

Glass sensor 2gang with room thermostat

Order-No. : 7564 20 xx

Glass sensor 3gang with room thermostat

Order-No. : 7564 30 xx

**Operation- and
Assembly Instructions**

1 Safety instructions

Electrical equipment must be installed and fitted by qualified electricians.

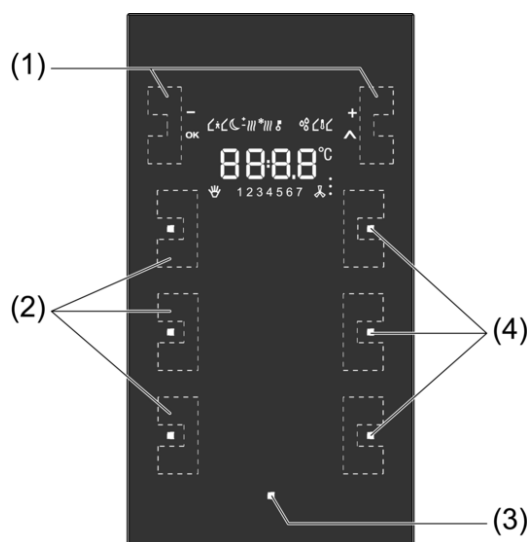
Failure to observe the instructions may cause damage to the device and result in fire and other hazards.

Do not operate the device with sharp or pointed objects. The touch-sensitive surface could be damaged.

Do not use sharp objects for cleaning. Do not use acids or organic solvents.

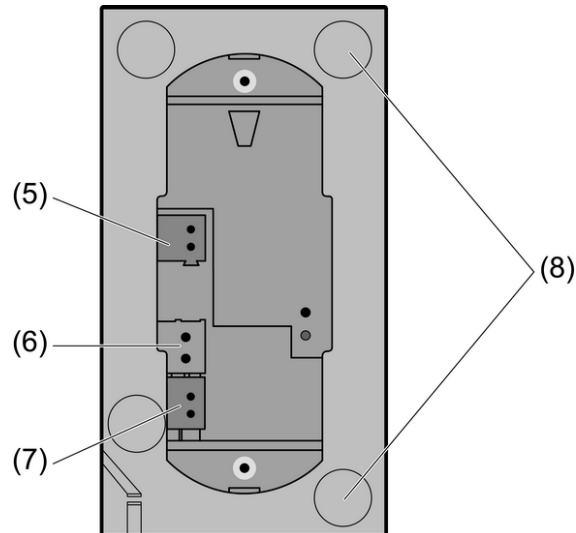
These instructions are an integral part of the product, and must remain with the end customer.

2 Device components



picture 1

- (1) Sensor buttons **-/OK, +/Δ**
- (2) Sensor buttons for operating functions
- (3) Operation LED
- (4) Status LED



picture 2

- (5) Power supply connection
- (6) Connection of wired floor temperature/remote sensors (accessories)
- (7) KNX connection
- (8) Adhesion points for adhesive dots

3 Function

System information

This device is a product of the KNX system and complies with the KNX directives. Detailed technical knowledge obtained in KNX training courses is a prerequisite to proper understanding.

The function of this device depends upon the software. Detailed information on loadable software and attainable functionality as well as the software itself can be obtained from the manufacturer's product database.

Planning, installation and commissioning of the device are carried out with the aid of KNX-certified software. Full functionality with KNX commissioning software version ETS3.0d onwards.

An updated version of the product database, technical descriptions and conversion programs and other auxiliary programs are available on our Internet website.

