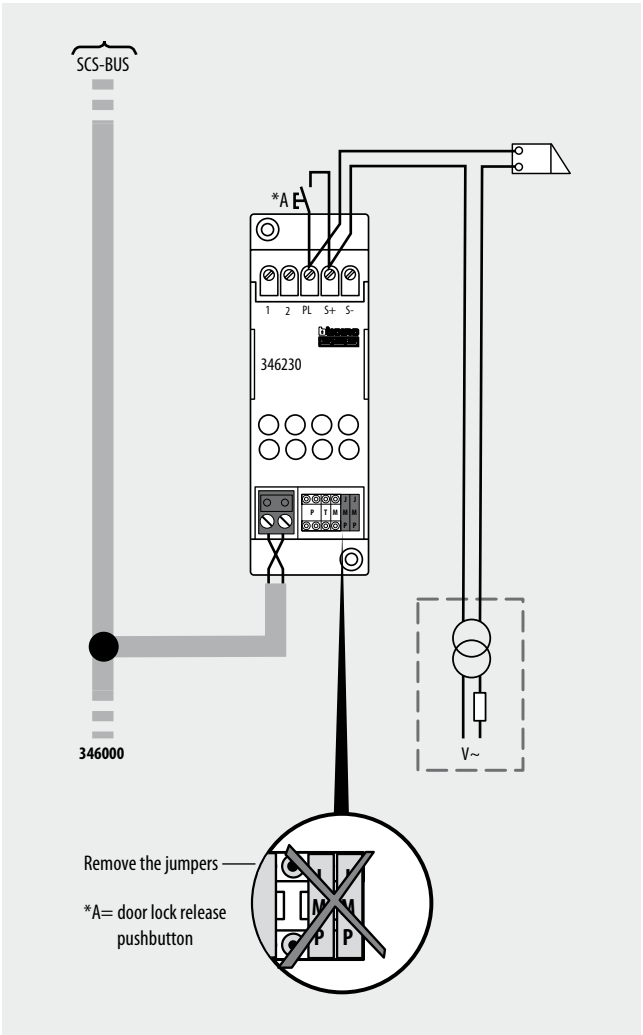
- 1 - Clamps for the connection of door lock and additional pushbutton  
 2 - Configurator socket  
 3 - 2 WIRE BUS connection clamps



Wiring diagram - 2-wire standard



Wiring diagram - with auxiliary transformer





# Door lock relay

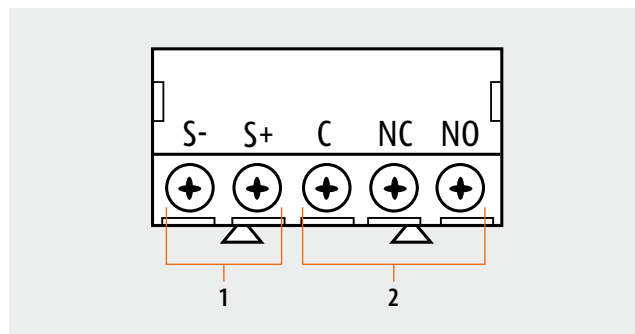
346250

## Description

Relay module for gate opening to be used only with audio/video SFERA item 342560, LINEA 2000, LINEA 2000 METAL and MINISFERA entrance panels. It allows to open door locks (NOT managed by BUS) by means of the above mentioned entrance panels (NOT fitted with relay). The device must not be configured.

## Related items

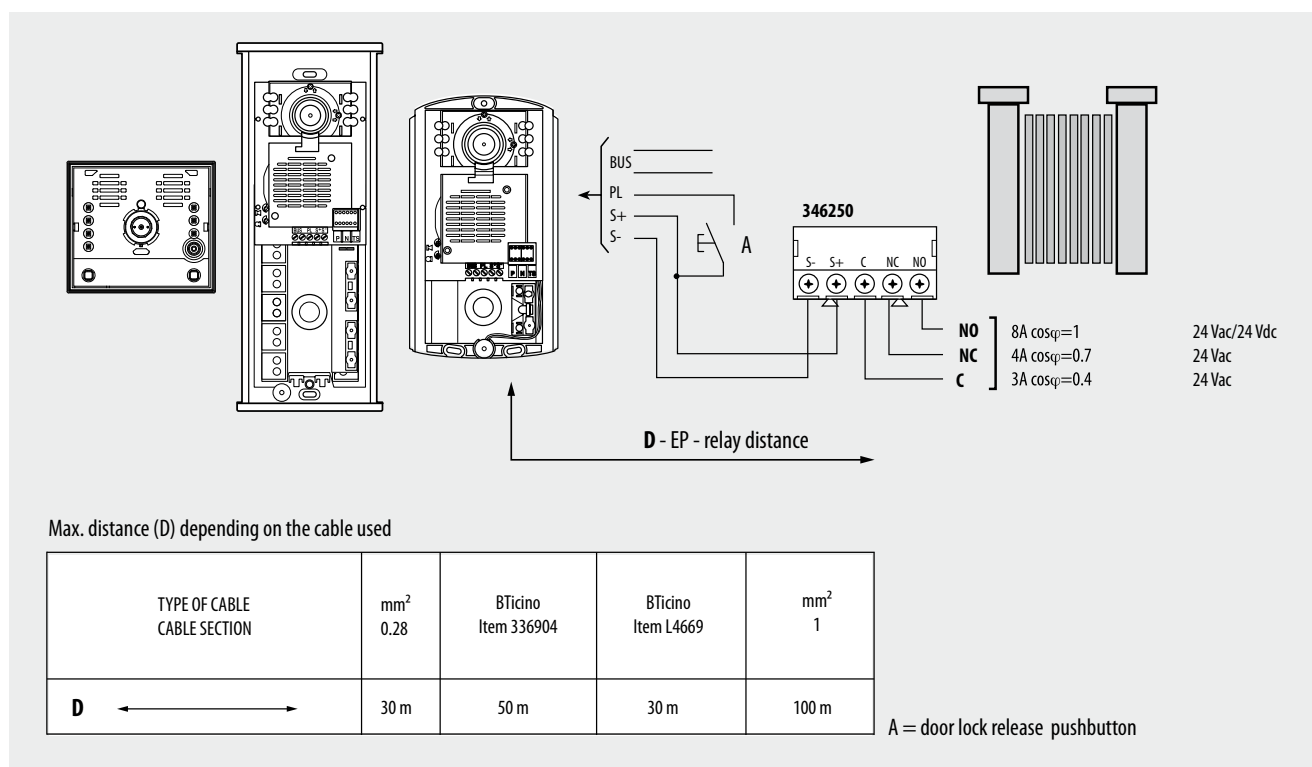
342560 (SFERA audio/video speaker module)  
 342702 (MINISFERA audio speaker module)  
 342708 (MINISFERA video speaker module)  
 342911/21 (LINEA 2000 audio EP)  
 342951/61 (LINEA 2000 video EP)  
 342971/72 (LINEA 2000 METAL audio EP)  
 342981/82 (LINEA 2000 METAL b/w video EP)  
 342991/92 (LINEA 2000 METAL colour video EP)  
 343001/02 (LINEA 2000 METAL flush mounted EP)



## Legend

- 1 - Clamps for connection to the entrance panel  
 2 - Clamps- contacts for connection to the electrical door lock

## Connection example





# Timed door lock actuator

346260

## Description

Timed door lock actuator for 2 WIRE system.

It can be used for switching the lights on, opening gates, or manage electromagnetic door locks, timed door opening, and door status (with NC contact).

The DOOR STATUS function can only be used with door entry systems and video door entry systems fitted with signalling LEDs, and when a magnetic door status contact is present.

It may also be used in systems integrated with an appropriately configured ACCESS CONTROL system.

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc

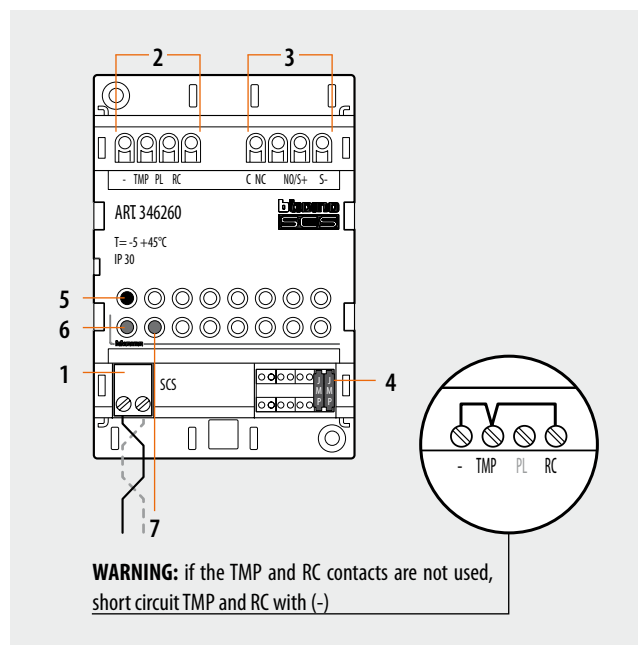
Stand by absorption: 5 mA

Max. operating absorption: 250 mA

Operating temperature: 5 – 40 °C

## Dimensional data

4 DIN modules



## Legend

- 1 - 2 WIRE BUS connection clamps
- 2 - Door status connection clamps:
  - (-) Common
  - (TMP) Anti tamper line contact (normally closed on -)
  - (PL) Door opening pushbutton contacts (normally open on -)
  - (RC) Door status magnetic contact (normally closed on -)
- 3 - Electromagnetic door lock connection clamps:
  - (C) Common
  - (NC) Normally closed contact
  - (NO/S+) Normally open contact
  - (S-) Contact for door lock power supply from BUS (to be used with NO/S+)
- 4 - Configurator socket
- 5 - Door opening local pushbutton
- 6 - Notification red LED: flashing in case of system tampering
- 7 - Notification orange LED: on when the relay is active (flashing orange + red LEDs for open door notification)

## Configuration

The device must be physically configured in terms of:

### P - Associated entrance panel number

A configurator like the one inserted in P of the entrance panel must be connected to this socket. When the actuator is associated to the main entrance panel, no configurator must be connected to P.

### M = Operating mode

Assigns the operating mode to the internal relay of the actuator, based on the following table:

P			M	R	T	J1	J2
○	○	○	○	○	○	J	J
A	B	C				M	M
○	○	○	○	○	○	P	P

A = DO NOT USE (access control only)

B - C = P CONFIGURATOR SOCKETS

M =	0	1	2	3	4	5	6
Management of access control	YES	YES	Signal repetition	YES	YES	NO	NO
Management of 2 WIRE video door entry system	NO	NO	NO	YES	YES	YES	YES
Actuator relay status	② Normally open	③ Normally closed. Electromagnetic door lock	④ Signal repetition	⑤ Normally open	⑤ Normally closed. Electromagnetic door lock	Normally open	Normally closed

### R = Enabling/disabling of the anticipated relay switching function<sup>(1)</sup>

Configurator	0	1
Advance of closing	Enabled (2 sec.)	Disabled

### T = Door lock relay timing

Configurator	0	1	2	3	4	5	6	7
Timesec.	4	1	10	20	40	60	90	180

### J1 - J2 = Jumpers for the selection of the door lock power supply

CONNECTED = DOOR LOCK POWERED BY THE BUS

DISCONNECTED = DOOR LOCK POWERED BY AN EXTERNAL DEVICE

### NOTES:

- (1) If enabled, 2 seconds after the opening of the entrance, anticipated relay switching occurs, irrespective of the T time set (this function can be used with door status magnetic contact and for T = s).
- (2) The device supplies the NC and NO contacts of the internal relay. It is therefore possible, also with M = 0, to use the internal relay as normally closed. It must be noted that in case of power cut from the power line (230 Vac), the relay stays normally closed and, if the power supply of the electric door lock is fitted with a back-up battery, the door lock stays closed.

- (3) In this mode, the software forces the relay to perform the opposite operation (positive safety). The NO contact stays in the closed status, and is opened in order to open the door (passage). In case of power cut from the main power line (230 Vac), the relay opens, and the door lock opens, even if the power supply line of the door locks is fitted with a back-up battery.

- (4) Operation as signal repeater. In case of system intrusion or opening of a door, the relay output can also activate an external notification device (sound or visual notification), based on the time value set in T.

- (5) Integration mode between video door entry system and access control (see instructions of item 348000).

EP: P=1

P	N	T	S
1			

TK BUS

BUS PL S+ S-

A

S1

230 Vac

BUS H

ART 346260

T= -5 +45°C

IP 30

BUS TR PS

BUS 2 1

346830

S2

18V 4 A

\* = Door lock pushbutton in the entrance-hall

\*S+ S- = 18V 4A impulsive 250mA holding current

P	M	R	T	J1	J2
1	5			J M P	J M P



# Video adapter

346830

## Description

2 WIRES video adapter that must be used with the power supply item 346000 in the installation of video systems (or audio/video combined), video door entry systems and sound systems.

Allows the connection to its 3 BUS clamps. Hence it is possible to realize installations with 2 video entrance panels and 1 riser and installations with 1 video entrance panel and 2 risers.

The device must be installed next to the system power supply item 346000.

**The device must not be configured.**

## Related items

346000 (2 WIRE system power supply)

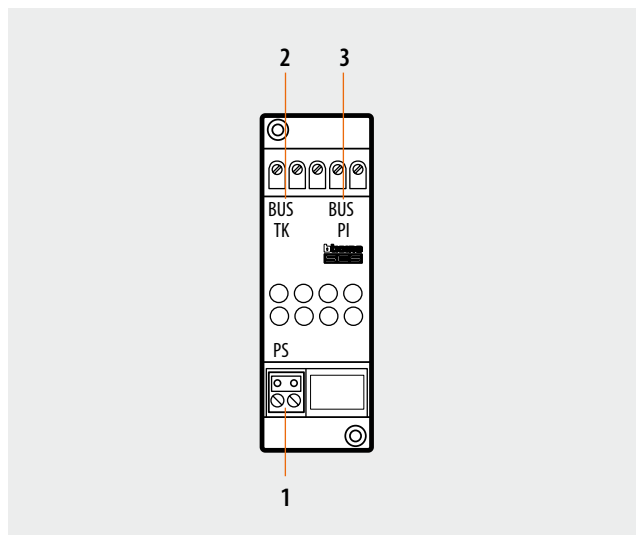
## Technical data

Power supply from SCS BUS: 18 - 27 Vdc

Operating temperature: 5 - 40°C

## Dimensional data

2 DIN modules.



## Legend

- 1 - BUS PS input from the power supply (removable clamp)
- 2 - BUS TK output towards the EP (fixed clamp entrance panels)
- 3 - BUS output towards the handsets (fixed clamp handsets)



# Floor call interface

346833

## Description

Floor call interface which allows, by means of a traditional pushbutton, to make the following functions:

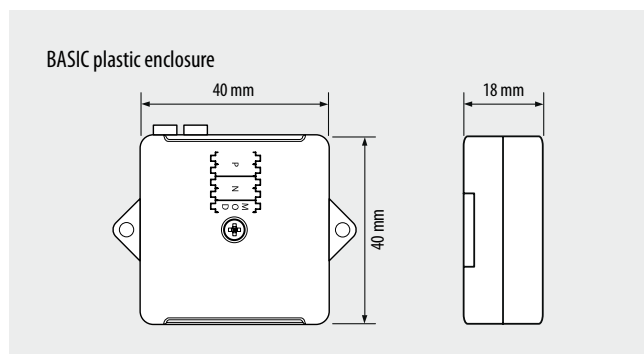
- general floor call
- addressed floor call
- staircase light switching on
- Door lock opening (with specific actuator)
- associate the video image to the call to the floor

**WARNING:** the maximum connection distance between the interface and the connected pushbuttons must not exceed 3 metres.

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc  
 Stand by absorption: 15 mA  
 Max. operating absorption: 15 mA  
 Operating temperature: 5 – 40°C

## Dimensional data



## Configuration

The device must be physically configured in terms of:

**N = address of the handset to call**

(To be used only with MOD = 0)

**P = address of the entrance panel associated to the door lock to open**

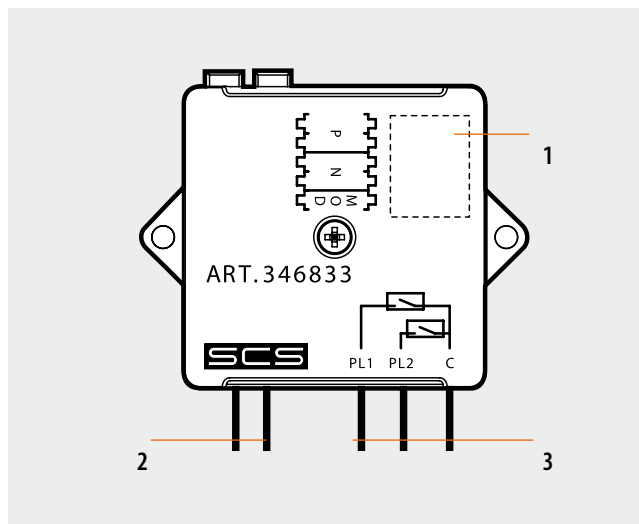
(To be used only with MOD = 2 and MOD = 3)

**MOD = Operating mode**

the configurator connected to MOD assigns the operating modes to the pushbuttons connected between (PL1 and C) and (PL2 and C), as shown in the table:

MOD	N	P	PL1	PL2
0	Handset address (00-99)	-	Addressed floor call	Staircase lights from Handset with 00
1	-	-	General floor call	Staircase lights from Handset with 00
2	-	Door lock address (00-95)	Door lock opening	Staircase lights from Handset with 00
3	-	Door lock address (00-95)	Door lock opening	Door lock opening (P+1)
4(*)	Handset address (00-99)	Camera address (00-95)	-	-

(\*): see installation notes on next page.



## Legend

- 1 - Configurator socket (to access remove the upper plastic protection cover)
- 2 - Clamps for the connection to the 2-wire BUS
- 3 - Clamps for the connection of the pushbuttons / contacts (connect a pushbutton between PL1 and C and one between PL2 and C)

**Installation notes**

The MOD = 4 configuration mode enables associating the video image of a camera to the call to the floor generated by the off-door pushbutton.

To use this function correctly, the following must be taken into account:

- The involved handsets, the 346833 interface, and the camera must be physically connected on the same SCS BUS.
- In multi-family systems connect the involved devices downstream the apartment interface item 346850 - (cameras and handsets are local resources of the individual user).
- The active function keeps the SCS BUS busy for approximately 30", during which no other call can be forwarded. If the handset connects, the BUS will be busy until the TIME OUT period elapses, or the handset itself is disconnected.
- Only the following 2-wire BTicino cameras that can be used for this function: 391670 – 391657 – 391658 – 391659 – 391667 – 391668 – 391669 – 391661 – 391662 – 391663.



# Floor shunt

346841

## Description

The floor distribution block can be used for video door entry systems with a star distribution of the wiring.

The distribution block is in a plastic enclosure with much reduced dimensions for easier positioning (above all during the refurbishments) even with the installation inside flush mounted boxes.

It is also possible to install systems with combined wiring risers, where a part can be of IN/OUT type and the other part is used for the floor distribution block.

The device automatically adapts the video signal.

Max. 3 devices (handsets, bells or additional bells) can be connected on the same output.

**The device must not be configured.**

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc

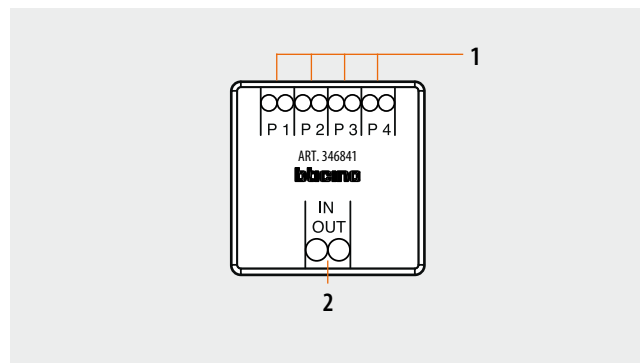
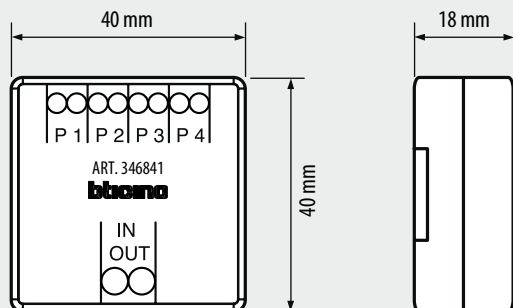
Stand by absorption: 15 mA

Max. operating absorption: 15 mA

Operating temperature: 5 – 40 °C

## Dimensional data

BASIC plastic enclosure



## Legend

1 - 4 outputs (P1, P2, P3, P4) - handset BUS

2 - Input/output of riser (IN-OUT) on the same pair of clamps



# Apartment interface

346850

## Description

Interface to be used to install a dedicated 2-wire system inside the home, isolated from the riser.

The system downstream the interface may include local CCTV, sound system, and MY HOME applications control.

It can be used for calls within the building, as well as outside calls.

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc

Operating temperature: 5 - 40°C

Dissipated power: 2.25 W

Stand by absorption:

**from the INT 15 mA connection**

**from the EXT 5 mA connection**

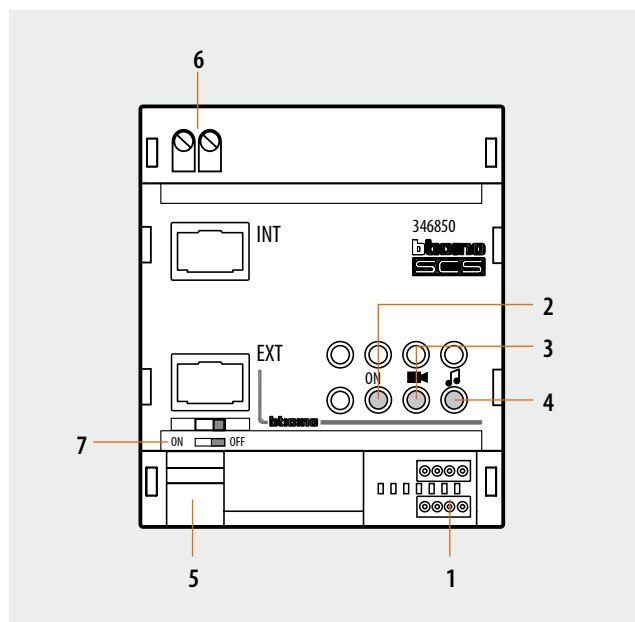
Operating Maximum absorption:

**from the INT 50 mA connection**

**from the EXT 30 mA connection**

## Dimensional data

4 DIN modules



## Legend

1 - Configurator socket: N = interface address, M = 3 (connected at the factory)

2 - Interface status notification LED:

Flashing green LED = STAND BY

Fixed green LED = EXT-INT connection active

3 - Video signal status notification LED:

Green LED = OK

Green/red LED = operation close to the limit

Red LED = no video signal or limits exceeded

4 - Not used

5 - Clamp for the connection to the 2 WIRE riser

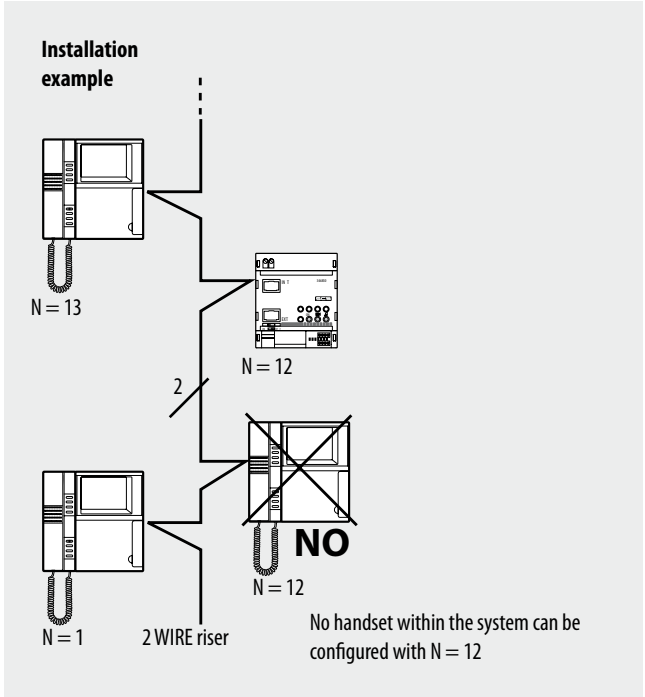
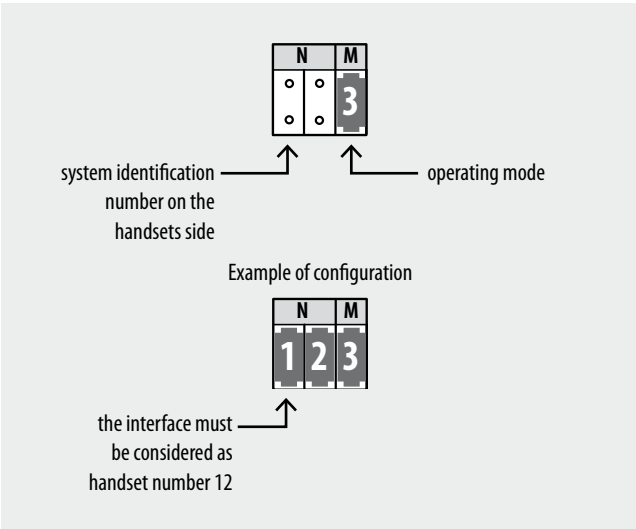
6 - Clamp for the connection of the apartment 2 WIRE system

7 - Line termination ON/OFF micro-switch

The device must be physically configured in terms of:

**N = device ID number**  
The configurator assigns to the interface a unique handset number inside the system.

**M = Operating mode**  
factory configuration with 3





## System expansion interface

346851

### Description

Interface for the installation of independent audio risers, to double the length of the riser line, or to increase the performance of the 2-wire system in one-family, or apartment systems.

