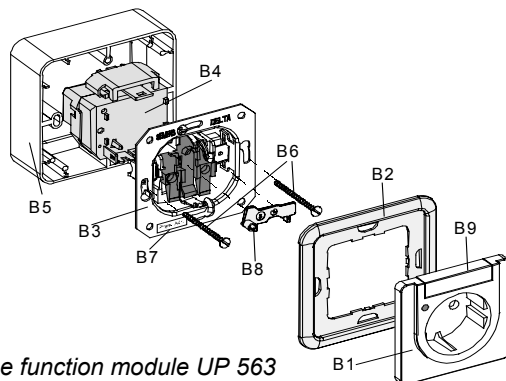


Function module UP 563
5WG1 563-2AB_1


Function module UP 563	DELTA profil
	pearl grey 5WG1 563-2AB01
	titanium white 5WG1 563-2AB11
	anthracite 5WG1 563-2AB21
	profil silver 5WG1 563-2AB71



- B1 Cup*
 - B2 Frame*
 - B3 Socket insert*
 - B4 Function module
 - B5 Spacing frame
 - B6 Fixing screws
 - B7 Label for physical address
 - B8 Operational display*
 - B9 Caption panel
- *= not included in the scope of supply

Installation of the function module UP 563 and the switchable socket with operational display

Product and Applications Description

A switchable socket is produced by clipping the function module UP 563 onto the device insert of a Siemens SCHUKO socket with a green terminal cover. The selected SCHUKO socket can then be mounted as usual using the spacing frame provided.

So that the switching status of the UP 563 can be detected at the socket, an operational display (e.g. MLFB 5UB1472 for titanium white) should be used. The function module has a 10 A switch contact available with an integrated bus coupler for *instabus EIB*. The supplied spacing frame enables the installation of the switchable SCHUKO socket in combined wall and joint boxes with a depth of 60 mm. The spacing frame

can be omitted when 24 mm ring fittings for adjustment to the plaster surface are used. The selected SCHUKO socket and the appropriate frame must be ordered separately.

The power supply for the UP 563 is carried out via the bus. Connection to the bus is carried out via the plug-in bus terminal.

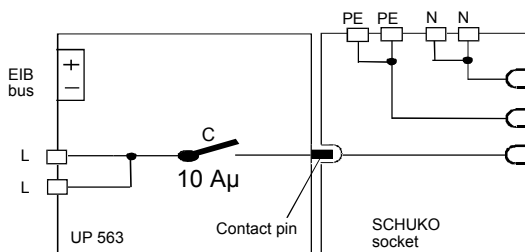
A plug-in screwless terminal is provided on the function module for the connection of the L conductor. The second plug-in terminal is used to loop through the L conductor.

Application programs

20 A1 switched socket outlets 900F02

- Switch function
- Time switch (staircase lighting timer)
- Switching with delays
- Logic function and positive drive can be assigned
- Behaviour on bus voltage failure
- Operation mode of relay

Connection example



Installation instructions

- The device may be used for permanent indoor installations in dry rooms and for insertion in flush-type boxes.

WARNING

- The device may only be installed and commissioned by an authorised electrician.
- When connecting the device, it should be ensured that the device can be isolated.
- The device may be used in switch-sockets, provided that VDE approved devices are used.
- The prevailing safety and accident regulations must be observed.
- The function module UP 563 must be clipped onto the socket prior to connecting the socket.
- The device may not be opened.
- 10 A circuit-breaking device is necessary in any case
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

Technical data

Power supply

Via the bus line

Outputs

- Number: 1 output (floating contact)
- Rated voltage AC 230 V, 47 ... 63 Hz
- Rated current: 10 A resistive load
- Switching current at AC 230 V:
 - 0.01 ... 10 A resistive load
- Switching current at DC 24 V:
 - 10 A resistive load
 - 4 A inductive load (L/R = 7 ms)
- Switching behaviour: adjustable, depending on the application program

Switching capacity at AC 230 V

- For incandescent lamp load: max. 1000 W
- For fluorescent lamp load (FL):
 - uncorrected FL, $\cos \varphi = 0.5$: max. 500 W
 - FL with parallel correction, $\cos \varphi = 1$ (at $C_{ges} \leq 14 \mu F$): 2 x 58 W or 3 x 36 W or 6 x 18 W
 - twin-lamp circuit, $\cos \varphi = 1$: max. 1000 W
 - OSRAM electronic ballast for 58 W FL: max. 10
 - OSRAM electronic ballast for 36 W FL: max. 15
 - OSRAM electronic ballast for 18 W FL: max. 20
- halogen lamp load (230V): 1000W
- halogen lamp load 12/24V
 - with mech. transformer: 500W
- halogen lamp load 12/24V
 - with elektr. transformer: 600W
- resistive load: 2300W
- engine load $\cos \varphi 0,9$: 2800VA
- engine load $\cos \varphi 0,5$: 2000VA