### Technical data

Power supply from SCS BUS: 18 - 27 Vdc  
 Operating temperature: 5 - 40 °C  
 Dissipated power: 2.25 W

Absorption:

**IN clamp (MOD=0)**

**Stand by absorption: 30 mA**

**Max. operating absorption: 30 mA**

**IN clamp (MOD=5)**

**Stand by absorption: 5 mA**

**Max. operating absorption: 30 mA**

**OUT clamp (MOD=0)**

**Stand by absorption: 50 mA**

**Max. operating absorption: 50 mA**

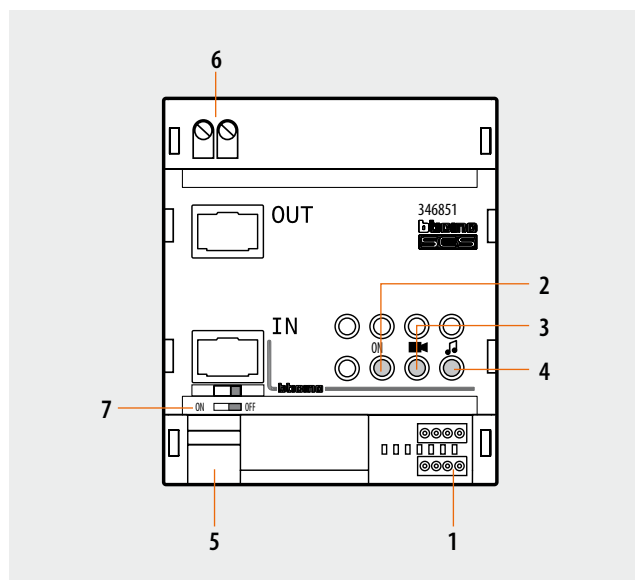
**OUT clamp (MOD=5)**

**Stand by absorption: 15 mA**

**Max. operating absorption: 50 mA**

### Dimensional data

4 DIN modules



### Legend

- 1 - Configurator socket
- 2 - Interface status notification LED:
  - flashing green = **STAND BY**
  - fixed green = active **IN-OUT** connection
- 3 - Video signal level notification LED:
  - fixed green = operation **OK**
  - green/red = operation close to the limit
  - fixed red = no video signal or limits exceeded
- 4 - Not used
- 5 - Clamps for BUS connection in input
- 6 - Clamps for BUS connection in output
- 7 - Line termination ON/OFF micro-switch

### Configuration

The device must be physically configured in terms of:

**M = progressive number inside the system**

It identifies the interface number within the system

**MOD = Operating mode**

MOD = 0 (**Galvanic separation mode**)

MOD = 5 (**Independent risers mode**)

NOTES: with (MOD =5) and (MOD = 0), with the same progressive no. it is possible to have inside the same system no. 2 interfaces item 346851, configured, for example, one with (M=1) and (MOD=0) and the other with (M=1) and (MOD=5).

**Galvanic separation mode (MOD=0):**

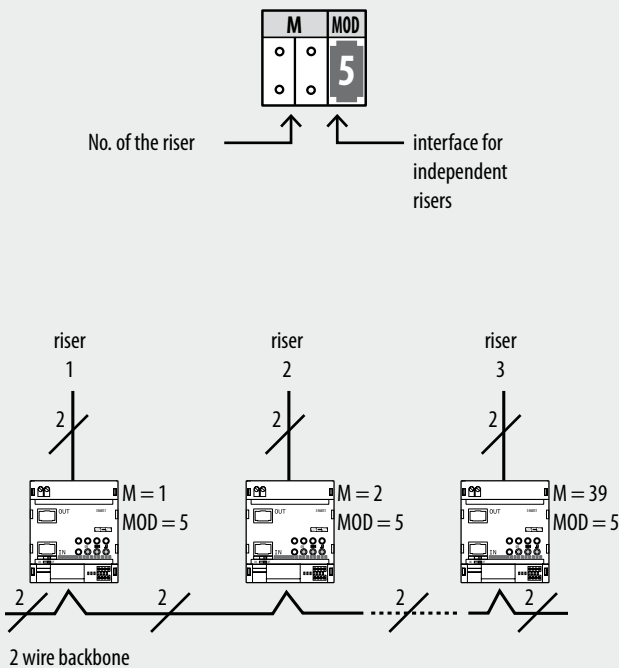
used to double the length of the line, or to increase the performance of the system.

**M = progressive number of the interface inside the system (from 1 to 99)**

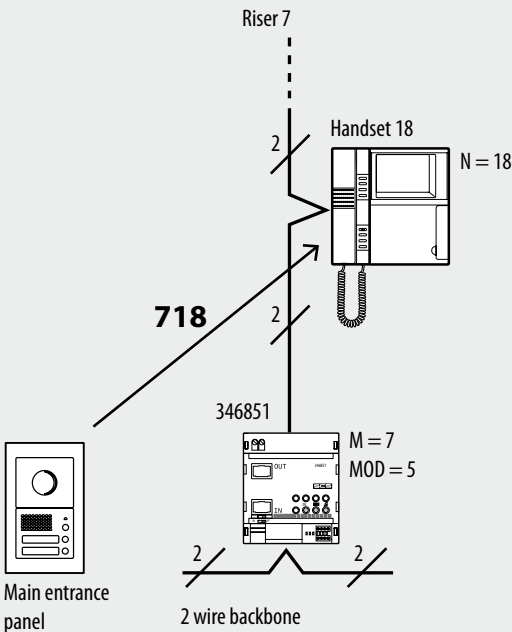
**Independent risers mode (MOD=5):**

**M = number of the riser (from 1 to 39)**

M	MOD
○	○
○	○



The handsets connected to the single riser will be identified at the main entrance panel by the M configurator of 346851 x 100 + the N configurator of the single handset.



As far as the main EP is concerned, the handset is number 718: this is the M of 346851 (7) x 100 + N of the handset connected to the riser (18).  
 $(7 \times 100) + 18 = 718$



# Coaxial - 2 WIRE interface

347400

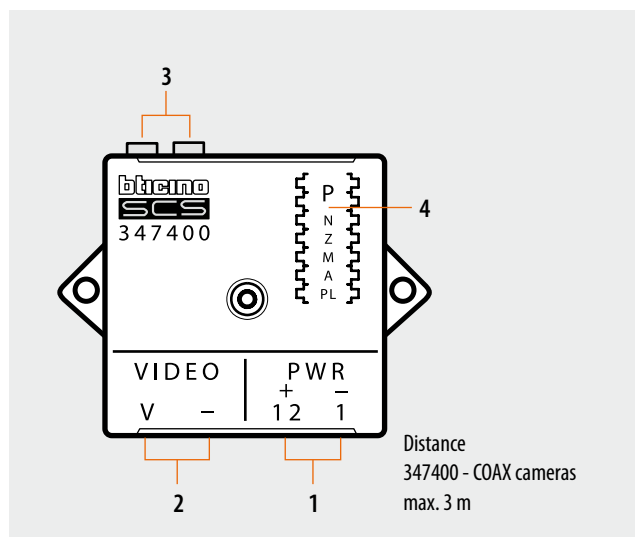
## Description

Interface used for connecting the cameras with 12 Vdc power supply (max. absorption 150 mA) and coaxial video output (1 Vpp @ 75 ohm) to the 2-wire video BUS. The interface provides direct power supply to the camera. the device can be used as an interface for the separate camera; to associate a camera to an audio entrance panel simply configure both the camera and the entrance panel using the same configurator in P.

## Technical data

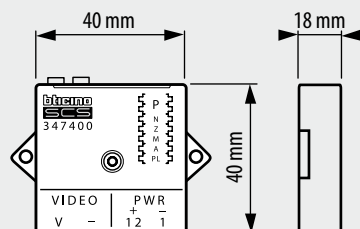
Power supply from SCS BUS: 18 – 27 Vdc  
Stand by absorption: 5 mA  
Max. operating absorption: 210 mA - see NOTES (\*)  
Operating temperature: (-20) – (+70)°C

(\*) NOTES: max. 150 mA when the interface supplies power to the 12 V camera



## Dimensional data

BASIC plastic enclosure



## Legend

- 1 - Clamps for the connection of the camera power supply (12 Vdc - 150 mA max.)
- 2 - Clamps for the connection of the camera video signal output
- 3 - 2 WIRE BUS connection clamps
- 4 - Configurator socket (to access remove the upper plastic protection cover)

### Configuration

The device must be physically configured in terms of:

**P = camera address**

The configurator in seat P of the interface assigns to it a recognition number inside the system. The interface is considered as a video entrance panel, therefore it must be configured with a progressive number in relation to (P) of the entrance panel.

**N = address of the handset called in case of alarm**

In those systems integrated with Bticino burglar alarm systems, the configurator connected to N of the interface, determines which handset must be called in case of alarm occurred in the Z zone configured in the interface. Then, the handset will display the images of the interface associated to the Z zone.

**Z = zone of the burglar-alarm system associated to the camera**

**M = Operating mode**

**M = 0** - standard operation

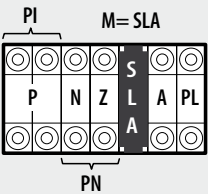
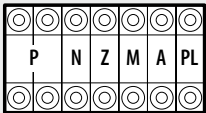
**M = SLA** - Configuration for association to several audio EP

**A/PL = Address of the SCS light actuator connected to the camera**

**Address of the scenarios module associated to the camera**

In systems integrated with BTicino automation applications, the configurator connected to A/PL of the interface associates the switching on of the camera with the activation of a SCS actuator configured with the same A/PL.

(Example: switching on of lights to illuminate the field of view, only with camera active).

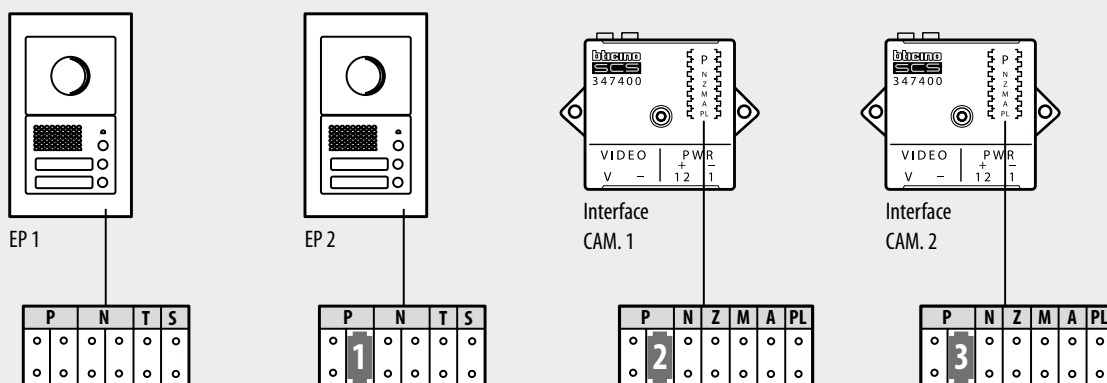


PI - PN = Range of audio EP associated to the camera (max 5).

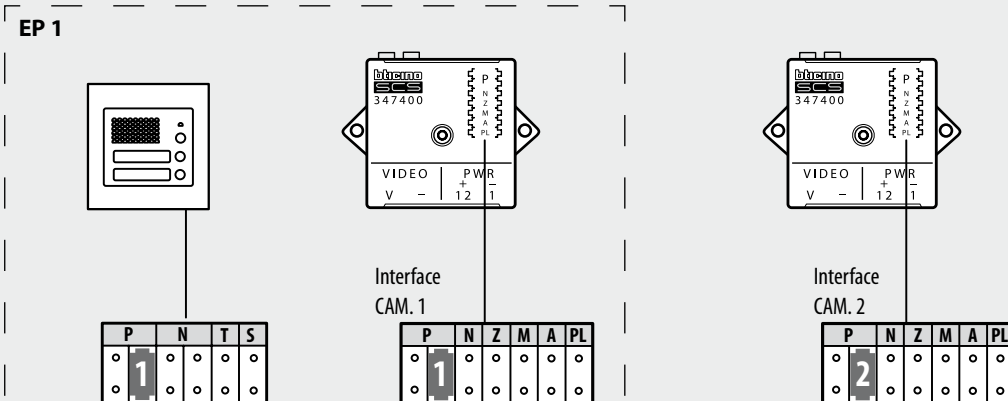
347400

## Configuration

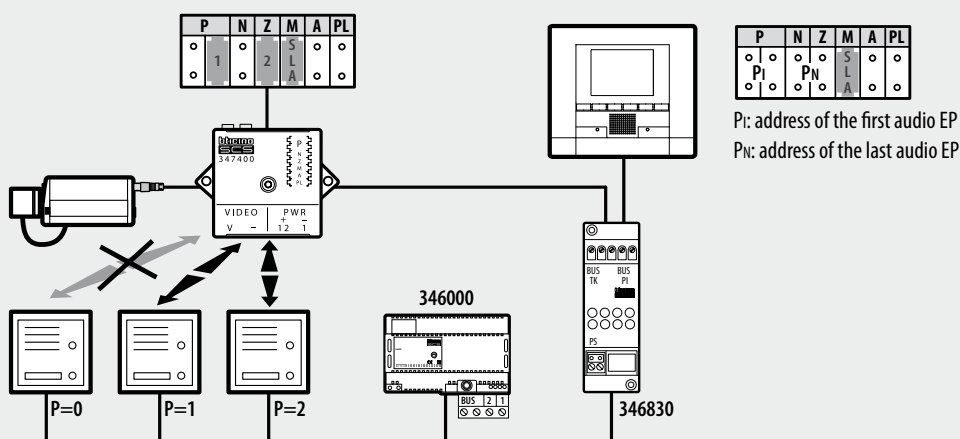
### Example of configuration



System with 2 video EP and 2 cameras.



System with audio EP and 2 camera (CAM. 1 associated to the EP)



Coupling the switching on of the camera with several audio EP (max. 5)



# AXOLUTE Outdoor entrance panel

349140

## Description

Axolute outdoor entrance panel suitable for connection to the 2-WIRE system BUS or to be used in BTicino IP systems. It's fitted with capacitive soft touch control backlit keypad, motorised colour camera (which swivelling operation can be controlled from the preset handsets), colour display with home page that can be fully customised by the installer, and transponder reader for the release of the door lock, which may also be activated using a numeric code for residents. Module to be completed with flush mounted box and surround plate. Programming, residents directory, and the configuration are completed using the appropriate software supplied with the product.

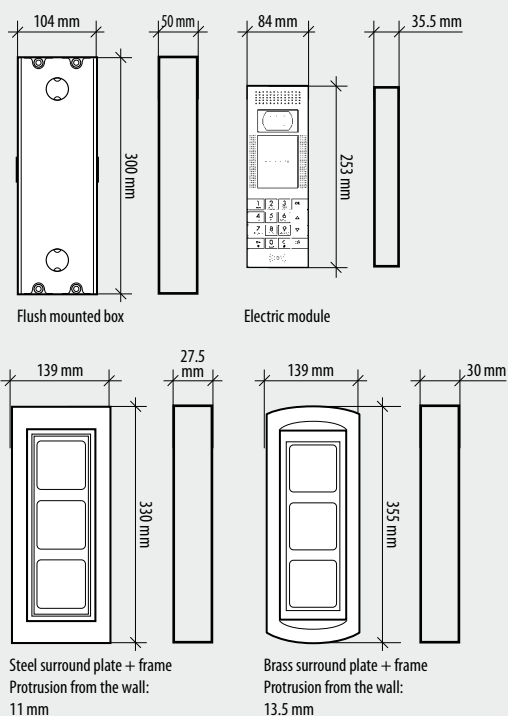
## Related items

339313 (Steel flush mounted box with tearing protection)  
 331130 (SFERA plastic flush mounted box)  
 339213 (Surround plate + frame, steel finish)  
 339223 (Surround plate + frame, brass finish)

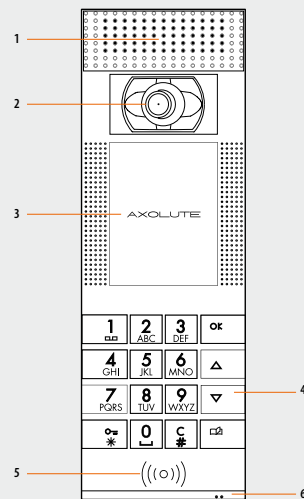
## Technical data

Power supply from SCS BUS: 18 – 27 Vdc  
 Stand by absorption: 220 mA  
 Max. operating absorption: 420 mA  
 Operating temperature: (-25)-(+70)°C  
 Connections: 2-WIRE SCS BUS  
 Ethernet 10/100 Mbit/sec  
 Protection index: IP54  
 PI against mechanical impact: IK07

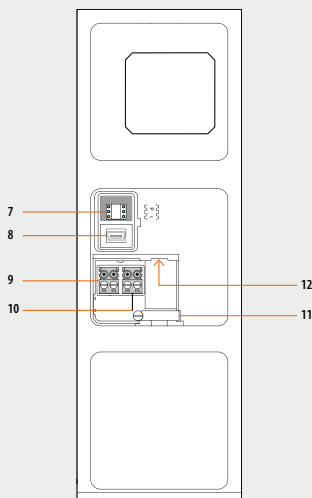
## Dimensional data



Front view



Rear view



## Legend

- 1 - Loudspeakers
- 2 - Colour camera that can be swivelled
- 3 - LCD colour display
- 4 - Capacitive alphanumeric keypad: to search for the extension and for sending the call, as well as for enabling the installer to complete the programming procedure
- 5 - Transponder reader: to open the door lock using the transponder
- 6 - Microphone
- 7 - Configurator socket
- 8 - Mini-USB connector: for PC connection, for programming or firmware update
- 9 - Clamps for the connection of the 2-wire SCS BUS
- 10 - Additional power supply connection clamps
- 11 - Cable fastener
- 12 - Ethernet connector: for connection to the IP BTicino system and for programming and firmware update from PC

## Configuration

The device can be configured in three different modes:

### 1) Physical connection for the configurators to their sockets:

#### P - entrance panel number

The configurator connected to P socket assigns an identification number within the system to the EP. The numbering of the EP must always start from P=0.

The EP configured with P=0 must be the main one.

#### S - selection of the ring tone to send to the Handset and general call

When a call is received: S=0 (RING TONE 1 - Default)

S=1 (RING TONE 2)

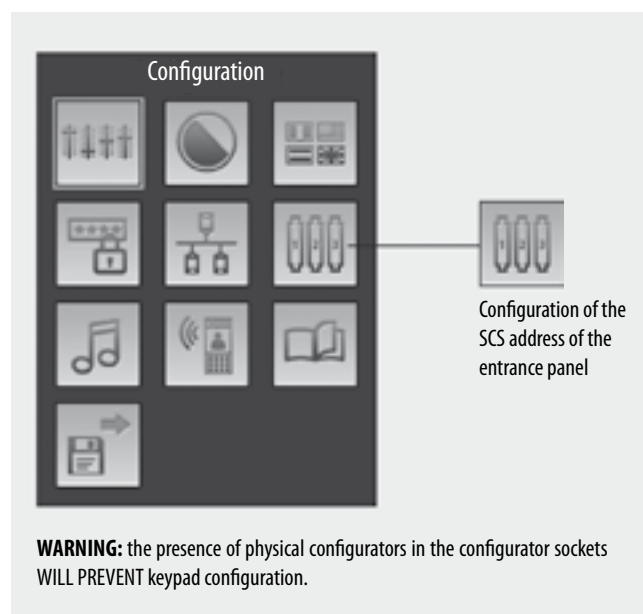
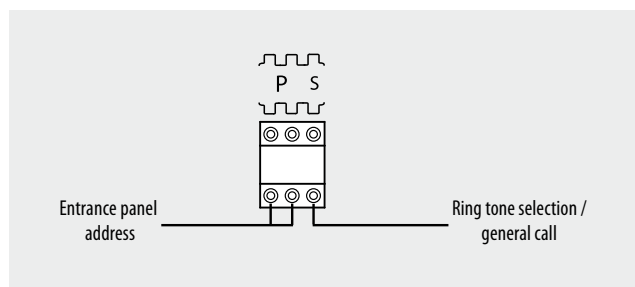
S=2 (RING TONE 3)

S=3 (RING TONE 4)

S=9 (GENERAL CALL TO ALL THE HANDSETS)

### 2) Directly from the keypad of the electronic module:

Using the installer menu (Password protected function)

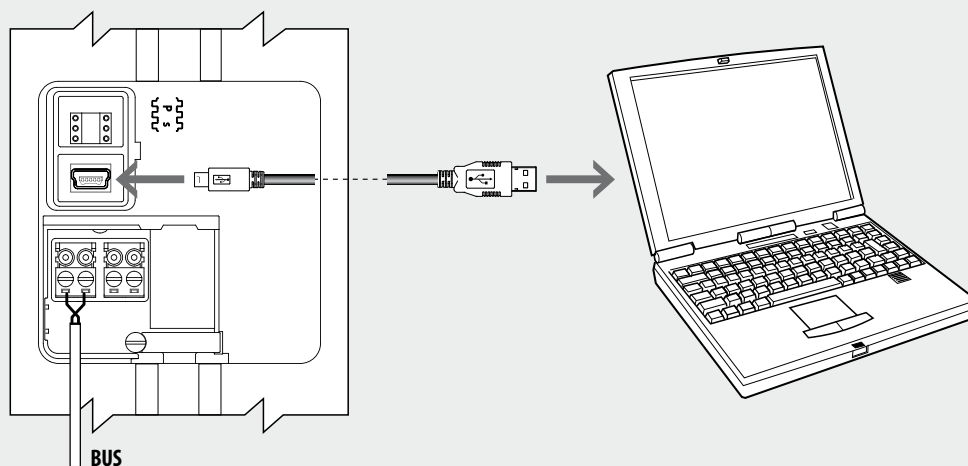


## Configuration

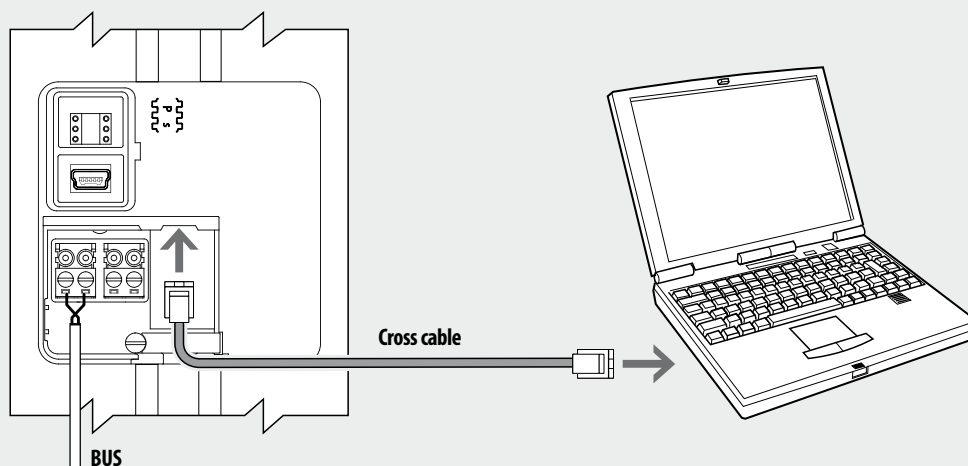
### 3) Using the TiAxoluteOutdoor Software supplied:

For the connection to the PC use an USB-mini cable or an Ethernet cable (cross cable).  
The dedicated application can be used for configuration, programming, device Firmware update, fill the residents list, save all information, and download to the device.

USB connection



Ethernet connection



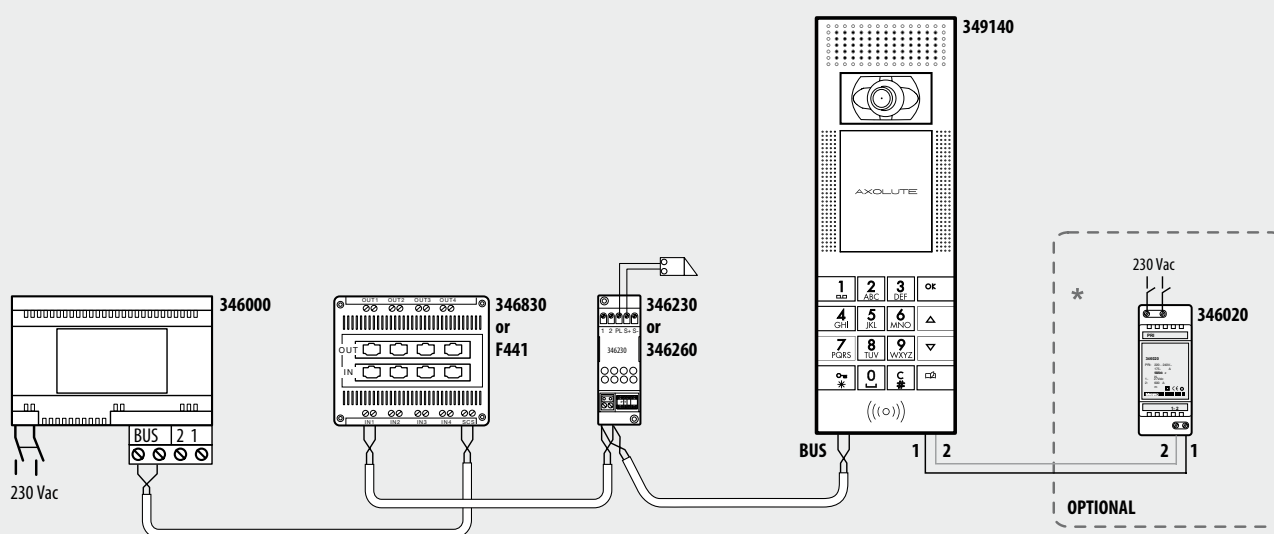
If the Axolute EP is installed and has Ethernet connection, remote connection is also possible.

**WARNING:** in order for the communication to take place, the EP must be powered and not physically configured.

349140

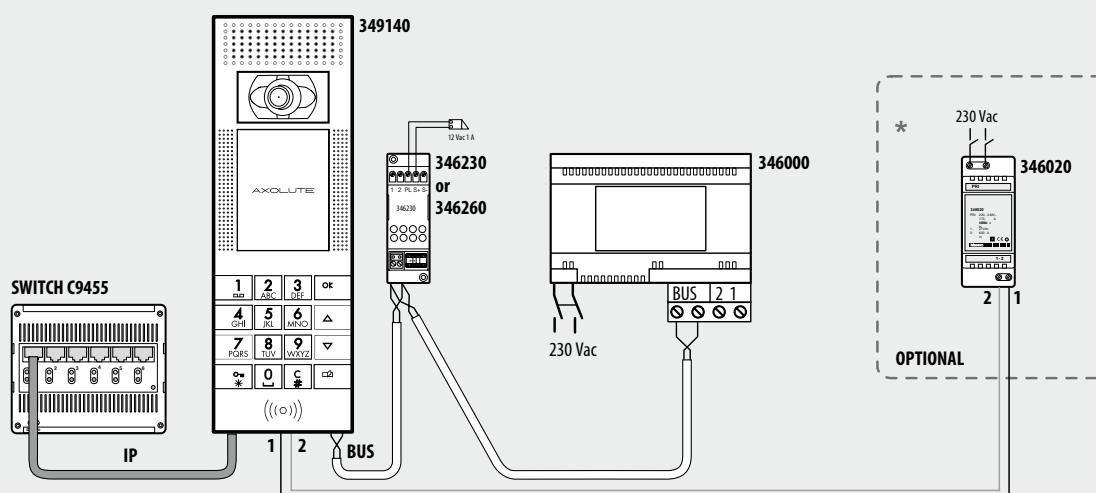
## Wiring diagrams

### 2-WIRE SCS BUS connection



NOTES (\*): needed for lines (SCS power supply - EP) > 50 m (with cable item 336904)

### IP Ethernet connection



NOTES (\*): needed for lines (SCS power supply - EP) > 50 m (with cable item 336904)



# AXOLUTE VIDEO STATION

349310

## Description

2-wire speaker phone video handset for wall mounted installation.  
With 5.6" colour LCD display with PC customisable OSD navigation icon menu for the management of the following MY HOME applications: video door entry system, temperature control, sound system, automation (scenarios) and anti-intrusion.  
In systems integrated with the sound system, the VIDEO STATION behaves as an amplifier, enabling playback of all audio/video sources connected to the system.  
LED signalling for: call exclusion, door status, and connection to the entrance panel.  
Suitable for wall mounted installation using the special bracket (supplied as standard).  
Programming and configuration using the TiAxoluteStation software supplied with the product.

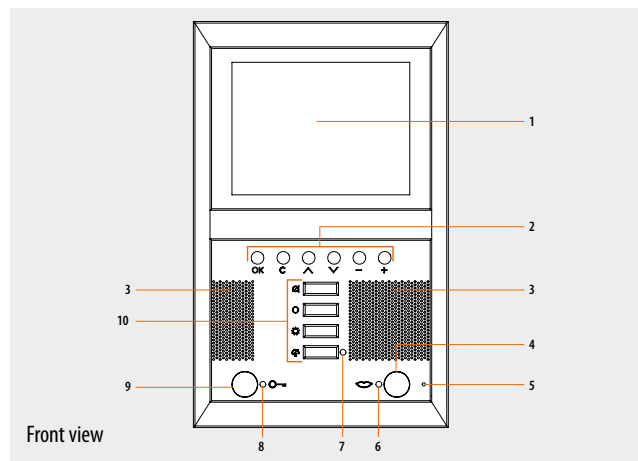
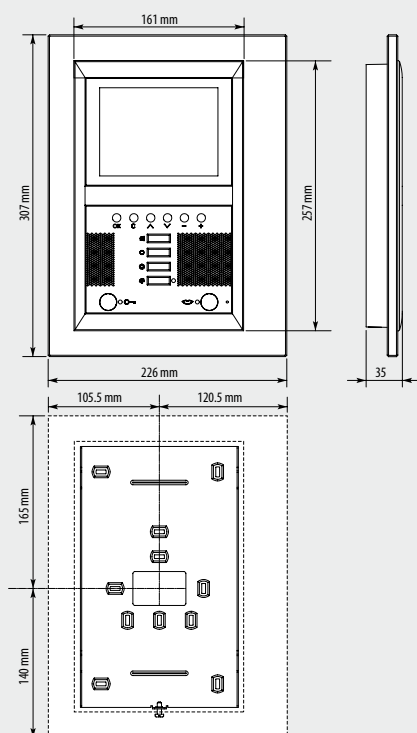
## Related items

349210 - Surround plate (satin-finished aluminium)  
349211 - Surround plate (KRISTALL glass)  
349212 - Surround plate (TEAK wood)

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc  
Stand by absorption: 10 mA  
Max. operating absorption: 410 mA  
Operating temperature: 5 - 40°C

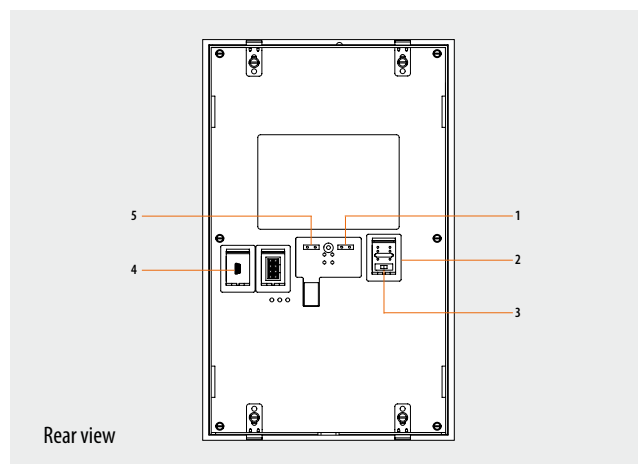
## Dimensional data



Front view

## Legend

- 1 - 5.6" colour LCD display
- 2 - Navigation keypad and confirmation inside the menu
- 3 - Loudspeakers; for the diffusion of voice and stereo sound
- 4 - Connection key; enable/disable the connection
- 5 - Microphone
- 6 - Connection status LED
- 7 - LED for call exclusion notification
- 8 - Door lock status LED
- 9 - Door lock opening key
- 10 - Keys for video door entry functions



Rear view

## Legend

- 1 - Clamps for the connection of the 2-wire SCS BUS
- 2 - Configurator socket
- 3 - Line termination ON/OFF micro-switch
- 4 - Mini-USB connector for PC connection
- 5 - Additional power supply connection clamps

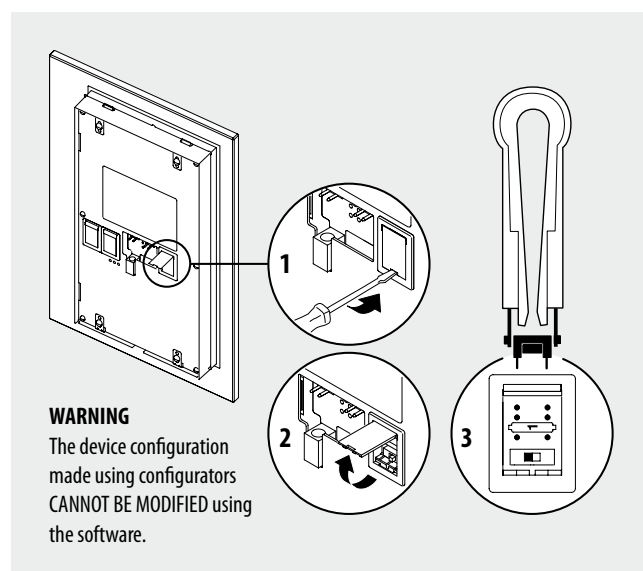
## Configuration

AXOLUTE VIDEO STATION can be configured in 2 different modes:

- **Fast configuration** (through the connection of physical configurators)
- **Advanced configuration** using the TiAxoluteStation software supplied with the product.

**Fast configuration** enables the user to access the menu of the video door entry functions. This is the standard configuration using configurators to be connected to the appropriate socket on the back of the device itself.

**Warning:** If the apartment interface, item 346850, is installed in the apartment, configuration of the video handset using the software supplied is recommended.



N	P	M
○	○	○
○	○	○

### N - numero del Handset

The N configurator assigns each video handset an identification number within the system. The handsets must be configured in progressive mode. Handsets with parallel connection (max 3 are allowed inside the apartment without item 346850) must be configured with the same N configurator. Additional audio handsets, video handsets and/or bells can be installed in parallel to the basic video handset.

### P - entrance panel association

The P configurator identifies the associated EP, or the first entrance panel that switches itself on when the pushbutton (○) is pressed the first time, as well as which door lock with idle video handset is activated, when the pushbutton (○) is pressed.

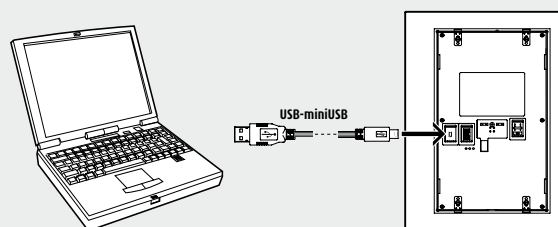
### M - Operating mode

The M configurator identifies the main menu of the device and therefore all the usable preset functions (see manual supplied with the product).

**The advanced PC configuration** using the TiAxoluteStation software (CD supplied), provides the user with a higher degree of customisation, with the possibility to:

- create flexible menus
- customize text messages
- access all home automation functions

To transfer the configuration performed using the TiAxoluteStation software, or to update the firmware, connect Axolute Video Station to the PC using the USB-mini cable.



To ensure that communication is successful, Axolute Video Station must be powered and not physically configured.



# AXOLUTE VIDEO DISPLAY

349311-349312-349313

## Description

2-wire speaker phone video handset for flush mounted installation. With 2.5" colour LCD display with PC customisable OSD navigation icon menu for the management of the following MY HOME applications: video door entry system, temperature control, sound system, automation (scenarios) and anti-intrusion. LED signalling for: call exclusion, door status, and connection to the entrance panel.

Suitable for flush mounted installation using item 506 boxes. To be completed with front cover plate (all those suitable for item 506E of the AXOLUTE series).

Programming and configuration using the TiAxoluteDisplay software supplied with the product.

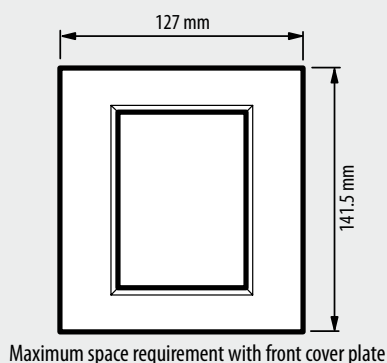
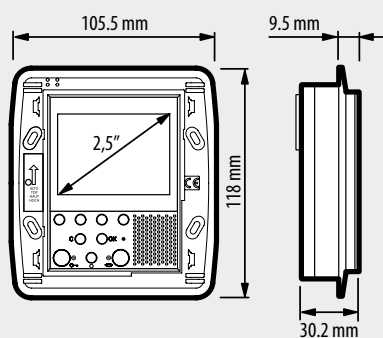
## Related items

item 506E	3+3 modules flush mounted box
item PB526	3+3 modules plasterboard box
item HA/HB4826...	3+3 modules front cover plate (see AXOLUTE finishes)
item 349319	VIDEO DISPLAY table-top base

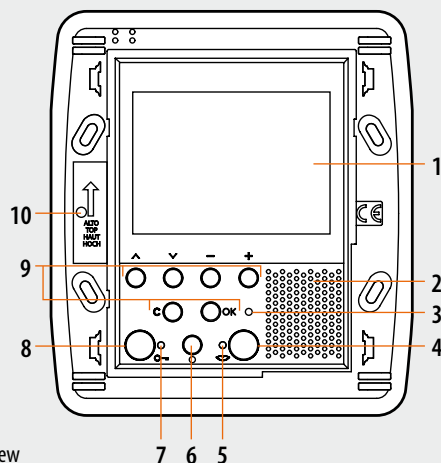
## Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	10 mA
Max. operating absorption:	320 mA
Operating temperature:	5 - 40°C

## Dimensional data



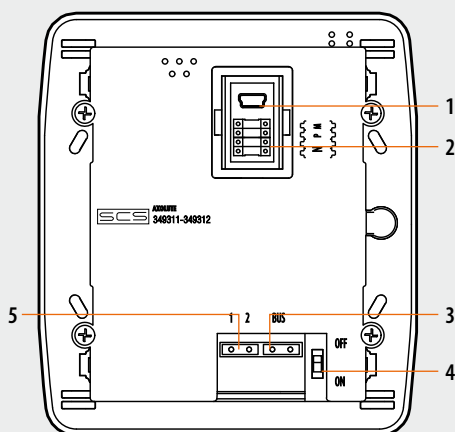
Maximum space requirement with front cover plate



Front view

## Legend

- 1 - 2.5" colour LCD display
- 2 - Loudspeaker
- 3 - LED for call exclusion notification
- 4 - Connection key; enable/disable the connection
- 5 - Connection status LED
- 6 - Entrance panel and cycling activation key
- 7 - Door lock status LED
- 8 - KEY Door lock opening
- 9 - Navigation keys and confirmation inside the menu
- 10 - Microphone



Rear view

## Legend

- 1 - Mini-USB connector for PC connection
- 2 - Configurator socket
- 3 - 2 WIRE SCS/BUS connection clamps
- 4 - Line termination ON/OFF micro switch
- 5 - Clamp for connection of the additional power supply

349311-349312-349313

## Configuration

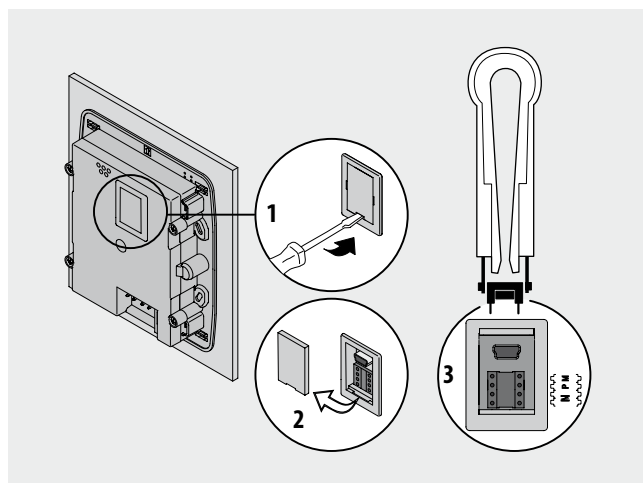
AXOLUTE VIDEO DISPLAY can be configured in 2 different modes:

- **Fast configuration** (through the connection of physical configurators)
- **Advanced configuration** using the TiAxoluteDisplay software supplied with the product.

**Fast configuration** enables the user to access the menu of the video door entry functions. This is the standard configuration using configurators to be connected to the appropriate sockets on the back of the device itself.

If the apartment interface, item 346850, is installed in the apartment, configuration of the video handset using the software supplied is recommended.

**WARNING:** The configuration of the device is performed using configurators and cannot be changed from the menu.



### N - numero del Handset

The N configurator assigns each video handset an identification number within the system. The handsets must be configured in progressive mode. Handsets with parallel connection (max 3 are allowed inside the apartment without item 346850) must be configured with the same N configurator. Additional audio handsets, video handsets and/or bells can be installed in parallel to the basic video handset.

### P - entrance panel association

The P configurator identifies the associated EP, or the first entrance panel that switches itself on when the pushbutton (○) is pressed the first time, as well as which door lock with idle video handset is activated, when the pushbutton (○) is pressed.

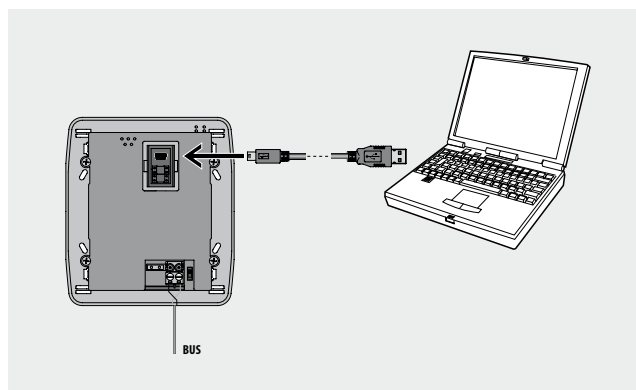
### M - Operating mode

The M configurator identifies the main menu of the device and therefore all the usable functions (see manual supplied with the product).

**The advanced PC configuration** using the TiAxoluteDisplay software (CD supplied), provides the user with a higher degree of customisation, with the possibility to:

- create customized menus;
- customize text messages;
- access all home automation functions.

To transfer the configuration performed using the TiAxoluteDisplay software, or to update the firmware, connect AXOLUTE VIDEO DISPLAY to the PC using an USB-miniUSB cable.



To ensure that the communication is successful, AXOLUTE VIDEO DISPLAY must be powered and not physically configured.



# AXOLUTE

## Nighter & Whice VIDEO STATION

349320-349321

### Description

2-wire speaker phone video handset for wall mounted installation. With 8" colour LCD display, backlit capacitive keypad with soft touch controls and PC customisable OSD navigation icon menu for the management of the following MY HOME applications: video door entry system, temperature control, sound system and multimedia, automation (scenarios) and anti-intrusion.

In systems integrated with the sound system, the VIDEO STATION behaves as an amplifier, enabling playback of all audio/video sources connected to the system.

LED signalling for: call exclusion, door status, and connection to the entrance panel.

It can be integrated with MY HOME, also in combination with the Multimedia interface, item 3465 - (in this case, allow for a local video door entry system power supply).

Suitable for wall mounted installation using the special bracket (supplied as standard). Programming and configuration using the TiNighterandWhiceStation software supplied with the product.

### Technical data

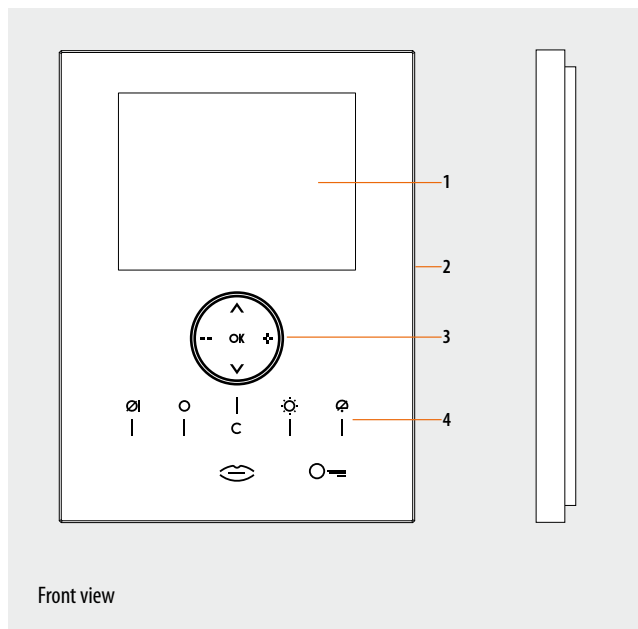
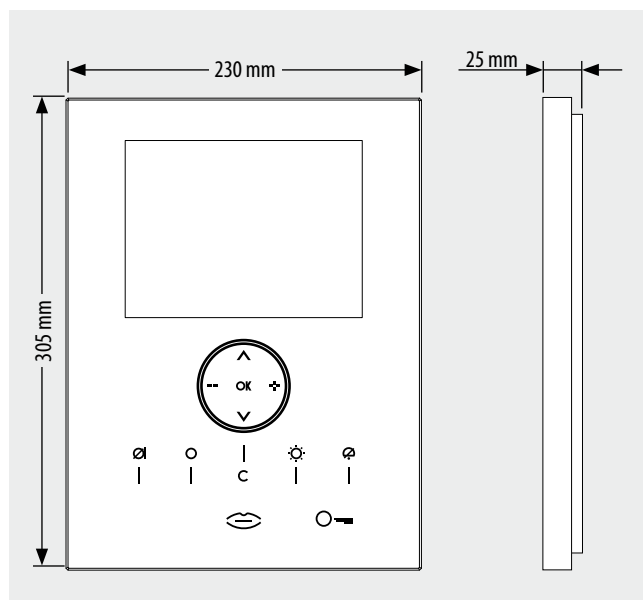
Power supply from SCS BUS: 18 – 27 Vdc

Stand by absorption: 30 mA

Max. operating absorption: 520 mA

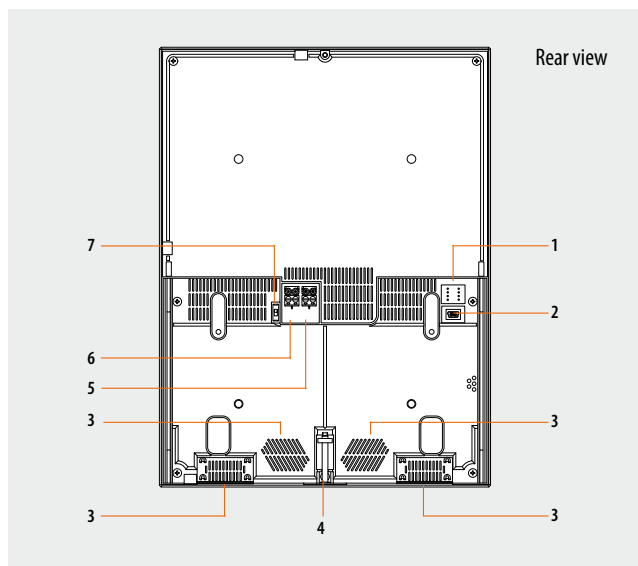
Operating temperature: 5 - 40°C

### Dimensional data



### Legend

- 1 - 8" LCD colour display
- 2 - Microphone
- 3 - Navigation keys and confirmation inside the menu
- 4 - Led and video door entry function keys



### Legend

- 1 - Configurator socket
- 2 - Mini-USB connector for PC connection
- 3 - Loudspeakers; for the broadcasting of voice and stereo sound
- 4 - Screw used to fasten the Video Station to the metal base
- 5 - Additional power supply connection clamps
- 6 - Clamps for the connection of the 2-wire SCS BUS
- 7 - Line termination ON/OFF micro switch

349311-349312-349313

## Configuration

AXOLUTE Nighter & Whice VIDEO STATION can be configured in 2 different modes:

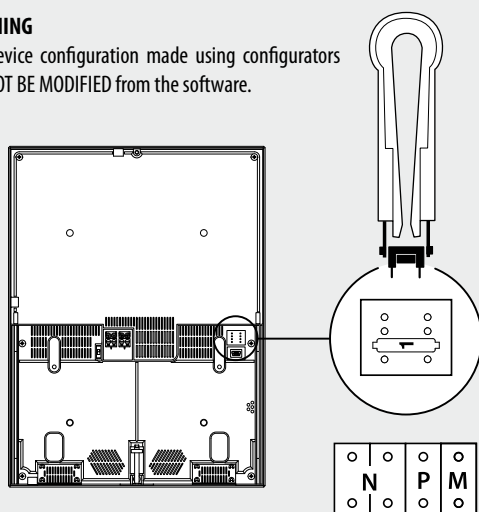
- **Fast configuration** (through the connection of physical configurators)
- **Advanced configuration** using the **TiAxoluteNighterAndWhiceStation software** (CD supplied)

**Fast configuration** enables the user to access the menu of the video door entry functions. This is the standard configuration using configurators to be connected to the appropriate housing on the back of the device itself.

If the apartment interface, item 346850, is installed in the apartment, configuration of the video handset using the software supplied is recommended.

### WARNING

The device configuration made using configurators **CANNOT BE MODIFIED** from the software.