Operating elements

1 learning button:

For toggling between normal mode / addressing mode

Display elements

1 red LED:

For checking the bus voltage and for displaying normal mode /addressing mode

Connections

- Load circuit, mechanical: (plug-in screwless terminals)
The following conductors / cross sections are permitted:
 - 0.5 ... 2.5 mm² single core or finely-stranded, ultrasonically sealed, 8 mm long
 - Insulation strip length 9...10 mm

Function module UP 563**5WG1 563-2AB_1**

- 0.5 ... 2.5 mm² finely-stranded with plug connector, crimped and sealed
- 0.5 ... 1.5 mm² finely-stranded with connector sleeve
- 1.0 and 1.5 mm² finely-stranded, untreated
Insulation strip length 9...10 mm
- Load circuit, electrical:
 - Finely-stranded conductor, untreated, from 1 mm²: current carrying capacity of max. 6 A
 - Finely-stranded conductor with plug connector, crimped and sealed, from 1.5 mm²: current carrying capacity of max. 10 A
 - All other conductors from 1.5 mm²: current carrying capacity of max. 10 A
 - The load circuit should be fused with a 10 A circuit-breaking device (for miniature circuit-breakers - characteristic A or B)
- bus line:
 - screwless bus connection block
Ø 0,6 ... 0,8 mm single core
remove approx. 5mm of isolation

Mechanical data

- Housing: plastic
- Dimensions: 47 x 47 x 30 mm (W x H x D)
- Weight: approx. 65 g
- Fire load: ca. 871 kJ ± 10 %
- Installation: insertion in combined wall and joint boxes with Ø 60 mm, according to DIN 49073 T1, 60 mm deep

Electrical safety

- Degree of pollution (in accordance with IEC 60 664-1): 2
- Overvoltage category (in accordance with IEC 60 664-1): III
- Device complies with EN 50090-2 and EN 60669-2-1

Reliability

- 20.000 switching cycles for the relay contact

EMC requirements

- Complies with: EN 50081-1, EN 50082-2 and EN 50090-2-2

Environmental conditions

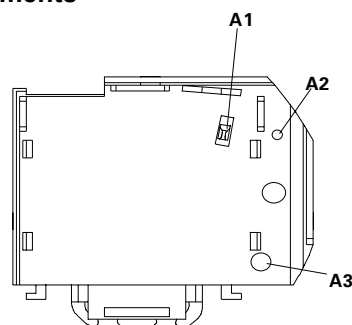
- Climatic withstand capability: EN 50090-2-2
- Ambient operating temperature: - 5 ... + 45 °C
- Storage temperature: - 25 ... + 70 °C
- Relative humidity (not condensing): 5 % to 93 %

Approval

EIB certified

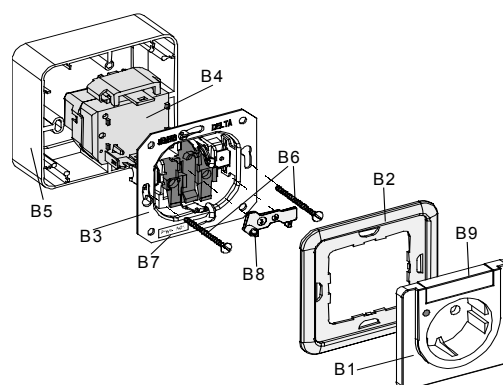
CE mark

In accordance with the EMC guideline (residential and functional buildings), low voltage guideline

Location and function of the operating elements

- A1 Contact pin for looping the switched L conductor of the function module UP 563 to the socket
- A2 LED for displaying normal mode (LED off) or addressing mode (LED on); it is automatically extinguished once the physical address has been transferred
- A3 Learning button for toggling between normal mode and addressing mode to transfer the physical address

Diagram 1: Location of the display and operating elements

Description of the system

- B1 Cup*
- B2 Frame*
- B3 Socket insert*
- B4 Function module
- B5 Spacing frame
- B6 Fixing screws
- B7 Label for physical address
- B8 Operational display*
- B9 Caption panel
- *= not included in the scope of supply