### N - numero del Handset

The N configurator assigns each video handset an identification number within the system. The handsets must be configured in progressive mode. Handsets with parallel connection (max 3 are allowed inside the apartment without item 346850) must be configured with the same N configurator. Additional audio handsets, video handsets and/or bells can be installed in parallel to the basic video handset.

### P - entrance panel association

The P configurator identifies the associated EP, or the first entrance panel that switches itself on when the pushbutton (○) is pressed the first time, as well as which door lock with idle video handset is activated, when the pushbutton (○) is pressed.

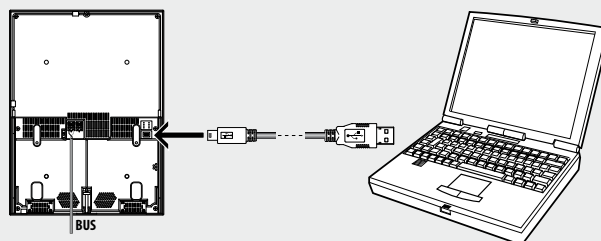
### M - Operating mode

The M configurator identifies the main menu of the device and therefore all the usable functions (see manual supplied with the product).

**The advanced PC configuration** using the TiAxoluteNighterAndWhiceStation software (CD supplied), provides the user with a higher degree of customisation, with the possibility to:

- create flexible menus
- customize text messages
- access all home automation functions

To transfer the configuration performed using the TiAxoluteNighterAndWhiceStation software, or to update the firmware, connect Axolute Video Station to the PC using the USB-mini cable.



To ensure that communication is successful, Axolute Video Station must be powered and not configured physically.



# Axolute Etèris Video Display

349340

## Description

2 WIRE speaker phone video handset for flush mounted installation.  
With 2.5" colour LCD display with PC customisable icons OSD navigation menu for the management of the following MY HOME applications: Video door entry system, temperature control, sound system, scenarios, burglar alarm. LED signalling for: call exclusion, door status, connection with entrance panel.  
Flush mounted / plasterboard installation using the appropriate boxes.  
To be completed with dedicated front cover and front cover plate available in the Axolute white, anthracite, and tech colour variants.  
Programming and configuration using the TiAxoluteDisplay software supplied with the product.

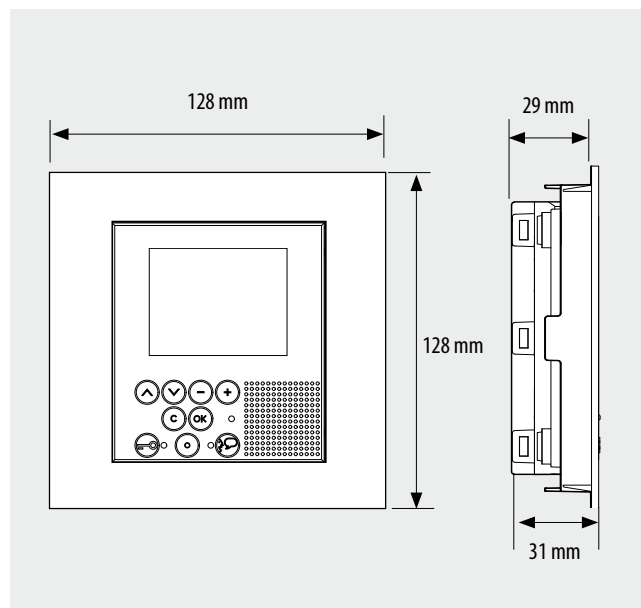
## Related items

528W	Flush mounted box
PB528W	Plasterboard box
349243	White front cover
349241	Axolute tech front cover
349242	Anthracite front cover
HW4826HD	White front cover plate
HW4826HC	Axolute tech front cover plate
HW4826HS	Tech front cover plate
346020	(additional 2 DIN modules power supply) - optional, for local powering of the video handset, when maximum installation distances are necessary.

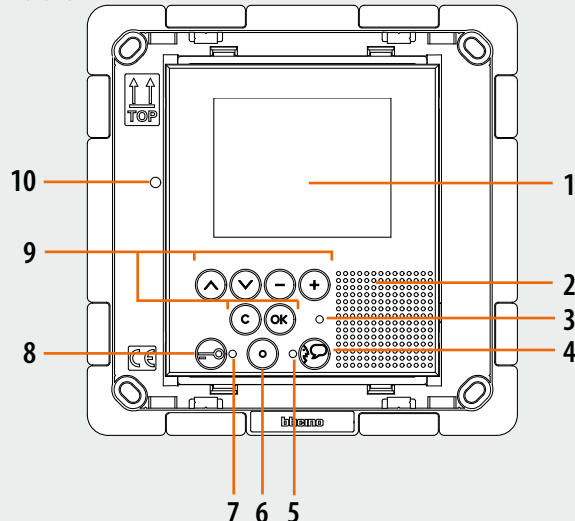
## Technical data

Power supply dal SCS BUS:	18 – 27 Vdc
Stand by absorption:	10 mA
Max. operating absorption:	320 mA
Operating temperature:	0 – 40 °C

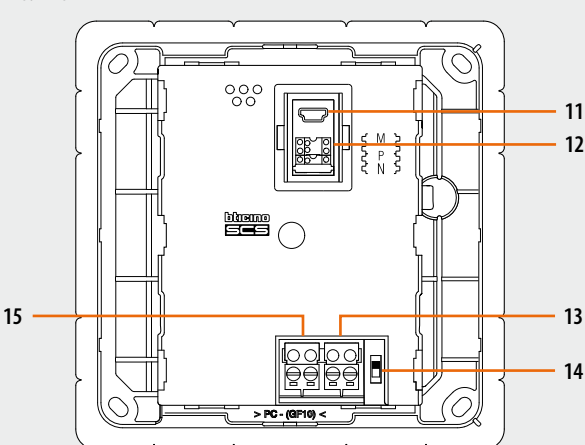
## Dimensional data



Front view



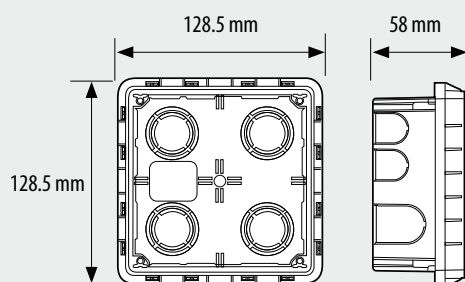
Rear view



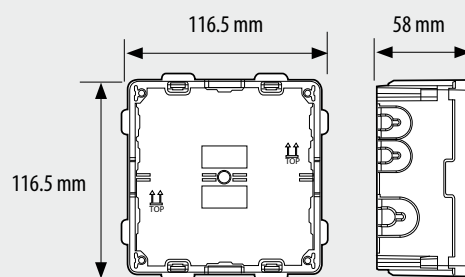
## Legend

- 2.5" LCD colour display
- Loudspeaker
- Bell exclusion notification LED
- Audio connection activation/deactivation key
- Connection status LED
- Entrance panel/camera cycling activation key
- Door lock status LED
- Door lock activation key
- Navigation and confirmation keys in the icon menu
- Microphone
- Mini USB connector for connection to the PC
- Configurator socket
- 2 WIRE SCS/BUS connection clamps
- Line termination ON/OFF micro-switch
- Additional power supply connection clamps (1-2)

Flush mounted box 528W



Plasterboard box PB528W



## Configuration

Axolute Etèris Video Display can be configured in 2 different modes:

- **Fast configuration** (through the connection of physical configurators)
- **Advanced configuration** (using the TiAxoluteDisplay software supplied)

The quick configuration enables the user to access the video door entry system function menu. This is the standard configuration with configurators to be connected to their own housing on the back of the device itself.

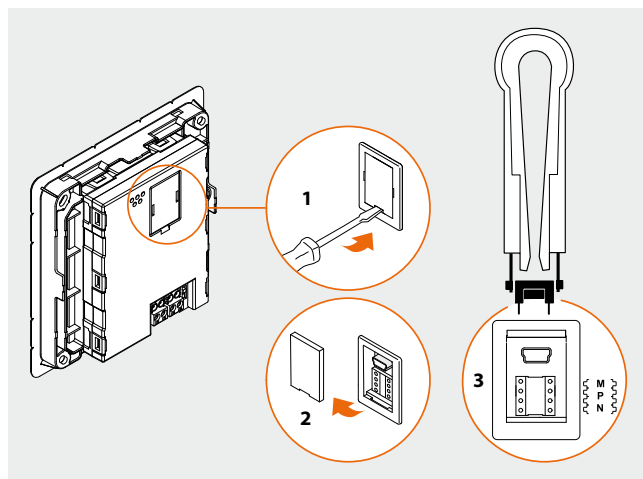
If the apartment interface, item 346850, is installed inside the apartment, configuration of the video handset using the software supplied is recommended.

The PC advanced configuration using the software (CD supplied), provides the user with the highest degree of customisation, with the possibility of:

- create customized menus;
- customize text messages;
- access all home automation functions.

## Connection to the PC



To transfer the configuration performed using the software, or to update the firmware, connect Axolute Etèris Video Display to the PC using the USB-miniUSB cable.



## N – numero del Handset

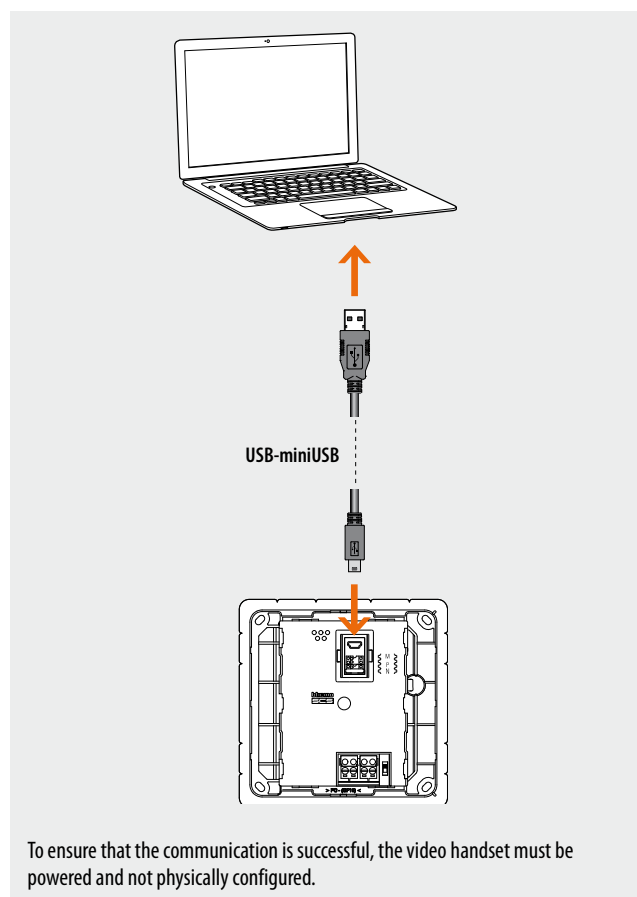
The N configurator assigns to each video handset an identification number within the system. The handsets must be configured in progressive order. Handsets with parallel connection (max 3 are allowed inside apartments without item 346850) must be configured using the same N configurator. In parallel with the main video handset, additional handsets, video handsets and/or bells may be installed.

## P – entrance panel association

The P configurator identifies the entrance panel associated, or the first entrance panel to activate before pressing the key  and which door lock with video handset at rest is activated, when the key  is pressed.

## M – Operating mode

The M configurator identifies the main menu page and therefore the preset functions that may be used (see manual supplied with the product).





# Flush mounted 2 wire indoor colour camera

391657-391658-391659  
391661-391662-391663

## Description

2 wire indoor colour camera for video monitoring system functions. Flush mounted or wall mounted installation using the dedicated accessories of the AXOLUTE, LIVING, LIGHT, LIGHT TECH residential series.

**WARNINGS: do not point the camera towards the sun or towards light sources.**

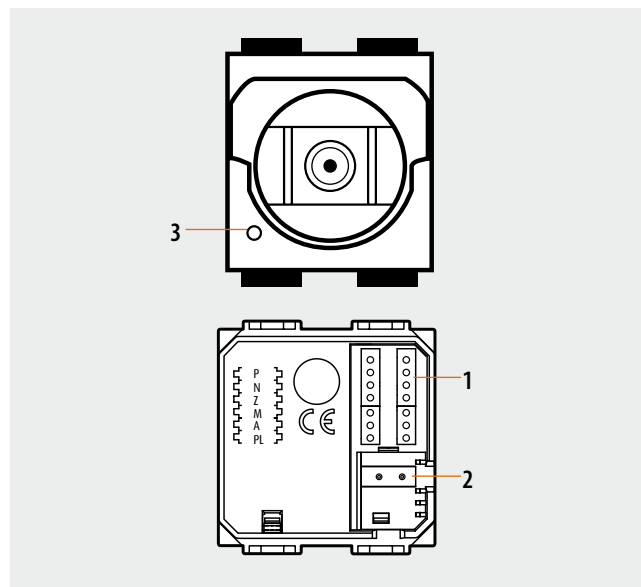
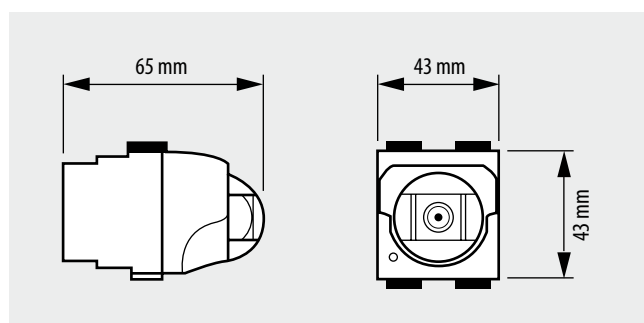
## Related items

The device must be completed with the accessories and the front cover plates of the AXOLUTE, LIVING, LIGHT, LIGHT TECH residential series.  
Refer to the corresponding catalogues.

## Technical data

Power supply from SCS BUS:	18-27 Vdc
Sensor:	from 1/3" colour CCD
Stand by absorption:	5 mA
Max. operating absorption:	140 mA
Lens:	"semi pin-hole" 3.7 mm
Interlace:	2:1
Scanning:	Standard CCIR
Horizontal frequency:	15625 Hz
Vertical frequency:	50 Hz
Image elements:	537 (H) x 597 (V)
Horizontal resolution:	380 TV lines at the image centre
Video signal:	PAL compatible
Minimum illumination:	5 lux
Operating temperature:	5 – 40 °C

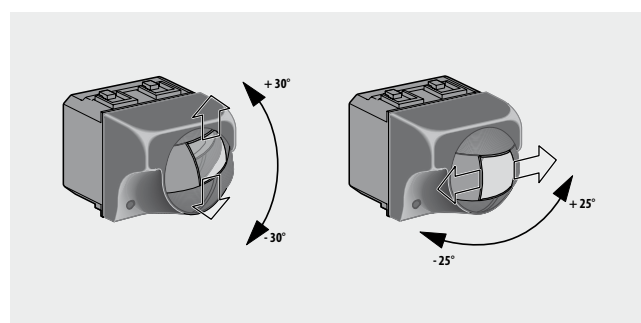
## Dimensional data



## Legend

- 1 - Configurator socket
- 2 - 2 WIRE BUS connection clamp
- 3 - Microphone

## Camera adjustment



391657-391658-391659  
391661-391662-391663

## Configuration

The device must be physically configured in terms of:

### P – Camera address

The configurator assigns to the camera the address inside the apartment.

**NOTES (\*)** : connect an OFF configurator here to disable the microphone (function available for cameras configured from 0 to 9, for other cameras the microphone cannot be excluded).

### N – Address of the handset called in case of alarm

### Z – Zone of the alarm system the camera is associated to

### M – Mode of operation when a camera is switched on

Each time a camera is switched on (call, selfswitching on, alarm) the MY HOME actuator and the scenario configured in A and PL are activated. When the camera is switched off, the associated actuator also switches off, while the scenario remains active.

If an actuator used by the automation system is also associated to the camera, the actuator will switch itself off when the camera is switched off, even if it was already on when the camera came on. To avoid this problem, the load should be activated using an actuator item F411/2, configuring different PL and setting the contacts with parallel connection.

M	A/PL
M = 0	Address of the SCS control device associated to the camera
M = 1 - 9	Address of the scenarios module associated to the camera

	P	N	Z	M	A	PL
○	○	○	○	○	○	○
*	○	○	○	○	○	○
○	○	○	○	○	○	○



# Outdoor 2-wire colour camera

391670

## Description

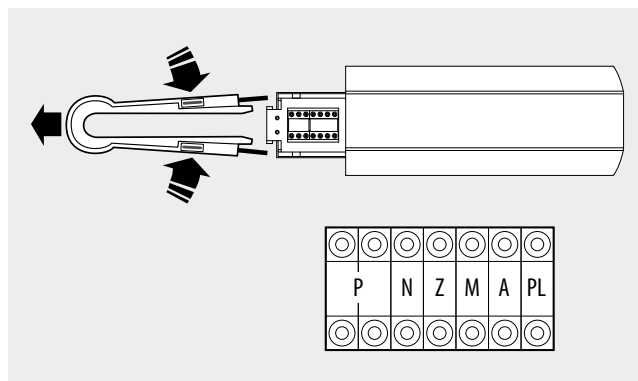
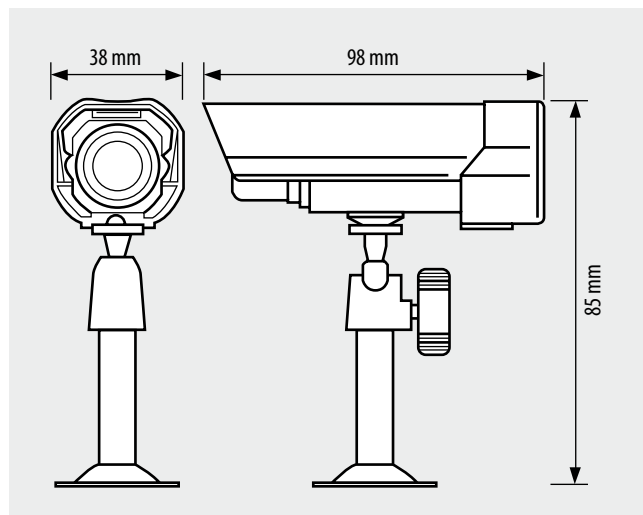
2-wire compact outdoor (IP65) colour camera.  
It can be used for video monitoring system installations, or for turning audio systems into video systems, using a separate camera.

**WARNINGS:** do not point the camera towards the sun or towards light sources.

## Technical data

Power supply from SCS BUS: 18 – 27 Vdc  
Enclosure: aluminium  
Sensor: 1/3" CMOS colour  
Stand by absorption: 5 mA  
Max. operating absorption: 65 mA  
Lens: f: 6 mm; F: 2.3 mm  
Image elements: 628 (H) x 586 (V)  
Horizontal resolution: 330 TV lines at the image centre  
Minimum illumination: 2 Lux F=2.0  
Operating temperature: (-20) – (+70) °C; RH 95% max  
Protection index: IP65

## Dimensional data



## Configuration

The device must be physically configured in terms of:

### P – Camera address

The configurator assigns to the camera the address inside the apartment.

### N – Address of the handset called in case of alarm

### Z – Zone of the alarm system the camera is associated to

### M – Mode of operation when a camera is switched on

Each time a camera is switched on (call, selfswitching on, alarm) the MY HOME actuator and the scenario configured in A and PL are activated. When the camera is switched off, the associated actuator also switches off, while the scenario remains active.

If an actuator used by the automation system is also associated to the camera, the actuator will switch itself off when the camera is switched off, even if it was already on when the camera came on. To avoid this problem, the load should be activated using an actuator item F411/2, configuring different PL and setting the contacts with parallel connection.

M	A/PL
M = 0	Address of the SCS control device associated to the camera
M = 1 - 9	Address of the scenarios module associated to the camera
M = SLA	Configuration of the audio entrance panel associated to the camera (see following details)

M = SLA

PI	PN	SLA	A	PL
----	----	-----	---	----

Pi - Pn = range of audio EP associated to the camera (max.5)

PI - PN = Audio entrance panels associated to the camera (max. 5)

PI = Address of first associated EP

PN = Address of last associated EP

A/PL = Address of the SCS control associated to the camera



## Audio/video node

F441

### Description

The audio/video node is a mixer device enabling distribution of up to 4 sound sources or 2-wire audio/video risers.

The 4 outputs will all have the same signal coming from the input selected among the 4 available.

**The device must not be configured.**

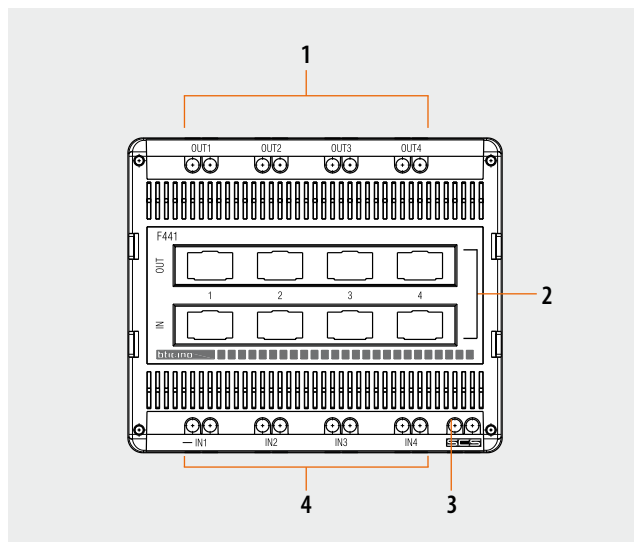
**WARNING : Connections using both screw clamps and patch cords at the same time are NOT possible.**

### Technical data

Power supply from SCS BUS: 18 - 27 Vdc  
Absorption from BUS: 20 mA  
Dissipated power: 0.5 W  
Operating temperature: 5 - 40 °C  
Number of inputs available: 4  
Number of outputs available: 4

### Dimensional data

6 DIN modules



### Legend

- 1 - Output clamps (OUT1 - OUT2 - OUT3 - OUT4) for the connection of 2-wire video risers or amplifiers
- 2 - Sockets for patch cord connection
- 3 - Clamps for the connection of the SCS BUS
- 4 - Input clamps (IN1 - IN2 - IN3 - IN4) for the connection of sound sources or entrance panels / cameras



# Multi-channel matrix

F441M

## Description

The multi-channel matrix is a device which can distribute up to 4 stereo sound sources and a video signal from entrance panels or cameras simultaneously.

The matrix is made up of 8 inputs and 8 outputs (to wire 8 rooms).

Video entrance panels and cameras (first 4 inputs) and stereo sound sources (last 4 inputs) can be wired in input.

On each output of the matrix there is a clearly separate room.

The rooms must be set in ascending order (room 1 - OUT, room 2 - OUT 2 etc.).

The stereo signals are distributed at the same time and independently on any output. However, it is not possible for the audio signals of two separate sound sources to be mixed on the same output branch.

The stereo signal of a sound sources and the video signal of one of the 2-wire video door entry sources can travel at the same time on the same branch (entrance panel or camera).

**The device must not be configured.**

## Technical data

Power supply from SCS BUS: 18 - 27 Vdc

Absorption da BUS: 46 - 60 mA

Dissipated power: 1.5 W

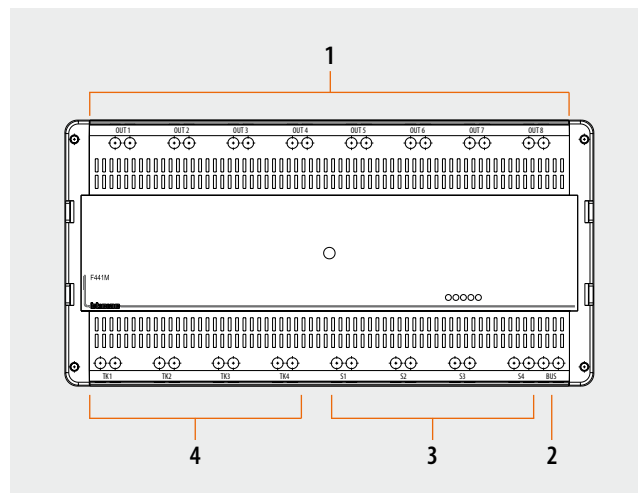
Operating temperature: 5 - 45 °C

Number of inputs available: 8

Number of outputs available: 8

## Dimensional data

10 DIN modules



## Legend

- 1 - Clamps for the connection of the amplifier and the video door entry system handsets.
- 2 - Clamps for the connection of the SCS BUS
- 3 - Clamps for the connection of the input sound sources (S1-S2-S3-S4)
- 4 - Clamps for the connection of the 2-wire cameras / entrance panels (TK1-TK2-TK3-TK4)

## CONTENTS

Technical sheets – Structured cabling system for the home sector



# SCS/TV modulator

F442

## Description

The SCS/TV modulation device is a device that can be installed on DIN 35 rail, giving the possibility of displaying on the home television set the video signal from the entrance panel of the 2-wire video door entry system. In this way, the caller can be displayed directly on the television set. This device (which can be used on one-family systems) must be connected to the terrestrial or satellite antenna, on the specific "F" type input, and to the television set, on the specific output connector. On the bottom are two screw clamps, for the connection of the 2-wire BUS, shunted from the entrance panel of the video door entry system.