Diagram 2: Installation of the function module UP 563 and the switchable socket with operational display

Function module UP 563

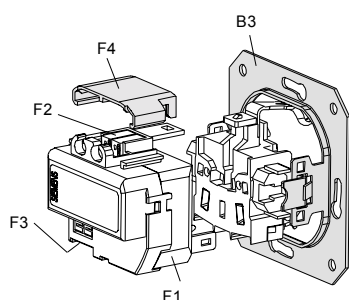
5WG1 563-2AB_1

General description

The function module UP 563 can only be used flexibly in SCHUKO sockets with a green terminal cover. Due to its compact size, it can be installed in a wall- or ceiling-mounted box (according to DIN 49073 Form B) with a diameter of 60 mm. Connection to the bus line is carried out via the bus terminal 193 (plug-in screw terminals for single core conductors]. The relay output is connected via the pin connector A1. The L-connection of the mains voltage is established via the plug-in terminal.

Installing EIB and 230V AC**Assembly sequence**

- 1) Clip the module UP 563 onto the socket insert
- 2) Remove the bus terminal and insert the wire
- 3) Slip on the bus terminal
- 4) Press the bus cable with its sheath into the open cable anchorage slot
- 5) Clamp on the cover F4 to establish a safe isolation between 230 V and EIB
- 6) Remove a piece of insulation of the 230 V conductor and insert the wire into the terminal F3
- 7) Install the whole unit UP 563 and socket insert onto the flush mounted box
- 8) Stick the label B7 for the physical address onto the mounting hanger of the socket insert B3

Assembly of the function module

- F1 Function module UP 563
 F2 Bus terminal
 F3 L-conductor connection
 F4 Cover

Diagram 3a: Mounting the function module UP 563 F1 onto the socket insert B3

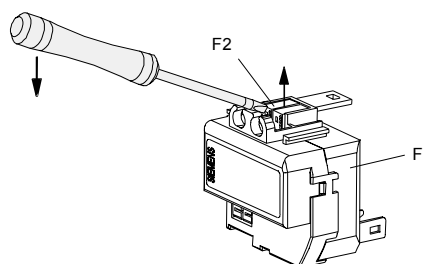
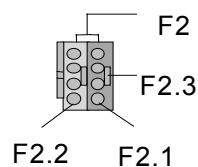
Installation of the bus wire

Diagram 3b: Removing the bus terminal

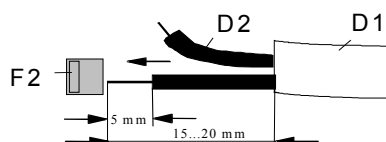
Carefully insert the screwdriver in the wire entry slot of the grey compartment of the bus terminal (F2) and pull the bus terminal (F2) forwards out of the function module (F1). Care should be taken not to damage the two test sockets (F2.3/ diagram 3c) either by accidentally connecting them to the bus conductor or with the screwdriver (when trying to remove the bus terminal).

- Connect the bus wire with the two piece terminal F2



- F2 Bus terminal
 F2.1 Red compartment of the bus terminal (red = +)
 F2.2 Grey compartment of the bus terminal (grey = -)
 F2.3 Test sockets

Diagram 3c: Bus terminal



- D1 Bus cable
 D2 Conductor

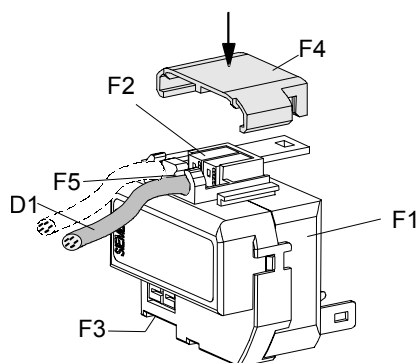
Diagram 3d: Stripping the bus cable insulation

Function module UP 563

5WG1 563-2AB_1

Connecting the bus wire (diagram 3d)

- The bus terminal (F2) is suitable for single core conductors with 0.6 ... 0.8 mm Ø.
- Strip the sheathing D1 and the conductor D2.
- Insert the stripped conductors D2 into the terminal F2 red = +
grey = -
- Place the bus terminal F2 properly orientated with its side faces in the guide slot of F1 and push the device backwards until it reaches the stop.
- When connecting a second bus cable, open the closed cable anchorage slot with a screwdriver and repeat the installation sequence described above.
- Press the sheath (diagram 3e) of the bus cable D1 (diagram 3d) into the open cable anchorage slot (F5) with an overshoot > 3 mm.
- Press the individual bus cores into the indentation and snap on the cover (F4).