In order to display the call on the television set, this must be set to the correct video channel, which must be the same as the one selected on the modulation device using the front adjustments (the left one for the tenths, and the right one for the units).

The television set must be enabled for the selection of the S band channel, to be selected between S11 and S41.

It will be necessary to associate to the channel of the selected S band for the display of the SCS signal the Video CH program that can be selected using the television remote control. This is the one that can be accessed using the remote control to display the SCS video output.

The SCS/TV modulation unit is preset with a selector that must be positioned near the letter A if the device is the last one of the SCS chain. In addition to a green LED confirming the presence of the power supply, a red alarm LED is also present: if the red ALARM LED turns on, check the wiring and the connections.

## Related items

Power supply 346000

## Technical data

Power supply:	10 - 35 Vdc
Absorption:	210 mA at 12 Vdc
	100 mA at 24 Vdc
	90 mA at 27 Vcc
Dissipated power:	3 W
Operating temperature:	5 - 45 °C
Rated frequency:	40 W- 2150 MHz
Output power (S band):	88 dBμV/750 Ω
No. of F type outputs:	1

## Dimensional data

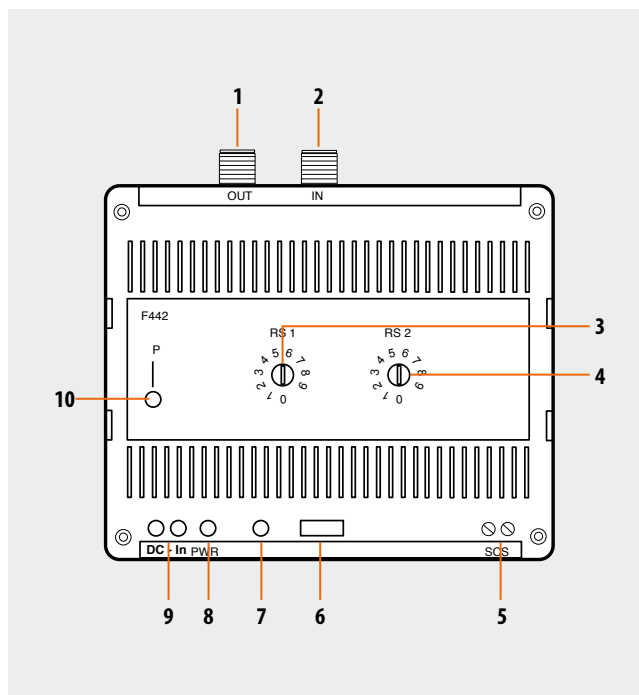
6 DIN modules

## Configuration

It will be necessary to configure the device in order to assign the number of the S band video channel used for transmitting the signal to send to the television set.

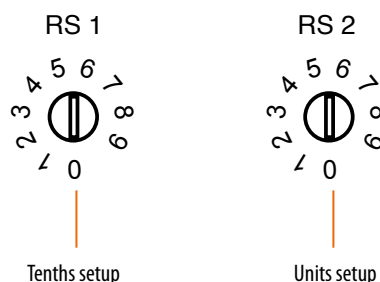
This operation is performed using the two front adjustment controls (units and tenths).

The same video channel number must be set on the television set.



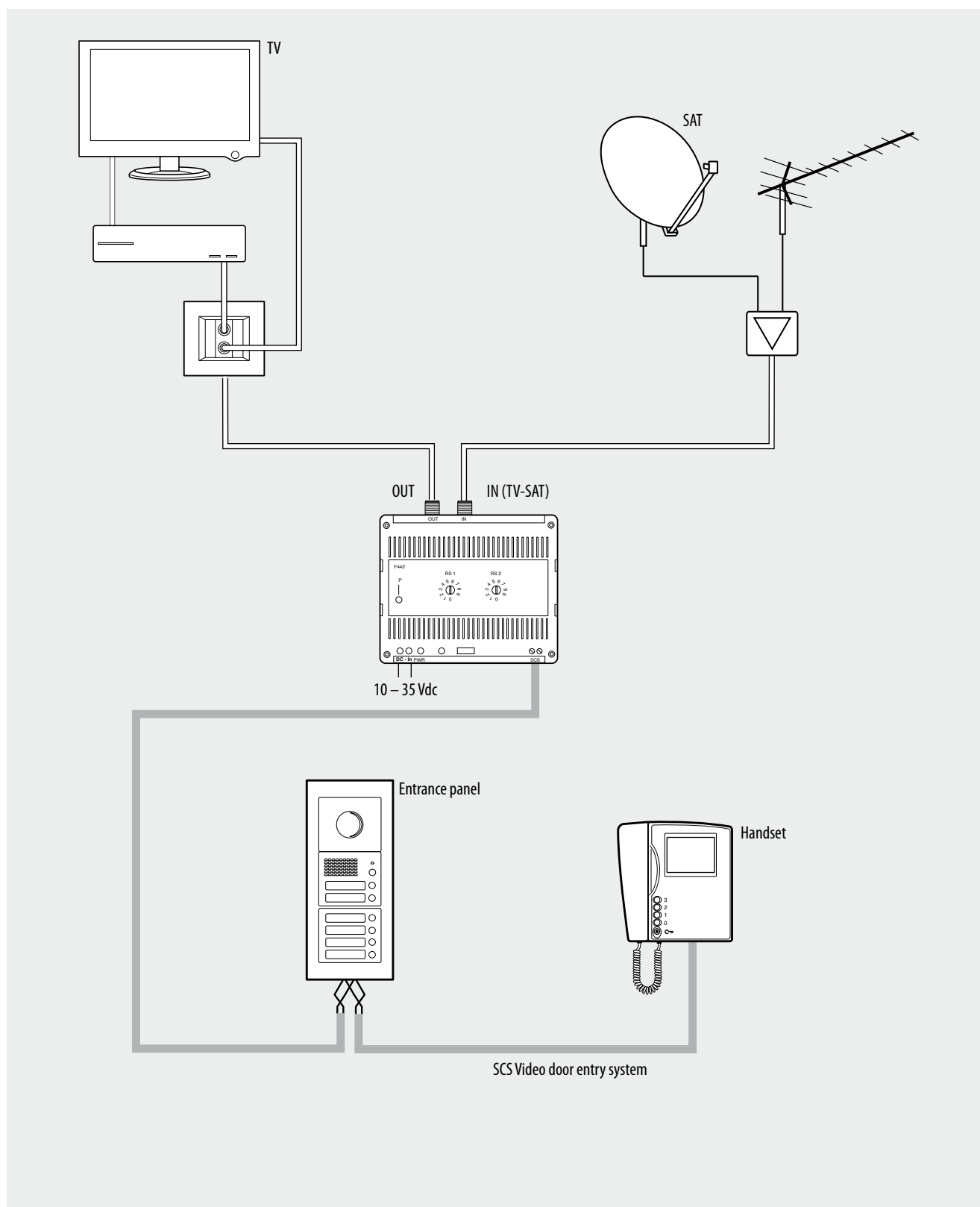
## Legend

1. Output for TV + SAT jacks distributed around the room, or to the TV HUB
2. Television antenna + SAT input
3. Selector for the selection of the tenths of the SCS channel
4. Selector for the selection of the units of the SCS channel
5. SCS BUS input
6. Selector for the selection of the device as the last one (A) of the SCS chain
7. Alarm LED
8. Power supply present signalling LED
9. Power supply clamps
10. Push-button for the selection of the SCS video band



F442

## Wiring diagram





## Patch module

F550C6

### Description

Patch module fitted with Toolless connector for the capping of the cable from the user socket. Possibility of device rotation to accept wiring cables coming either from the top or the base of the electric distribution board.

Fitted with visual indicator, for the identification of the service transmitted.

Connects to other data network devices using patch cords L4665L20 and L4665L40.

### Related items

FLAT L4665L20 and L4665L40 patch cords

### Technical data

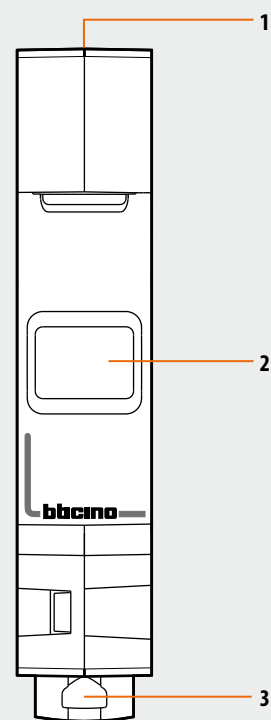
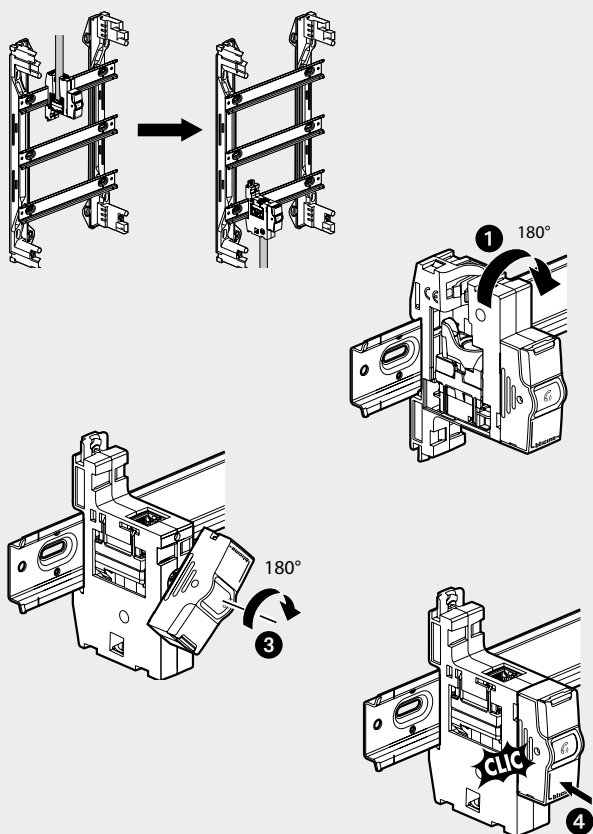
Category: 6  
Operating temperature: 5 – 40 °C

### Dimensional data

1 DIN module

### Fitting and installation

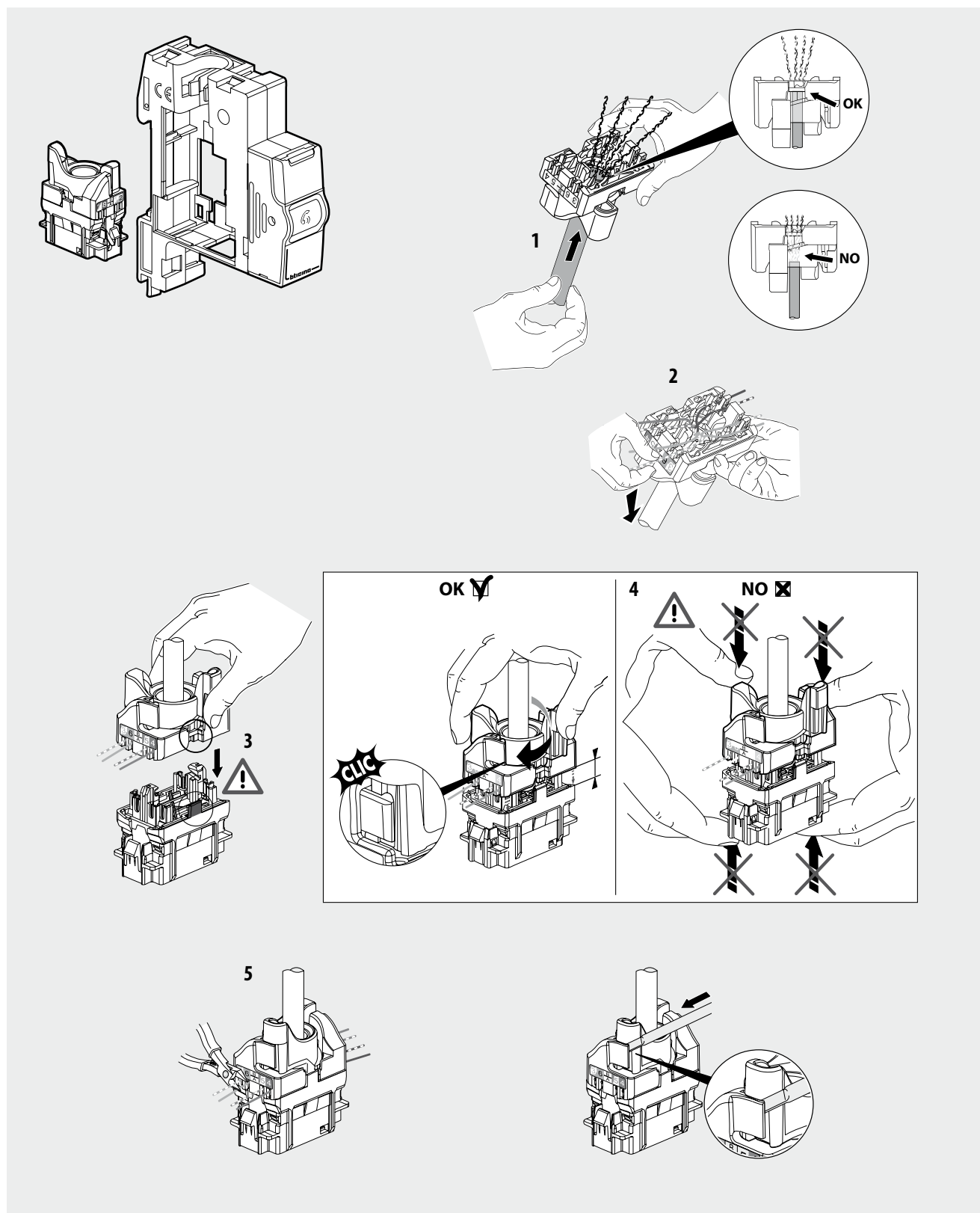
Device rotation for best positioning based on the side the wiring is coming from.



### Legend

1. RJ45 input port
2. Visual indicator
3. RJ45 output port

## Wiring





## 5 port switch

F551

### Description

Device use for distributing the data network to several points of the home. It has 5 RJ45 ports (1 input and 4 outputs) and supports 10/100 Mbit/s Ethernet connections, automatically adapting to the maximum speed supported by the network terminals connected to each port. Should It be necessary to extend the home data network to more than 4 terminals, a port may be connected to a second switch. For the connection use patch cords L4665L20 and L4665L40.

### Related items

Power supply F552

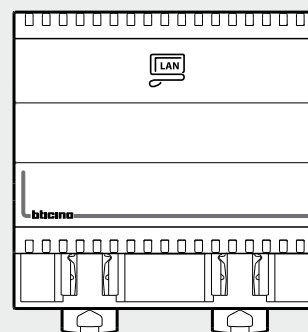
### Technical data

Power supply voltage:	9 Vdc
Absorption:	220 mA
Transmission speed:	10/100 Mbit/s
Operating temperature:	5 – 40 °C

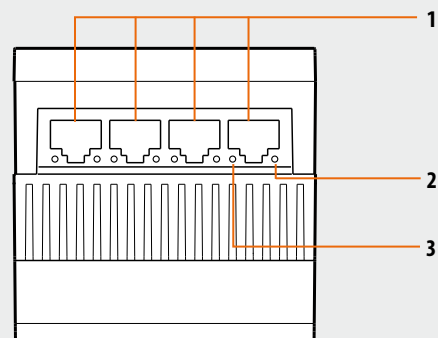
### Dimensional data

4 DIN modules

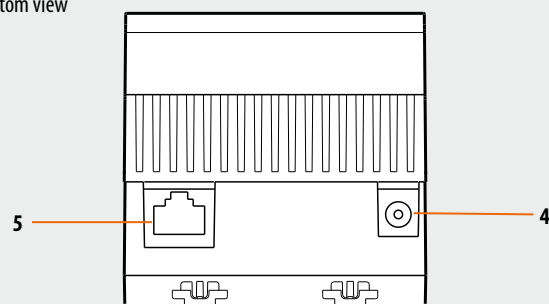
Front view



Side view



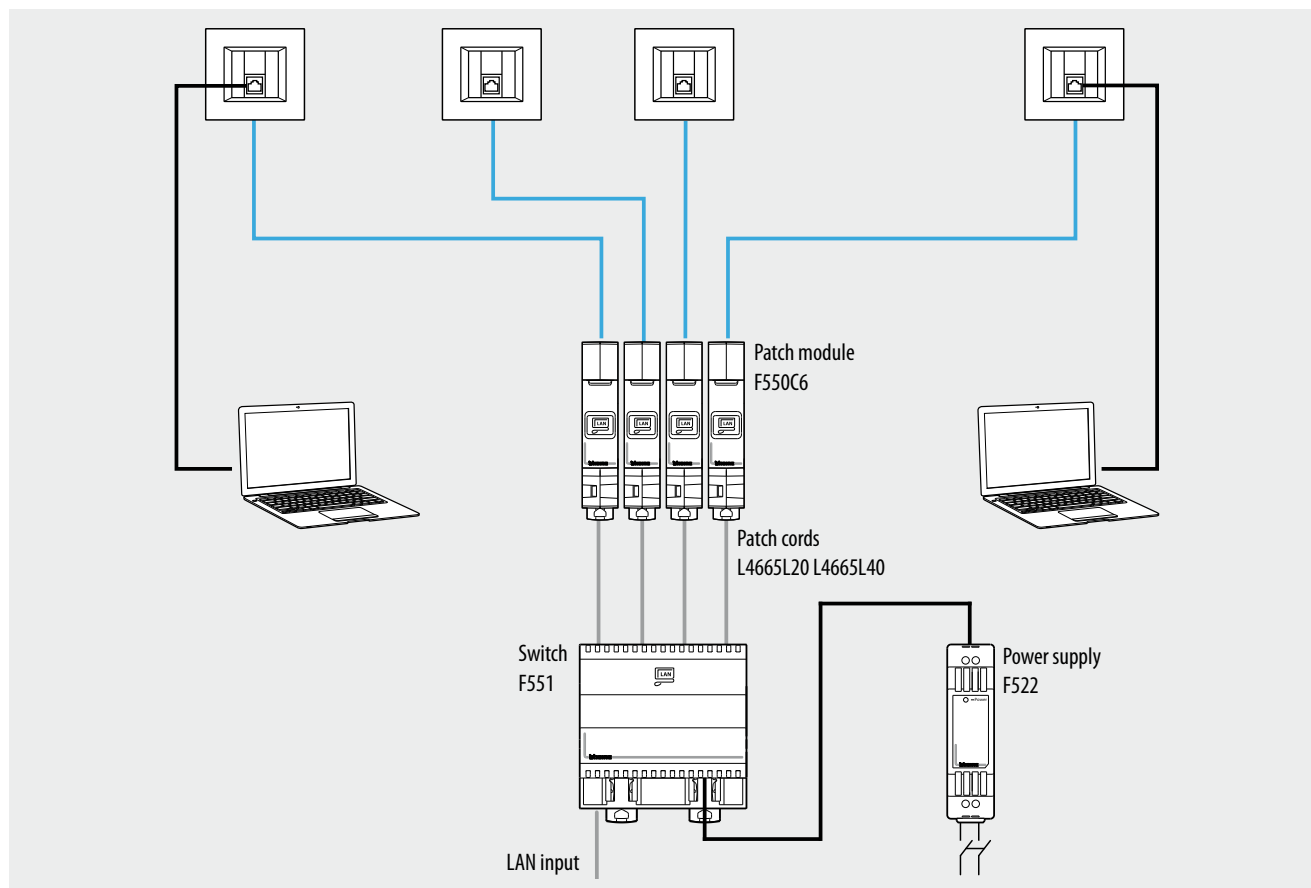
Bottom view



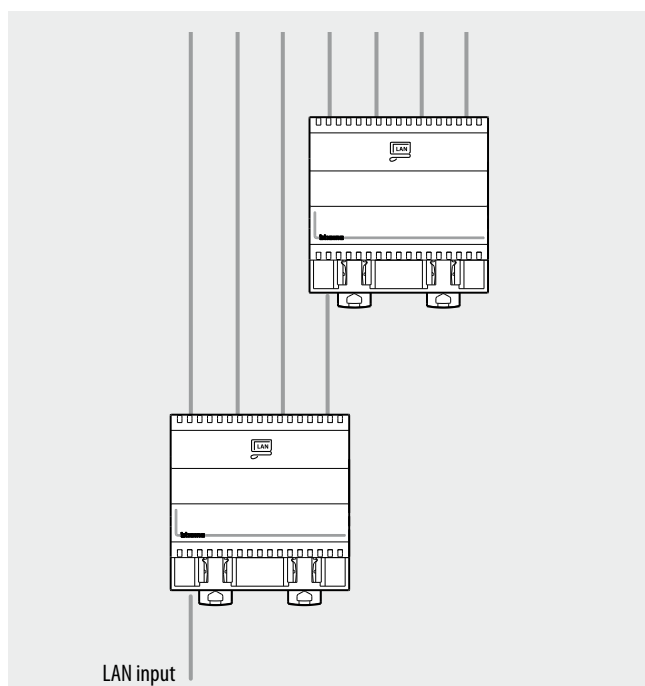
### Legend

1. RJ45 output ports
2. Orange LED: - OFF: speed 10Mbit/s  
- ON: speed 100Mbit/s
3. Green LED: - flashing: data transmission  
- ON: device active
4. Electric power supply connector (F552)
5. RJ45 input port

## Wiring diagram



Connection of the switches in series, to increase the number of LAN lines available on the output





# Power supply

F552

## Description

DIN modularity device for providing power supply to the Switch, item F551.

## Related items

Switch F551

## Technical data

Power supply voltage:	115 - 230 Vac 50 - 60 Hz
Output voltage:	9 Vdc
Maximum current delivered:	1.6 A
Operating temperature:	5 - 40 °C

## Dimensional data

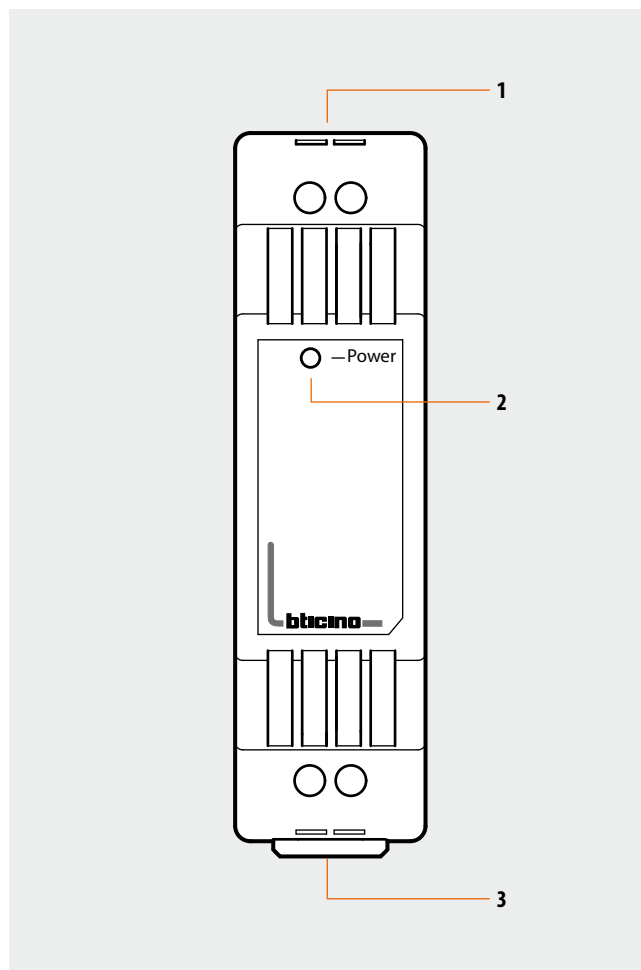
1.5 DIN modules

## Fitting and installation

The installation must be performed in accordance with current local regulations.

In general, the following requirements must be met:

- The device must be installed inside appropriate containers;
- It must not be exposed to water drips or sprays;
- Do not obstruct the air vents;
- In order to ensure overload and direct contact protection, it must be powered using a two-pole circuit breaker with contact separation of at least 3 mm, located nearby the device.



## Legend

1. Clamps for the connection of the device power supply
2. 230 V network present LED
3. Power line voltage connection clamps



## TV/SAT distribution frame

F553

### Description

This device, which does not require electric power supply, is used for the distribution of the television signal to 6 TV/SAT jacks.

It is fitted with an F type input connector for the signal from the TV switchboard, and of six output connectors, for the connection of the TV/SAT jacks, which must have electric features compatible with the device, and be of the "shunted" type.

The distribution frame is supplied with 3 plugs in case protection of the unused outputs is required.