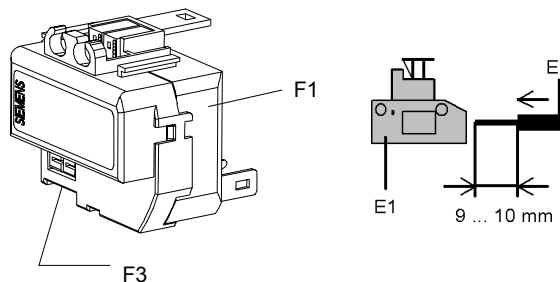


- F1 Function module UP 563
F2 Bus terminal
F3 L-conductor connection
F4 Cover
F5 Cable anchorage slot
D1 Bus cable

Diagram 3e: Installation of the bus cable

Load circuit - installation

Note: When connecting the 230 V mains voltage and the bus voltage, it should be ensured that the individual cores of the mains voltage cable maintain a minimum distance of 4 mm from the bus cable.



- E1 Screwless plug-in terminal
E2 Conductor

Diagram 3f: Mains voltage installation

The connections for the load circuits consist of plug-in screwless terminals (E1/diagram 3f).

Strip approx. 9 ... 10 mm of insulation from the conductor (E2) and place the conductor in the terminals (E1/F3).

Conductor cross sections:

see "Connections, Load circuit, mechanical"

Finally the outer conductors "N and PE" have to be fixed on the SCHUKO socket insert.

The fixing screws B6 according to diagram 2 are used for finishing the installation.

Example

Switching several plug-in sockets simultaneously with only one function module UP 563 (diagram 4) by opening the safety lap G1.

Attention: The specified switching power must be heeded. It mustn't be exceeded.

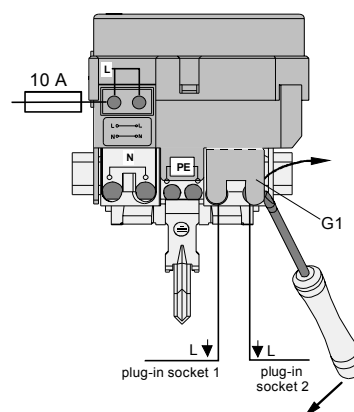


Diagram 4: Wiring for switching several plug-in sockets simultaneously

Disassembly 230V and EIB

Disassembly sequence

- 1) Disconnect socket circuit
- 2) Disassemble the whole unit UP 563 and socket insert from the flush mounted box
- 3) Remove 230 V (L) from the terminal F3
- 4) Remove the cover F4
- 5) Remove the bus cable with the sheath from the cable anchorage slot
- 6) Remove the bus terminal and the wire
- 7) Remove the module UP 563 from the socket insert

Disconnecting load circuits (Diagram 5)

- Press on the interlocking device (E3) of the terminal (E1) with the screwdriver and
- pull the conductor (E2) from the terminal (E1).

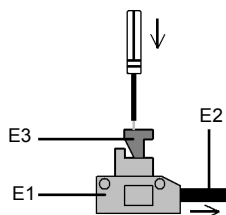


Diagram 5: Disconnecting load circuits

Disconnecting the bus cable (Diagram 6)

- Insert a screwdriver underneath the cover F4 and lever it out as shown by the arrows.
- Remove the bus terminal (F2) and the conductor (D2) of the bus cable by rotating simultaneously backwards and forwards.

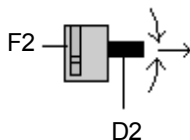
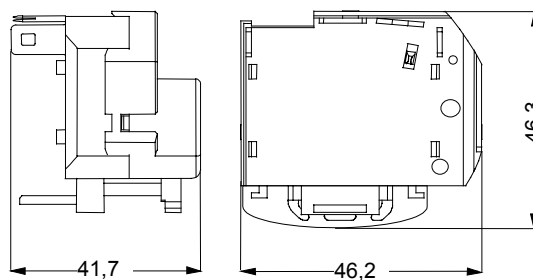


Diagram 6: Disconnecting the bus cable

Dimensions

Dimensions in mm



General Notes

- Any faulty devices should be returned to the local Siemens office.
- If you have further questions about the product, please contact our Technical Support:

 +49 (0) 180 50 50-222
 +49 (0) 180 50 50-223
 adssupport@siemens.com