### Related items

Shunted TV/SAT jacks HC/HS/L/N/NT4202D, HC/HS/L/N/NT4269F, A/AM5173D, A/AM5175D, C4202D

### Technical data

Frequency range: 5 - 2400 MHz  
Impedance: 750 Ohm

Direct loss (db):	Type	Max.
Frequency (MHz)		
5 - 470	13	13.5
470 - 862	13	14
950 - 2150	16	17

Return loss- (db):	Type	Max.
Frequency (MHz)		
5 - 40	11	10
40 - 1000	13	14
1000 - 2150	15	14
2150 - 2400	15	14

Operating temperature: 5 – 40 °C

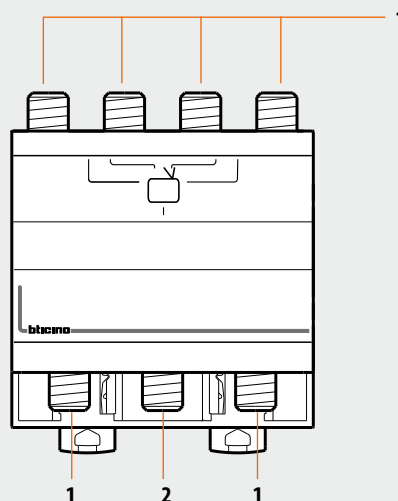
### Standards, Certifications, Marks

EN 50083

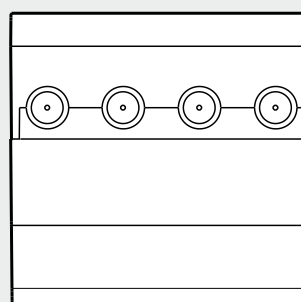
### Dimensional data

4 DIN modules

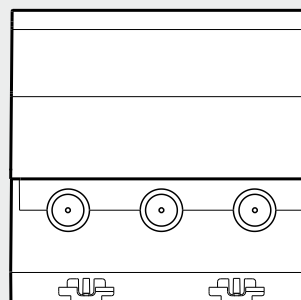
Front view



Top view



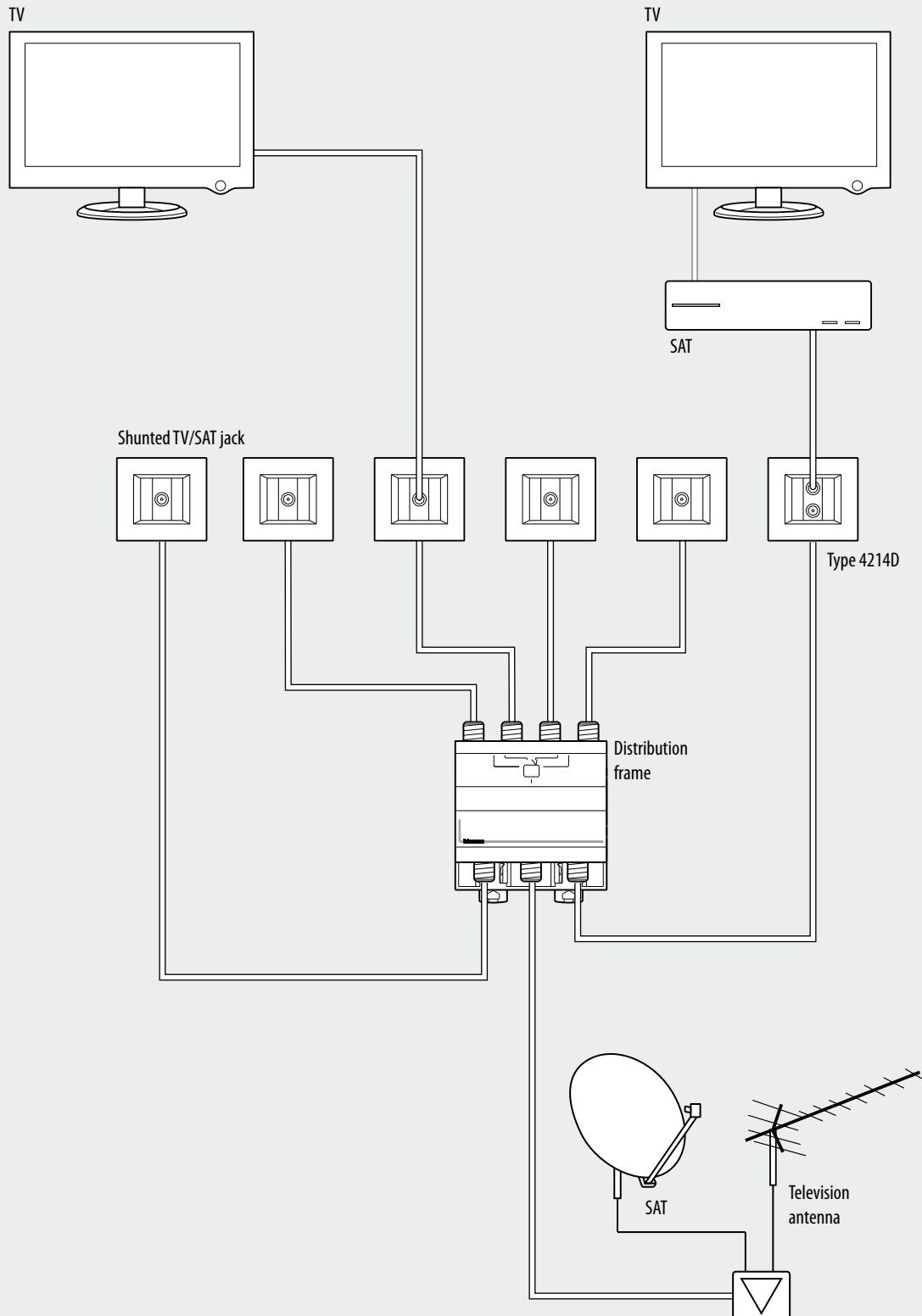
Bottom view



### Legend

1. F type output connector
2. F type input connector

## Wiring diagram





# Telephone distribution frame

F555

## Description

Device with two input ports and eight RJ45 output ports for the distribution of one or 2 telephone lines in the following way:

- one telephone line can be shunted on all the output ports;
- two telephone lines can be shunted on two groups of output ports.

The selection of the mode of shunting is made using the changeover switch, as shown in the following table:

IN		OUT							
		1	2	3	4	5	6	7	8
L1+L2	1	x	x	x	x				
	2					x	x	x	x
L1	1	x	x	x	x	x	x	x	x

In alternative to the connection using the RJ45 connector, the input line cables may also be connected using traditional screw clamps.

Should it be necessary to distribute more than eight telephone lines, a second similar device may be connected in cascade to the main distribution frame.

## Related items

L4665L20 and L4665L40 patch cord

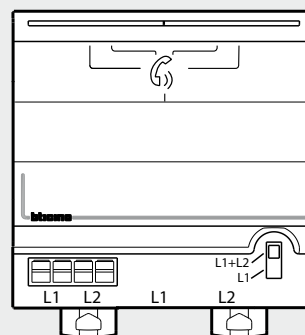
## Technical data

Operating temperature: 5 – 40 °C

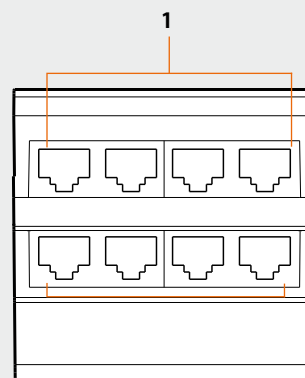
## Dimensional data

4 DIN modules

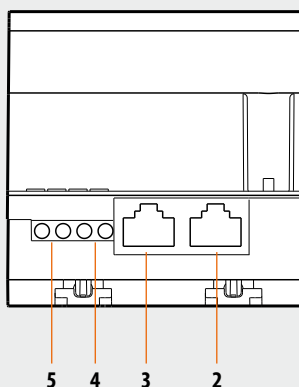
Front view



Top view



Bottom view



## Legend

1. RJ45 ports, output telephone line
2. RJ45 port, line 2 input
3. RJ45 port, line 1 input
4. Screw clamp, line 2 input
5. Screw clamp, line 1 input

Wiring diagram

Diagram for the shunting of one telephone line

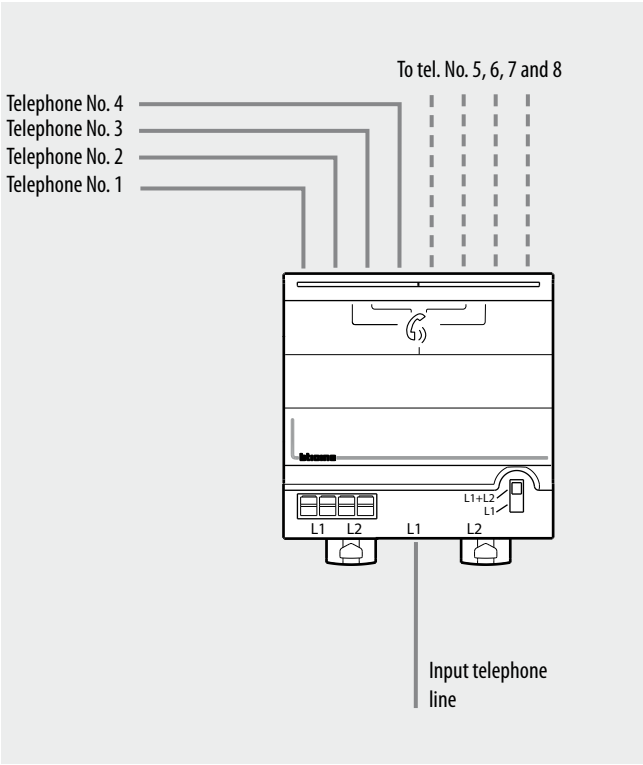
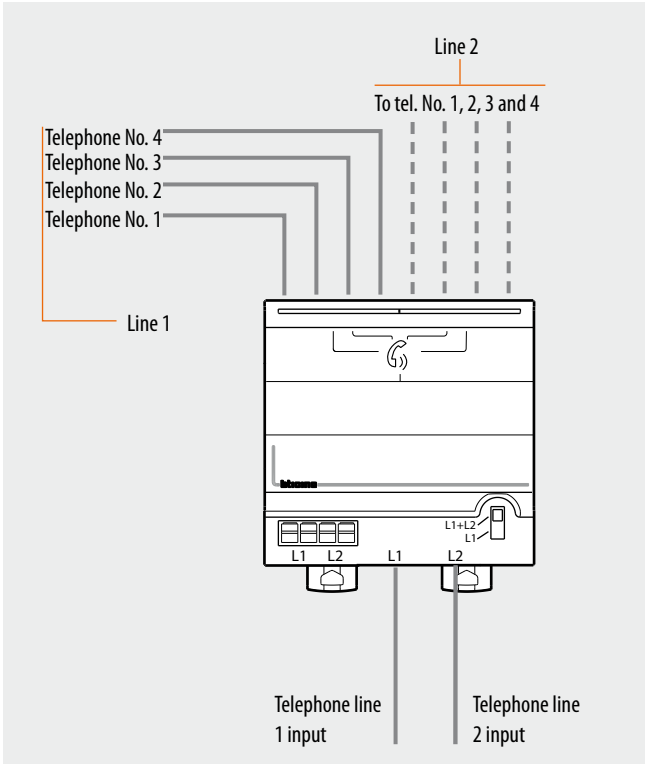
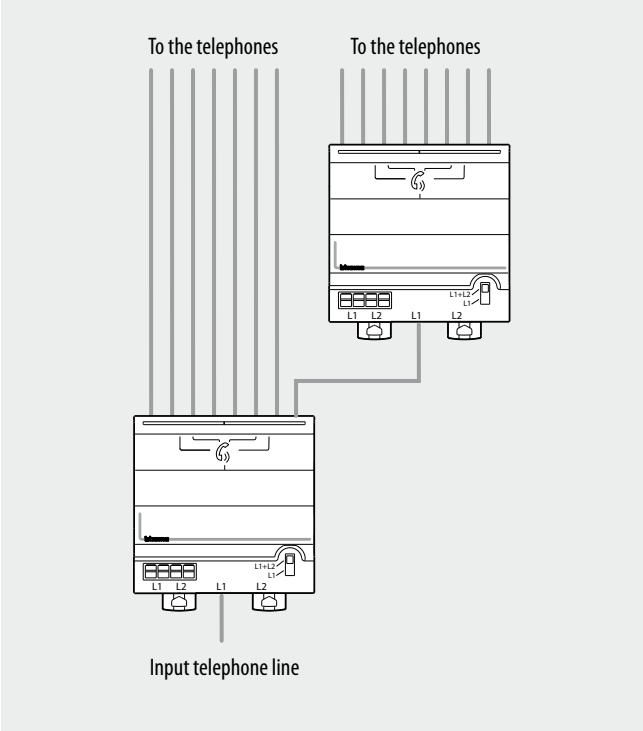


Diagram for the shunting of two telephone lines



"In series" connection of the distribution frames to increase the number of available telephone lines



BT00325-a-UK



## xDSL filter with telephone distribution frame

F558

### Description

This device, with one input port and four output ports, RJ45 type, performs a double action:

- it makes the ADSL signal intended for a modem available to an output port;
- it makes the telephone signal intended for the other three telephone lines available to the other three output ports.

In alternative to the RJ45 connector, the input telephone line can also be connected using a traditional screw clamp.

The filter is compatible with ADSL, ADSL2+, VDSL and VDSL2 standards.

If more than three telephone lines are required, it will be possible to use the device in conjunction with the F555 telephone distribution frame using patch cords L4665L20 and L4665L40.

### Related items

Telephone distribution frame F555  
L4665L20 and L4665L40 patch cord

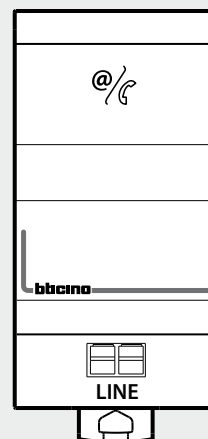
### Technical data

Audio frequency range:	0.3 - 3.4 kHz
Bandwidth splitter	from continuous current up to 16 kHz
DSL frequency range:	32 kHz - 30 MHz
Input signal rated voltage:	21 mV pp - 5.4 Vpp
Telephone call voltage:	40 - 150 Vrms
Line impedance:	250 - 750 Ohm
DSL loss (db):	
Frequency	Type
32 kHz - 138 kHz	> 45
138 kHz - 30 MHz	> 55
Operating temperature:	5 - 40 °C

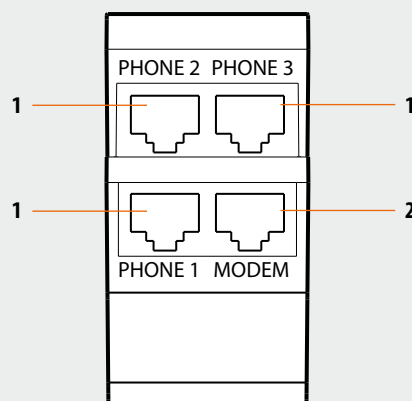
### Dimensional data

2 DIN modules

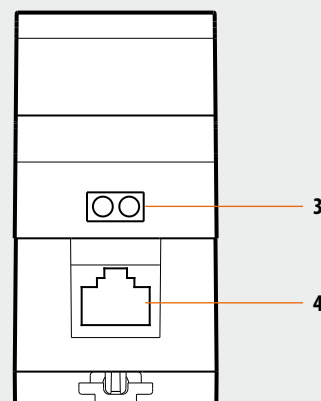
Front view



Top view

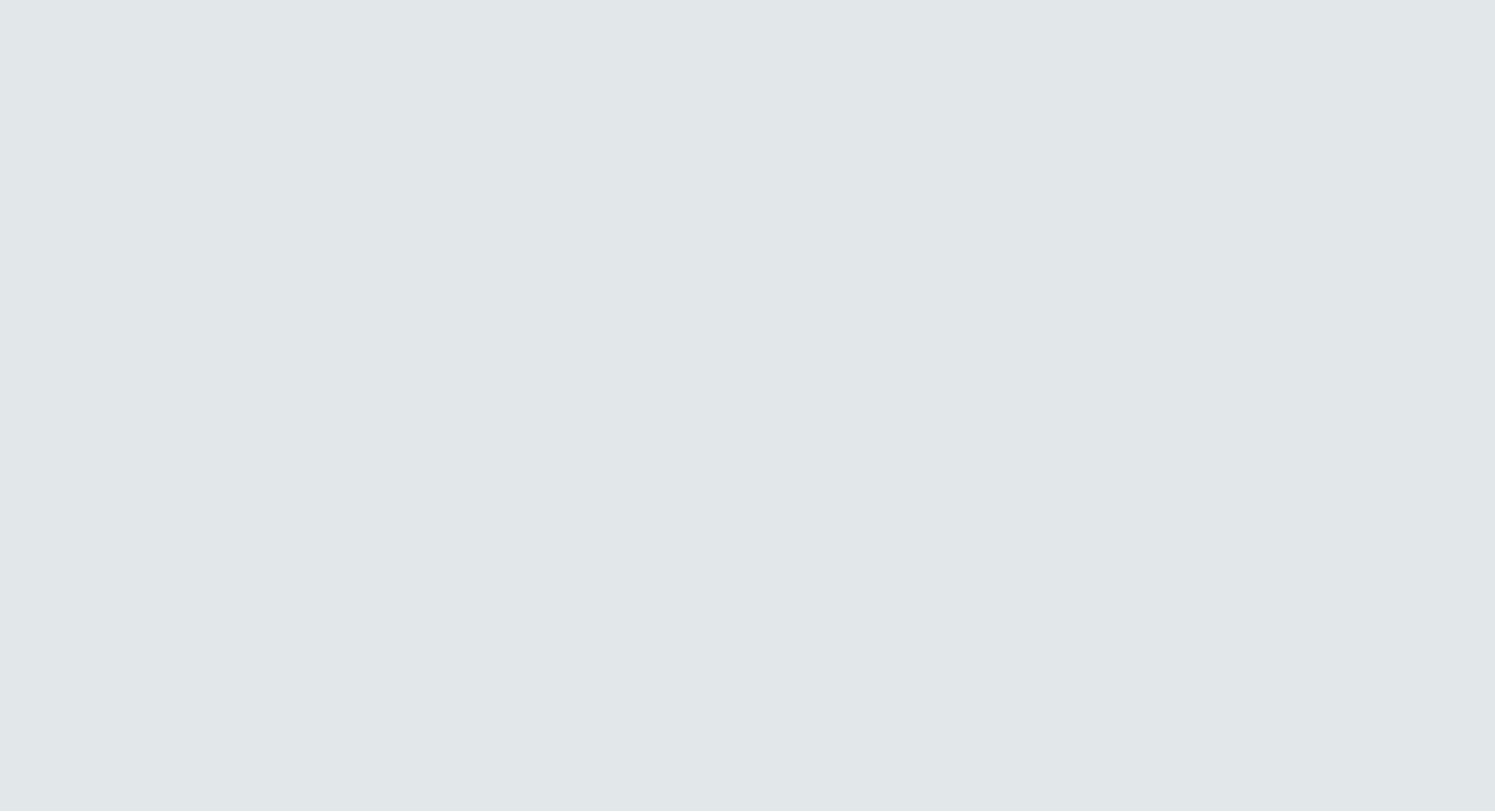


Bottom view



### Legend

1. RJ45 port, output telephone line
2. RJ45 port, output ADSL line to the modem
3. Screw clamp for input telephone line
4. RJ45 port for input telephone line



1108	MY HOME	Technical sheets - Control and integration	
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## CONTENTS

Technical sheets – Control and integration



# Audio/Video Web Server

F454

## Description

Audio/Video Web Server for local and remote control of MY HOME applications using dedicated web pages.

The Web Server can also be used as a gateway for the management of the system using devices like PCs and Smartphones, and for virtual configuration, using a dedicated software.

## Technical data

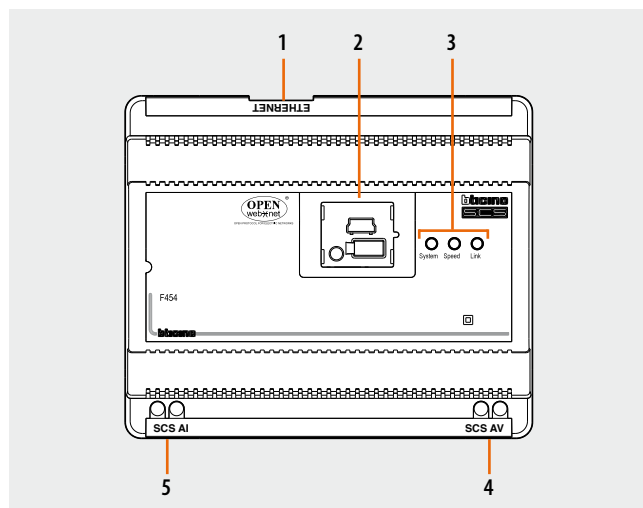
Power supply from SCS BUS: 18 – 27 Vdc  
Absorption: 125 mA max (with active video interface)  
Operating temperature: 5 – 35 °C

## Dimensional data

6 DIN modules

## Configuration

The audio/video web server is configured using the TiF454 software thanks to a LAN connection (with cross-over cable if the connection between PC and F454 is direct, without using a HUB/SWITCH) or using a standard USB and mini USB cable.



## Legend

1. RJ 45 for 10/100Mbit Ethernet LAN
2. Under the door are:
  - USB ports for PC configuration and Firmware update
  - RESET pushbutton
  - Serial connector RS232
3. User interface:
  - Speed: Connection speed; ON = 100 Mbit; OFF = 10 Mbit
  - Link: ON it indicates the presence of the Ethernet network
  - System: when the power supply is connected, it comes on, goes off, and then comes on again, to indicate that the web server is working
4. 2-wire BUS for video door entry system connection
5. 2-wire BUS for burglar alarm system



# Telephone actuator

F461/2

## Description

The telephone actuator enables remote control of two users (e.g. boilers, garden watering, staircase light, garden light, rolling shutters, etc.) using the fixed, or the mobile telephone line.

Remote control and programming are protected by a password consisting in a 4 digit code that can be customised by the customer; the default code is 1234. During the programming procedure, it is possible to select three operating modes:

### - LIGHTING

It can be used to enable/disable users such as staircase lights, garden lights, boilers, etc.

### - AUTOMATISMS

It can be used to activate the rolling shutter motors (up/down movement), as well as other motors.

### - TEMPERATURE CONTROL

To enable or disable the boilers; used together with the BTicino timer thermostat.

The activation, deactivation, check and programming controls must be sent from the actuator using only a DTMF telephone; if other types of telephones are used, the actuator does not work. In order to control more than two users, it is possible to install on the same telephone line up to four actuators, in parallel on the line.

The operation of the actuators is guaranteed even if an answering machine is installed on the telephone line.

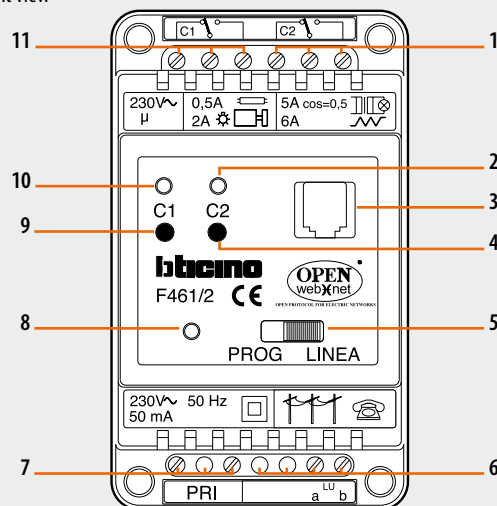
## Technical data

Network Power supply:	230 Vac $\pm$ 10 % 50Hz
Dissipated power:	11 VA
Absorption:	50 mA
Operating temperature:	0 – 35 °C
Telephone network:	analogue (PSTN)
Weight:	270 grams
Connection to the telephone network:	two-wire with telephone pair
Connection to the PABX	two-wire with telephone pair
Dialling system:	only with touch tone dialling (DTMF)
Relay number:	2 with independent control and changeover contacts
Relay output contacts:	230 Vac 6A resistive, 2A inductive both between N-NC and N-NO

## Dimensional data

3 DIN modules.

Front view

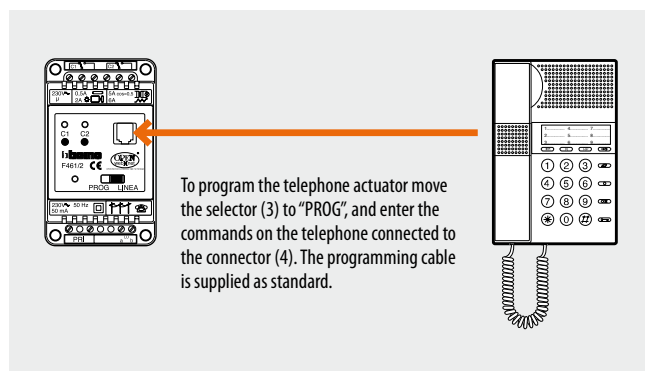


## Legend

1. Screw clamps (C2): uscita contatti in scambio del relè 2
2. Yellow LED: relay (C2) status. ON = relay active
3. RJ8 female connector: to connect the actuator to the telephone using the cable supplied, and activate the programming procedure
4. Pushbutton (C2) for local activation of relay 2
5. PROG/LINE selector:
  - in PROG position: operation in programming mode
  - in LINE position: normal operation
6. Screw clamps (LU): telephone line input
7. Screw clamps (PRI): power supply 230 Vac
8. Green LED : operating mode:
  - OFF = actuator faulty or incorrectly powered
  - On steady = powered and normal operation
  - ON flashing = powered and in programming mode operation
9. Pushbutton (C1) for local activation of relay 1
10. Yellow LED: relay (C1) status. ON = relay active
11. Screw clamps (C1): output of changeover contacts of relay 1

### Configuration

The programming procedure is performed using a standard touch tone telephone, connected to the RJ8 socket of the actuator, using the appropriate cable, supplied as standard.



The actuator can be programmed to operate in three different modes:

- lighting: to enable or disable lights, boilers, etc.;
- automation: to activate the rolling shutter motors (closing – opening), or other motors;
- temperature control: to activate or deactivate the heating or the air conditioning system to be used with the BTicino timer thermostat item HC/HS/HD/L/N/NT4451 and item AM5721.

Also, in the three operating modes the two relays can themselves be programmed to operate with the monostable function (once timed, the relay closes for the programmed time; ideal, for example, when timed switching on of the staircase lights is required), or bistable (ON – OFF, at every command the relay changes its status and keeps it until a new command is received, behaving as a switch).

The actuator can also be connected to an internal telephone extension (shunted), when a PABX BTicino telephone switchboard is present (to expand the number of relays that can be selected remotely); it is also possible to connect in parallel to each other on the same telephone line up to 4 actuators, even if an answering machine is also installed.

At the end of each programming operation the actuator sends to the telephone receiver a confirmation (programming correct) or an error (programming failed) tone.

### LIGHTING MODE

In this mode the two relays can be enabled independently, and can also be programmed with different functions.

A user can be activated with "impulsive" monostable operation using relay 1 (Example 1: timed switching on of the staircase light), and with "ON/OFF" bistable operation using relay 2 (Example: boiler activation/deactivation).

### TEMPERATURE CONTROL MODE

This mode enables to combine the telephone actuator to the operation of the BTicino timer thermostat, item HC/HS/HD/L/N/NT4451 and item AM5721.

Using this mode, it is possible to remotely change the operation of the timer thermostat. If the timer thermostat is in any AUTO, MAN, ANTIFREEZE, PARTY, HOLIDAY, or OFF condition, by activating the following controls on the actuator:

- ANTIFREEZE, the timer thermostat will switch to the antifreeze condition, until an unlocking command is received;
- AUTO, the timer thermostat will switch to the automatic condition.

### AUTOMATISM MODE

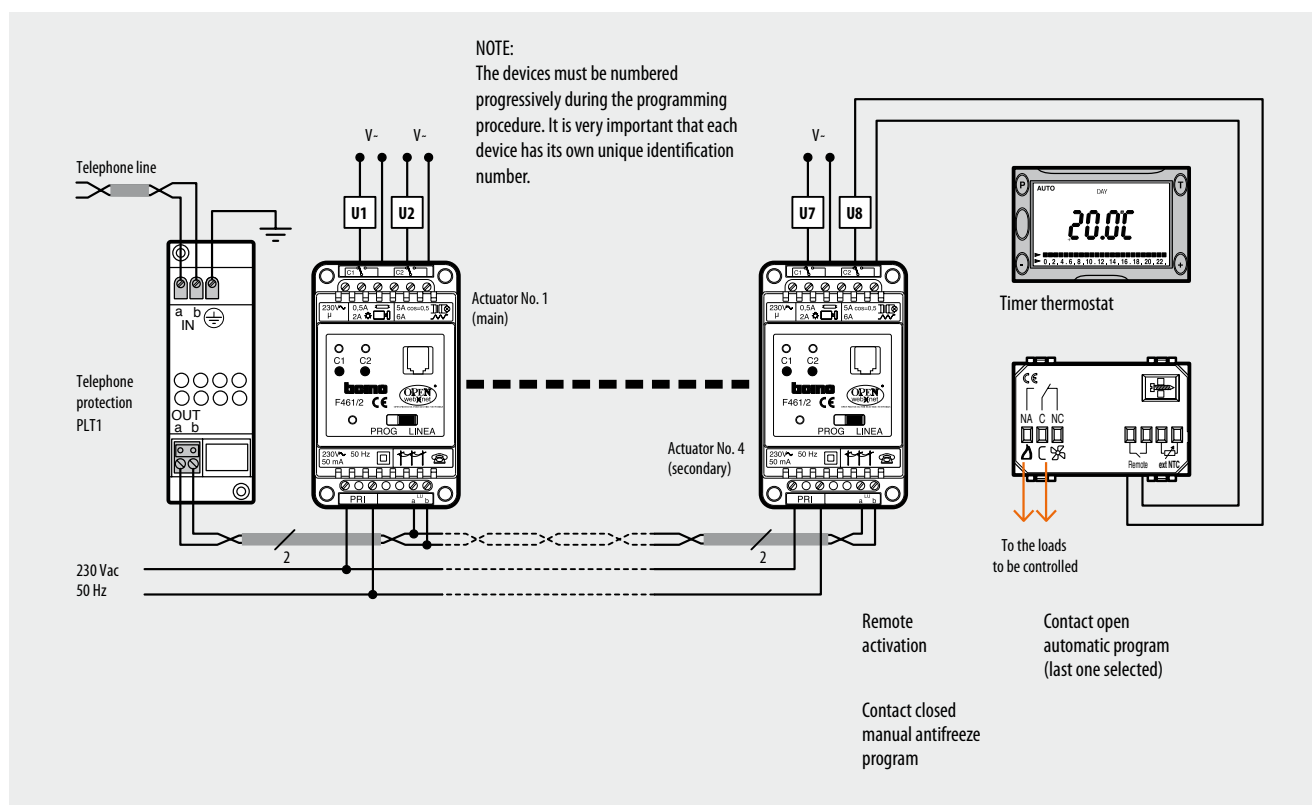
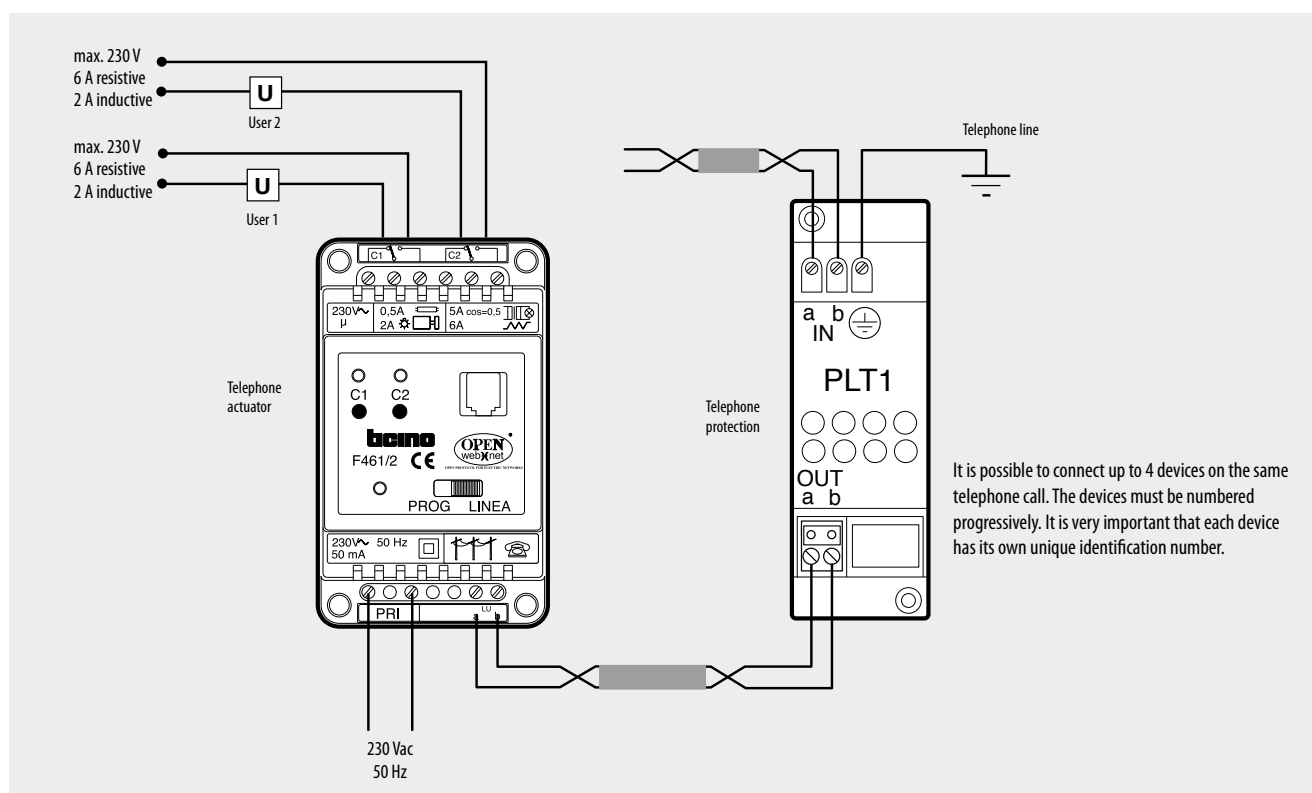
In this mode, the two relays are both controlled using the same command and cannot be activated independently from each other.

Therefore, when relay 1 is programmed, the actuator will automatically also manage relay 2.

The AUTOMATISM mode is recommended for controlling users interlocked with each other, such as the operation of a rolling shutter (up/down), motors (forward/backwards), etc.

For more details see the instruction leaflet supplied with the device.

# Wiring diagrams





## GSM telephone actuator

F462

### Description

The F462 GSM actuator is a GSM terminal suitable for the remote management of all the heating systems, particularly if there is no fixed telephone line.

It is also possible to control two remote inputs and one remote output.

The communication is between a mobile phone and the GSM modem of the device, using an SMS message.

The F462 GSM actuator connected to a timer thermostat, item L/N/NT4450 enables, using appropriate SMS messages, to read the status of the timer thermostat (measured room temperature, program set, etc.), to change the set program, and change certain temperature control parameters; In alternative, it can be used with the timer thermostat, item HC/HD/HS/L/N/NT4451, with the ON-OFF function only.

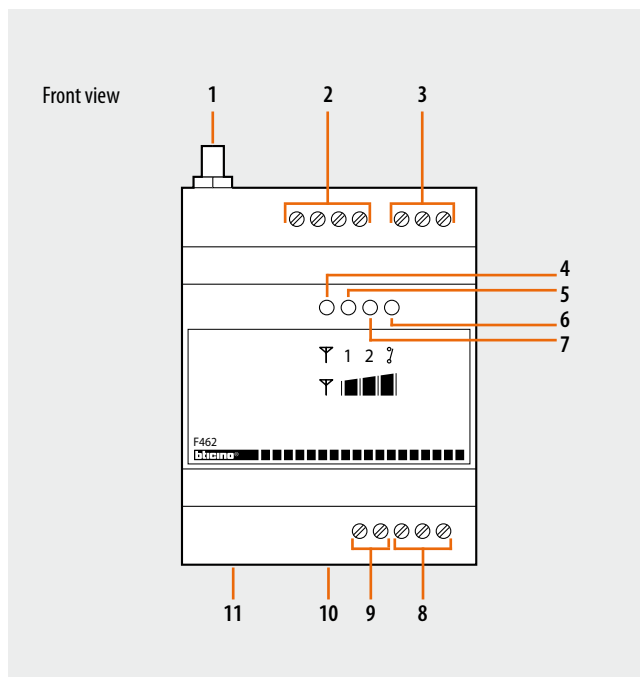
The device is capable of sending an SMS message to the telephone numbers saved inside the device itself, when an alarm situation caused by the closing/opening of the contacts occurs.

### Technical data

Power supply:	10 – 20 Vac/Vdc
Absorption:	Idle 30mA 500mA MAX
Contact output:	4(2)A-250Vac
Contacts free from voltage	
Quad band:	E GSM850/900/1800/1900 MHz
Output power:	Class 4 (2W) for 850/900 MHz Class 1 (1W) for 1800/1900 MHz
Sensitivity:	107dBm@ 850/900MHz 106dBm@ 1800/1900MHz
Protection index:	IP40 (when correctly installed)

### Dimensional data

4 DIN modules



### Legend

1. Outdoor antenna connector
2. Alarm input connections
3. Relay or HC/HS/L/N/NT4451 timer thermostat output connections
4. Network status LED: OFF = Not powered  
FLASHING QUICKLY = Searching for network  
FLASHING SLOWLY = Standby
5. Input 1 (alarm 1) status LED, and field intensity notification
6. Relay status LED, and field intensity notification
7. Input 2 (alarm 2) status LED, and field intensity notification
8. L/N/NT4450 timer thermostat connections
9. Power supply input
10. Battery connector
11. SIM card housing (remove the bottom cover)



F462

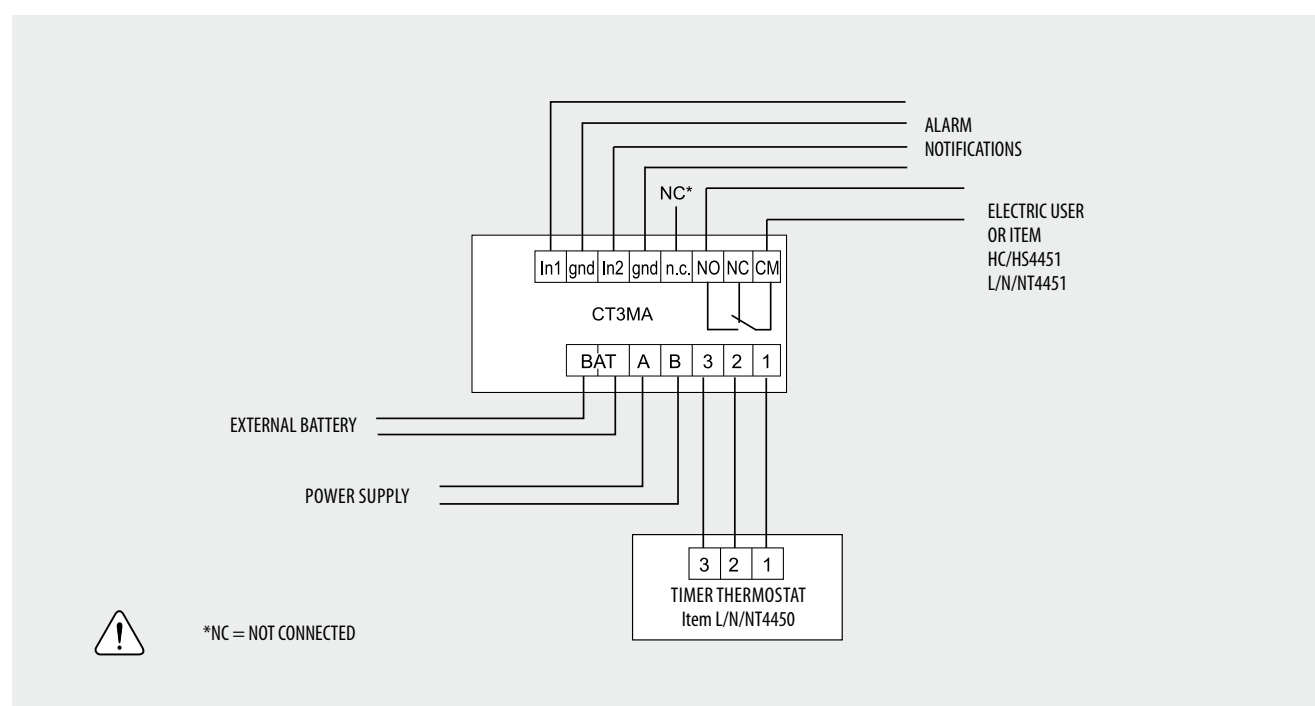
## Configuration

The device configuration operations consist in defining the coded SMS messages following several criteria depending on the control to actuate remotely, or remote status information for the managed devices. As a coding example here is the message for the control of the timer thermostat (item L/N/ NT4450).

- #STATUS to know the status of the timer thermostat, the alarms and the relays
- #FROST to set the antifreeze program
- #ECONOMY to set the MANUAL program with temperature T1
- #COMFORT to set the MANUAL program with temperature T3
- #AUTO to set the AUTOMATIC program
- #RESUME to return to the program set on the timer thermostat.

For the full list of codes see the instruction manual supplied with the device

## Wiring diagrams





# Multimedia Touch Screen

HC/HS 4690

## Description

Multimedia Touch Screen is a device that enables controlling all the functions of the MY HOME system by means of simple and intuitive icons displayed on the 10" 16:9 LCD Touch Screen.

In addition to the management of the automation functions, lights, temperature control, sound system, burglar alarm, and scenarios, by using the device it is also possible to answer to video door entry system calls, and display the images transmitted by the entrance panel, or the connected cameras. Thanks to the USB device and SD card inputs, Multimedia Touch Screen can manage multimedia files, allowing the users to listen to their favourite music or to view films and images.

When integrated with a domestic LAN network with internet connection, the device enables (following the activation of specific icons) receiving RSS services such as "news" and weather information, displaying images transmitted through webcams, and listening to internet radio channels.

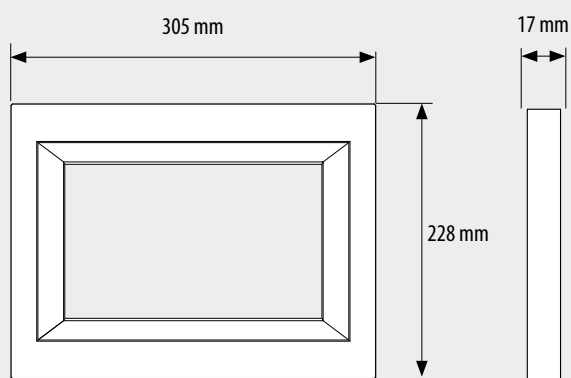
## Related items

Surround plate: HA4690XC, HA4690VBB, HA4690LTK, HA4690VNB, HA4690VSW  
Power supply: 346020

## Technical data

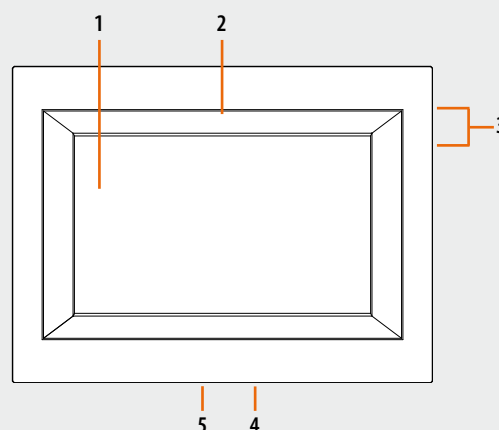
Power supply from SCS BUS: 18 – 27 Vdc  
Local power supply (1 – 2): 18 – 27 Vdc  
Max. local absorption (1 – 2): 600 mA  
Absorption from SCS BUS: 50 mA  
Operating temperature: 5 – 45 °C

## Dimensional data

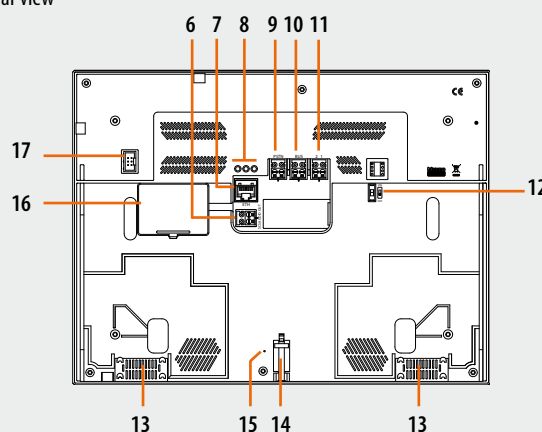


BT00318-a-UK

Front view



Rear view



## Legend

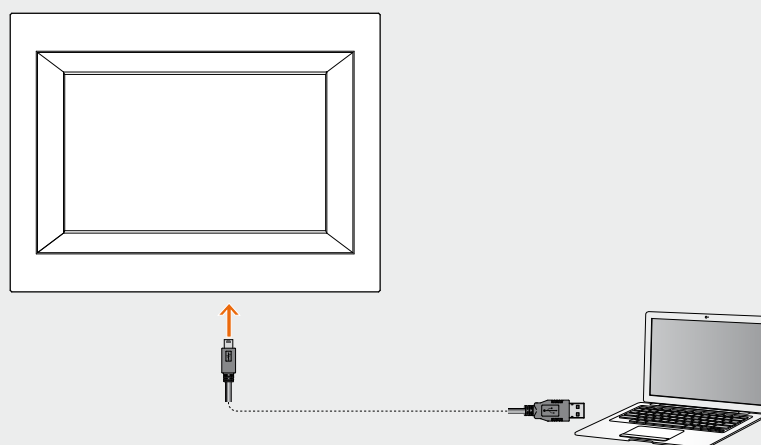
1. 10" Touch Screen colour LED display
2. Microphone
3. USB connection
4. Mini USB PC connection
5. SD card connector
6. Sound system source output connector
7. RJ45 connector for Ethernet connection
8. LAN connection signalling LED
9. PSTN telephone line connector (future application)
10. 2 wire video BUS/SCS connector
11. 1-2 power supply connector
12. End of line ON/OFF micro switch
13. Loudspeaker
14. Bracket fixing screw
15. Factory configuration reset pushbutton
16. NiMH 7.2 V battery compartment; 160 mAh
17. RS232 PC connector

## Configuration

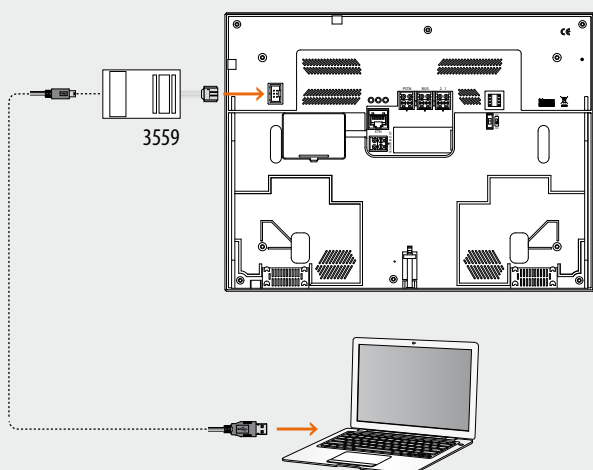
Multimedia Touch Screen must be configured using the TiMultimediaTouchScreen software supplied as standard. In order to receive/transfer the configuration performed, or to update the firmware, connect Multimedia Touch Screen to the PC using one of the three solutions:

- USB-miniUSB cable;
- serial connector (3559);
- Ethernet cable.

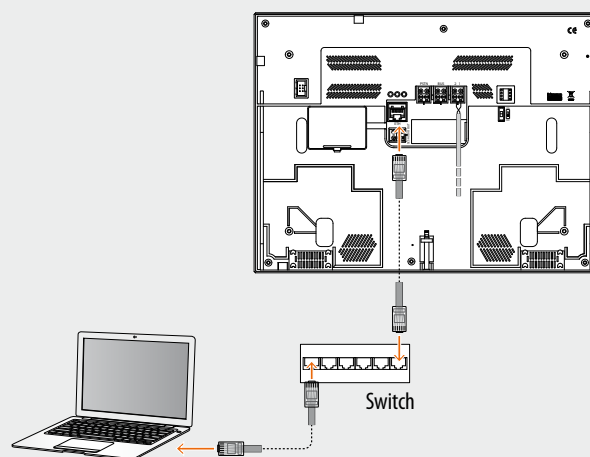
### USB connection



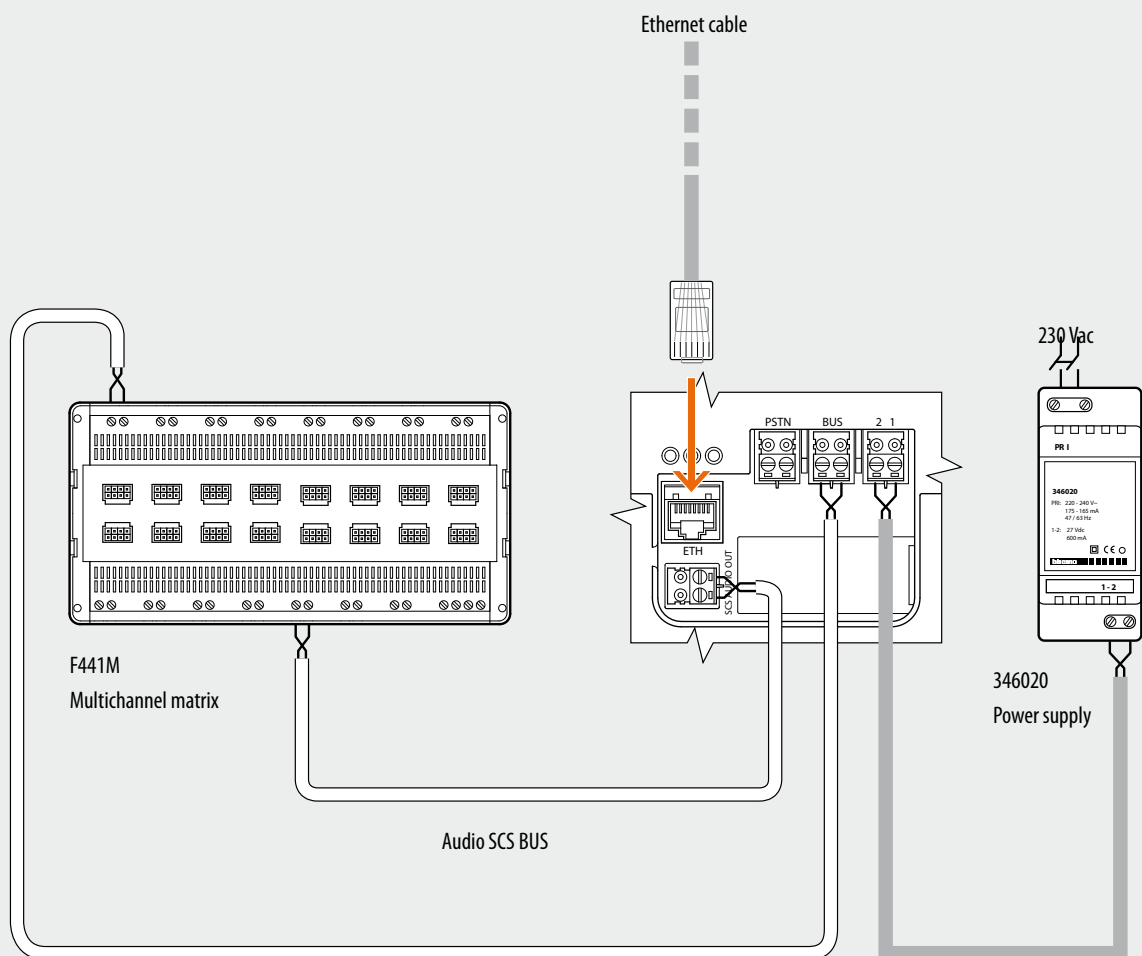
### Serial connection



### Ethernet connection

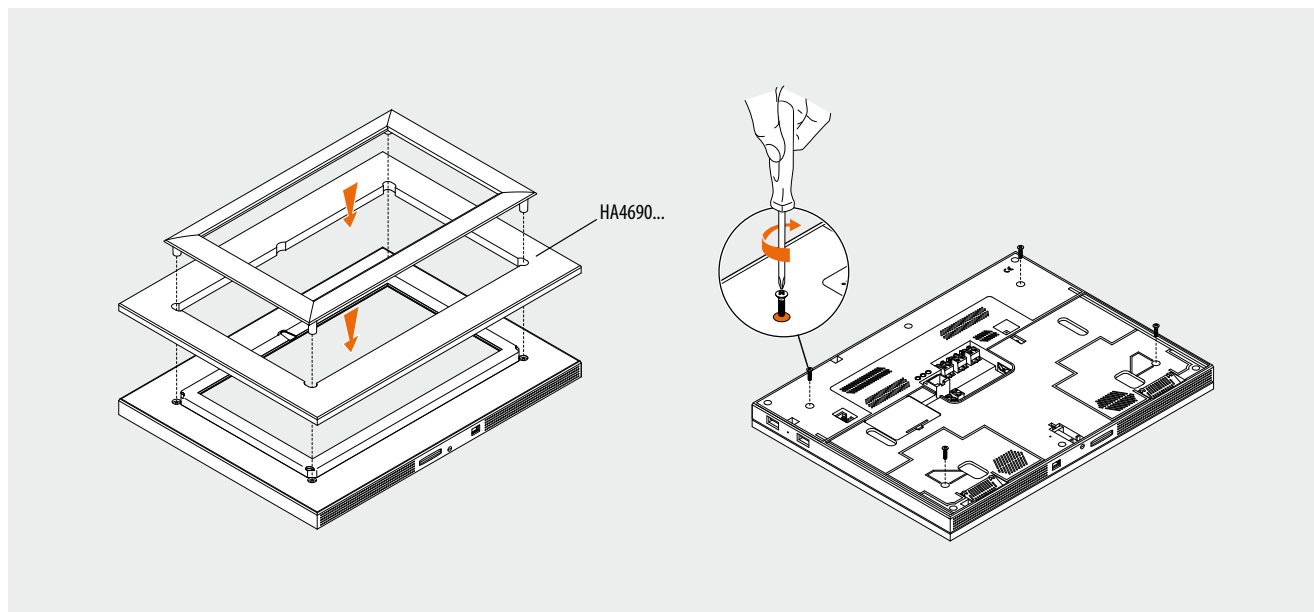


# Wiring diagram



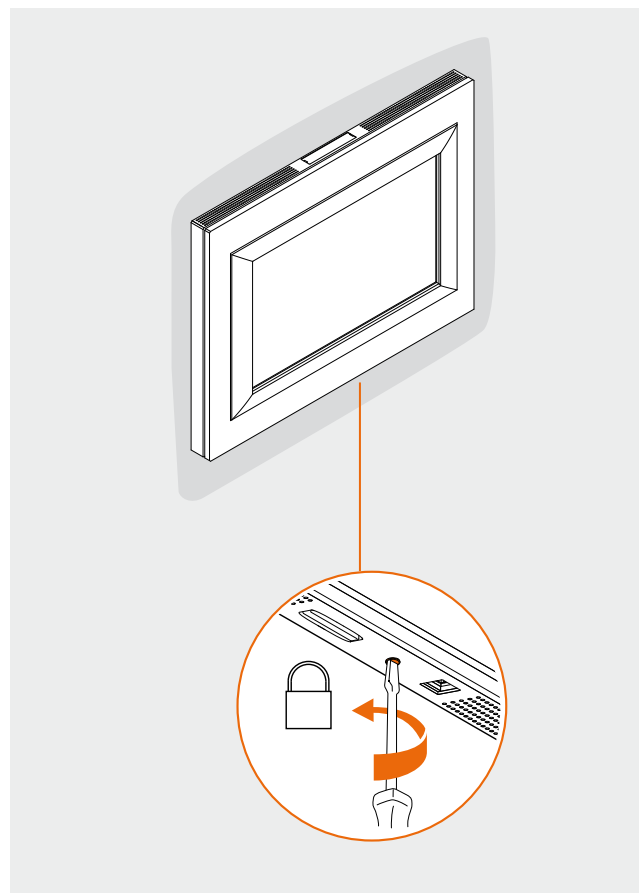
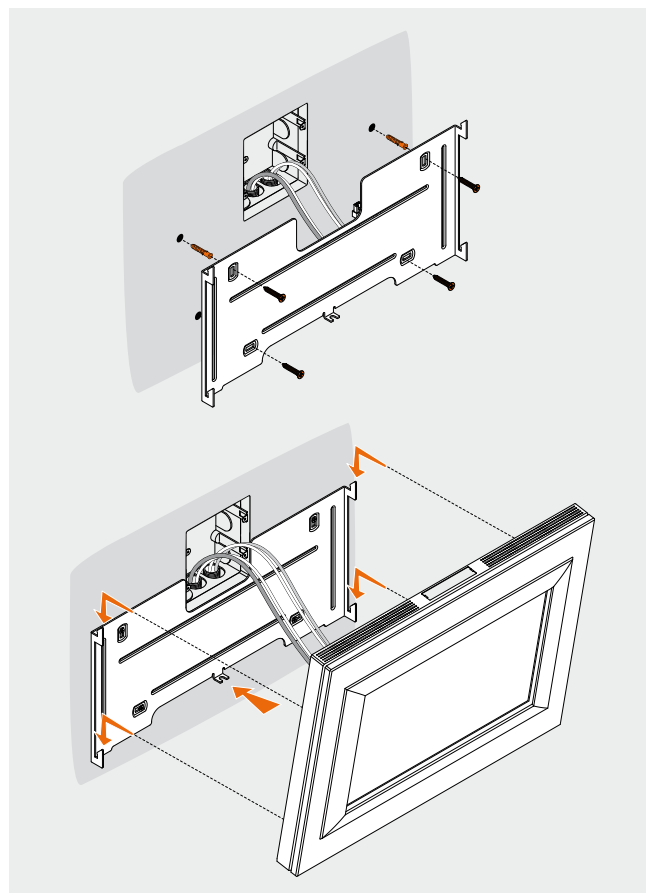
## Installation

Before fixing the device to the wall apply the surround plate item HA4690...



Connect Multimedia Touch Screen to the system and fix it to the wall using the bracket supplied with the product.

To complete the installation rotate the fixing screws at the back of Multimedia Touch Screen clockwise.





# Touch Screen

H4890 - HW4890 - LN4890 - LN4890A - AM5890

## Description

Touch Screen is a device that enables controlling the MY HOME and Lighting Management functions, by means of simple and intuitive icons displayed on a 3.5" touch screen LCD display.

The device can be used to manage the automation, lights, temperature control, sound system, burglar-alarm, energy management, and scenario functions.

For each application, it is possible to manage up to 20 actuations (for example 20 actuators, 20 amplifiers, etc.).

## Technical data

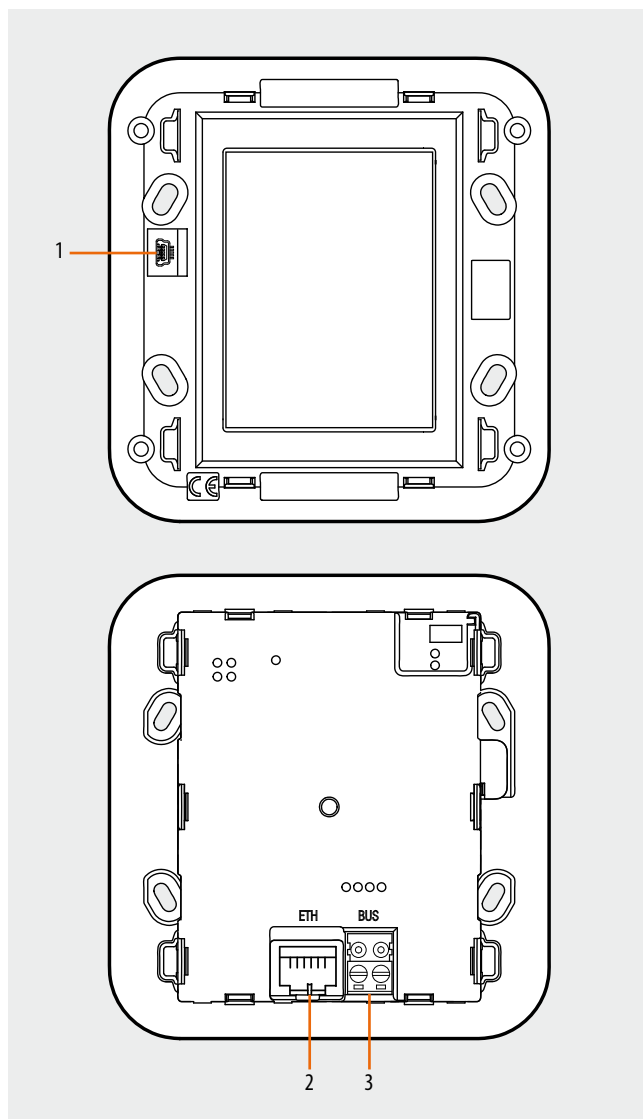
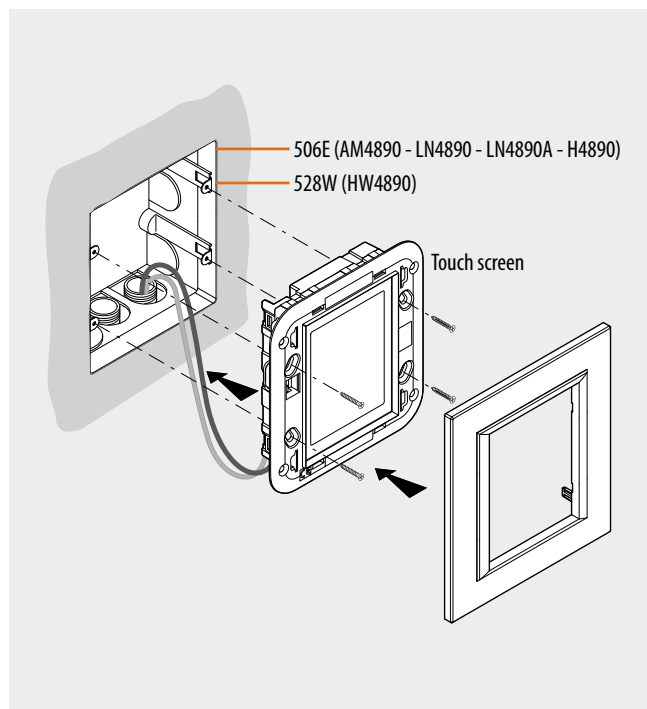
Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS: 18 – 27 Vdc	18 – 27 Vdc
Absorption:	80 mA
Operating temperature:	0 – 40 °C

## Dimensional data

Size: 3+3 flush mounted module

## Installation

Touch Screen can be installed very easily on the wall using a box, item 506E, and integrates perfectly with any domestic room thanks to its compatibility with all cover plates of the Axolute, Living and Màtix civil series.



## Legend

1. USB connector for programming and firmware update
2. RJ45 Ethernet connector
3. Clamp for SCS BUS connection

## H4890 - HW4890 - LN4890 - LN4890A - AM5890

### Configuration

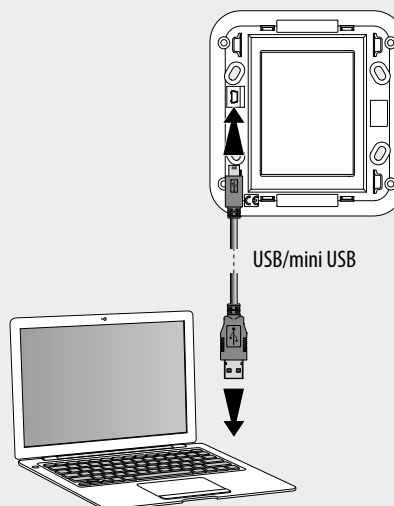
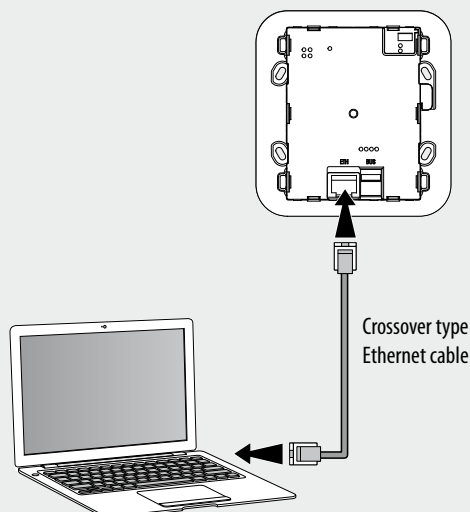
Touch Screen is programmed by connecting it to a PC using the interface cable, item 335919 (RS232 version), 3559 (USB version), or an Ethernet cable, and the TiTouchScreen software.

The software creates a link between the preconfigured icons, which will be shown on the Display, and the functions that must be managed and performed by the devices of the Automation and lighting, Sound, burglar-alarm, temperature control, energy management and scenario systems.

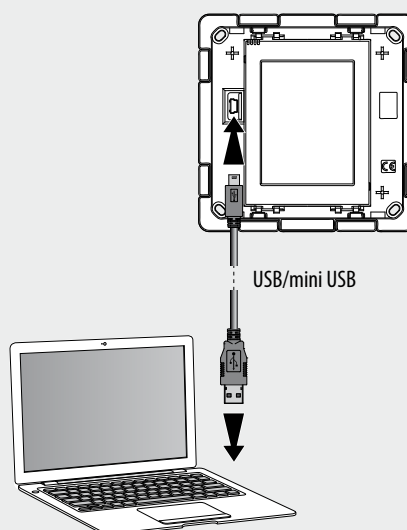
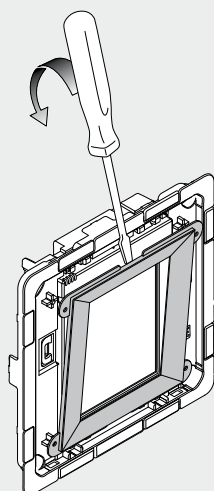
Based on the requirements of the customer, it is possible to create a new configuration, or manage an existing one. The program also gives the possibility of configuring extra Touch Screen functions, such as scenarios with logic or time conditions, the display of the time and the date, and the setup of a protection password.

It is also possible to define the graphic style of the icons to complement the look of the device. For further information refer to the software documentation.

#### Connection to the Personal Computer for AM4890 - LN4890 - LN4890A - H4890



#### Connection to the Personal Computer for HW4890





# Scenario programmer

MH200N

## Description

This device can be used to manage up to 300 simple and advanced scenarios. Thanks to the scenario programmer, the MY HOME system can perform certain actions, not only following a command from the user, but also when external events occur, such as the opening of a door, or a signal generated by light or temperature sensors. The execution of an advanced scenario based on a set time and date, or the arming/disarming of the burglar alarm system, may initiate, for example, the simulation of a presence inside the home, by automatically activating the rolling shutters or the lights at certain preset times, when no one is in fact at home.

The scenarios are programmed on the device using the TiMH200N software that can be found in the CD supplied. The installation of the scenario programmer, item MH200N only requires the connection to the power supply and to the MY HOME automation BUS. Thanks to the possibility of connection to the Ethernet network, the device is also suitable for advanced applications, like:

- Use as SCS/LAN Gateway device for:
  - Managing or configuring the MY HOME system with the MHVisual program and Virtual Configurator respectively, installed on PCs connected to the network;
  - Displaying the status of a scenario through web pages (enabled/disabled);
  - Managing new functions relating to the 4 zone temperature control system and current sound system and automation devices (new F503 amplifier, 100 level dimmer, lighting sensor);
- Managing the burglar alarm system (arming and disarming) based on events.

## Related items

Power supply 27 Vdc 346020

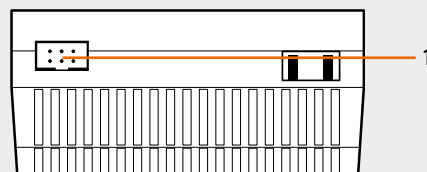
## Technical data

Power supply: 27 Vdc  
 Power supply from SCS BUS: 18-27 Vdc  
 Max. absorption: 200 mA  
 Operating temperature: 5 – 40 °C

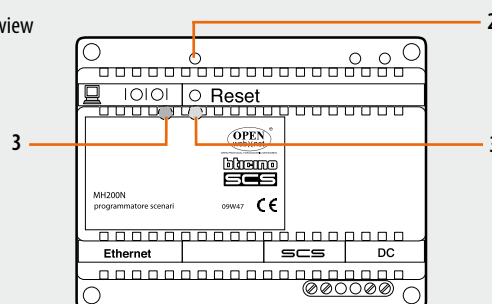
## Dimensional data

6 DIN modules

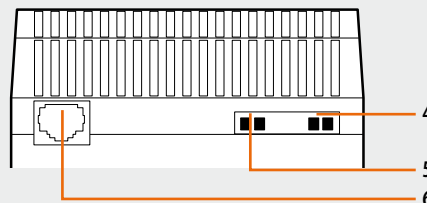
Bottom view



Front view



Top view



## Legend

1. Connection to the PC serial port
2. Reset key
3. Status LED
4. Power supply (Item 346020)
5. BUS
6. Ethernet network RJ45 connector

## Configuration

For the configuration of the device the TiMH200N program must be used, for creating scenarios (actuation of light points, rolling shutters, etc.) of different degrees of complexity, based on time events or events detected on the system (alarms, pushbuttons pressed, etc.). If the scenario is activated by a control device (configured with M=CEN), it will be possible to associate the corresponding key to the scenario itself.

The scenarios are grouped in a collection directly saved in the project.

The collection enables saving several scenarios, with only the required ones being activated.

The project created must then be transferred (downloaded) to the scenario programmer. This is done by connecting the device to the PC using a crossover type Ethernet cable (see figure). In alternative, it is also possible to update MH200N remotely. To do this, both the IP address and the OPEN password must be known (see manual found inside the CD supplied with the device).

In the same way, it is possible to upload the files from the device to check the saved configuration. The TiMH200 program also enables updating the unit permanent base MH200 software, by downloading any new versions published on the Bticino website (Update Firmware).

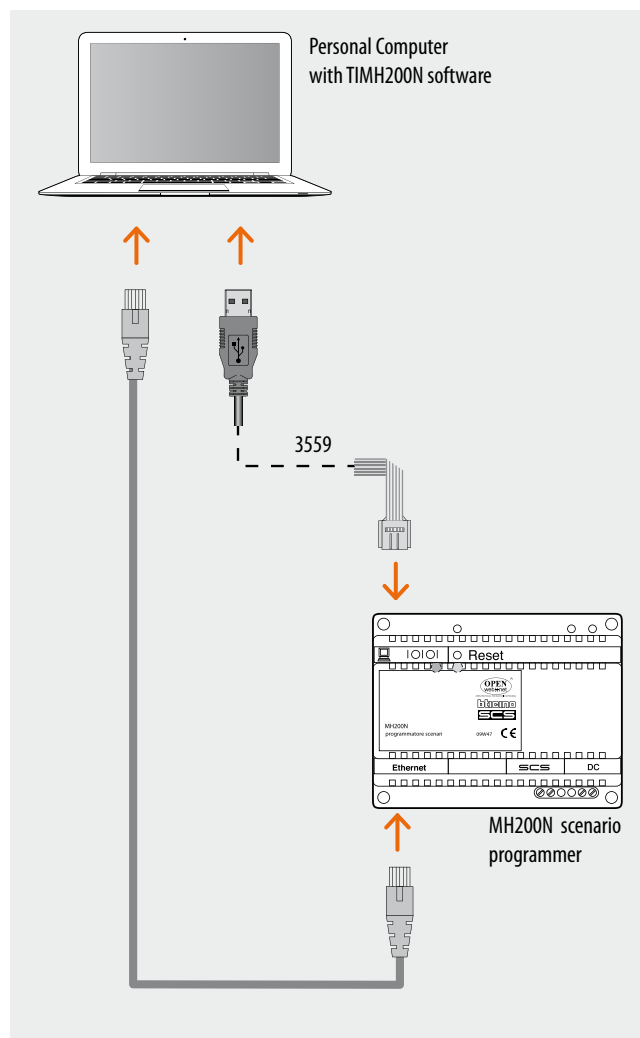
## CEN operating mode

This special mode is used for managing MH200N scenario programmers, by manually activating the control device or the MY HOME automation range set by connecting the CEN configurator in M.

The association between the key (upper or lower) of the control device and the scenario to be activated, is obtained using the MiMH200N software. For example, it is possible to activate two independent scenarios using the special H/L4651M2, AM5831M2 control, using the T1 (upper) and T2 (lower) pushbuttons. For the correspondence between the control keys and the scenarios to activate see the table below.

In addition to the listed devices, the CEN operating mode may be managed using the Touch Screen, item H/L4864 and item AM5864, the Multimedia Touch Screen, item HC/HS4690, the Multimedia Interface, item 3465, the Web Server, item F453AV, and a Personal Computer with the MHVisual supervision software installed.

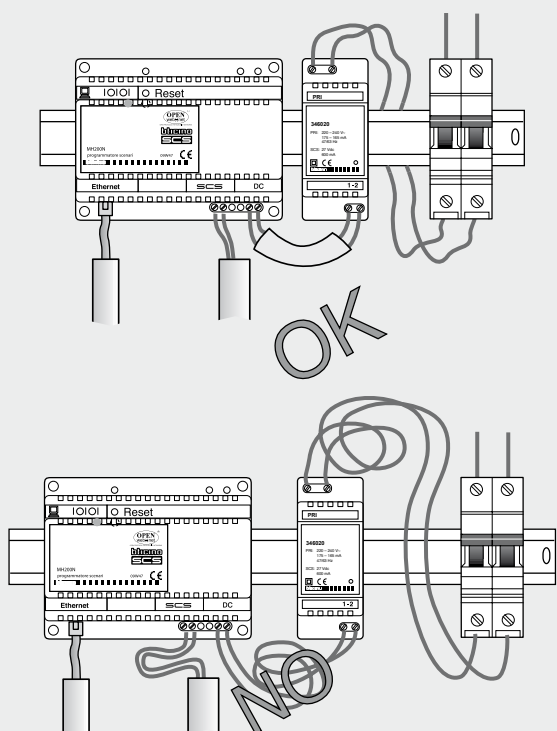
**NOTE:** The control devices configured with M=CEN mode can be connected to any point of the system; The address specified in the A and PL positions must be different from the addresses assigned to the actuators.



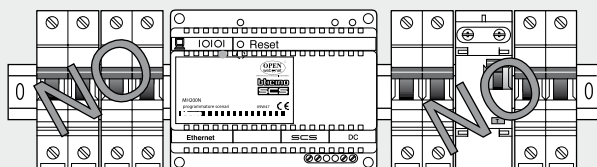
Type of control	Configuration	Identification of scenario activation keys
H/L4651M2 and AMS831M2 special control	A=0-9; PL=0-9; M=CEN; LIV1/AUX=-; LIV2=-; SPE=-; I=-	
Basic control for 2 independent loads, H/L4652 and AM5832/2	A=0-9; PL1=0-9; M1=CEN; A2=-; PL2=-; M2=-	
	A=0-9; PL1=0-9; M1=CEN; A2=-; PL2=-; M2=CEN	
Basic control for 3 independent loads, H/L4652 and AM5832/2	A=0-9; PL=0-9; M=CEN; LIV1/AUX=-; LIV2=-; SPE=-; I=-	

## Assembly, installation

Install the wiring in an ordered way.



Do not place devices that may generate electromagnetic interferences near the Scenario Programmer.



## Configuration

Note: connect the E46ADCN power supply of the automation system and the 346020 power supply of the Scenario Programmer to a standard double-pole switch.