Intended purpose

- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light moods, etc.
- Installation in double installation socket for glass sensor (see chapter 6.3. Accessories)

Product characteristics

- The push-button functions switching, dimming, controlling blinds, valuator, calling up moods, etc.
- Operation through touching the sensor buttons
- LED to display status or actuation
- Integrated room temperature sensor
- Room temperature control with setpoint value specification
- Display of room and setpoint temperature
- Display of external temperature; in conjunction with external KNX temperature sensor
- Display of day and time, in conjunction with KNX time encoder
- Temperature limitation for floor heating; in conjunction with external temperature sensor
- Integrated bus coupling unit

4 Operation

The operation of functions or electrical consumers can be set individual for each device. Two operating modes are used:

- Single button operation:
Switching on or off or dimming brighter/darker, e.g. of lighting, takes place alternately when the sensor button is pressed repeatedly.
- Two button operation:
Two sensor buttons next to each other form a function pair. Pressing the left button, for example, switches or dims lighting on or brighter, pressing the right one switches it off or makes it darker.

The individual programming of the device means that individual functions and displays may not be enabled.

Operating a function or load

Consumers such as lighting, blinds, etc. are operated using the sensor buttons (2) and such operation depends on the programming of the device.

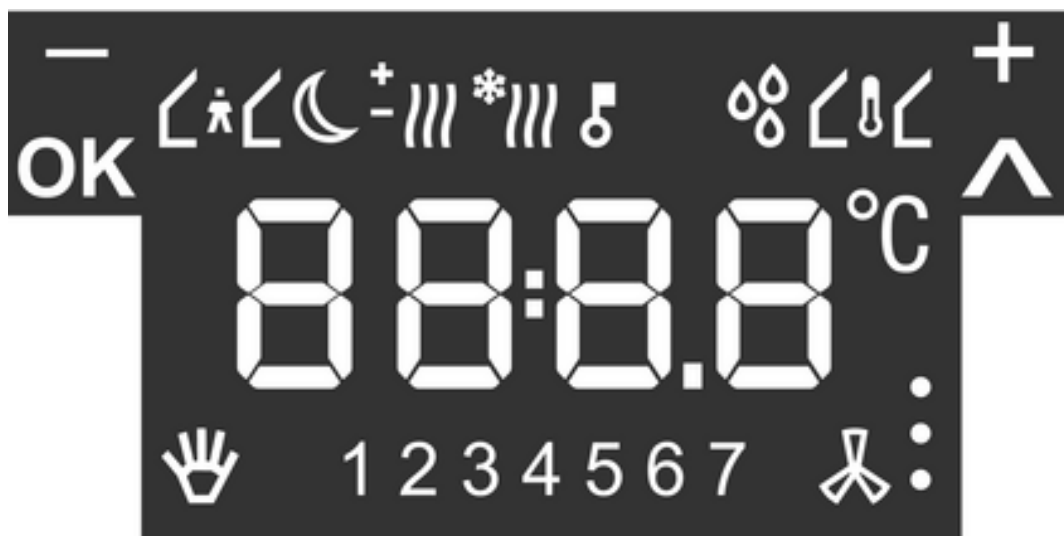
- Press a sensor button.

The stored function is executed.

- i** The actuation pulse is relative to the length of touch. Depending on the function, short and long actuations may trigger different actions, e.g. switching/dimming.

Operating modes and display icons

The device compares the current room temperature with the setpoint temperature and controls heating or cooling devices according to the current demand. The setpoint temperature depends on the current operating mode and can be changed by the user, depending on the programming. The operating modes and the current controller status are shown in the display.



picture 3

☀	Operating mode Comfort
☾	Operating mode Standby
☾	Operating mode Night
❄	Operating mode Frost/heat protection
💧	Display dewpoint operation; controller blocked
☀☾	Comfort extension, night
☀❄	Comfort extension, frost protection

☞	Setpoint value shift active
⌘	Fan controller with fan level display ⌘.⌘.⌘:
*///	Heating mode
-///	Cooling mode
⏸	Icon blocked: buttons locked
⌚	Timer switch icon
ℳ	Interior temperature
⌘ℳ	Exterior temperature
1 ... 7	Weekdays Mon...Sun
- and +	Active when values are changed.
OK and ⏏	Active, when the menu is active.

The numeric display shows temperature values or times.

Basic display

Depending on the programming, the display can either be switched on permanently or for a specific time.



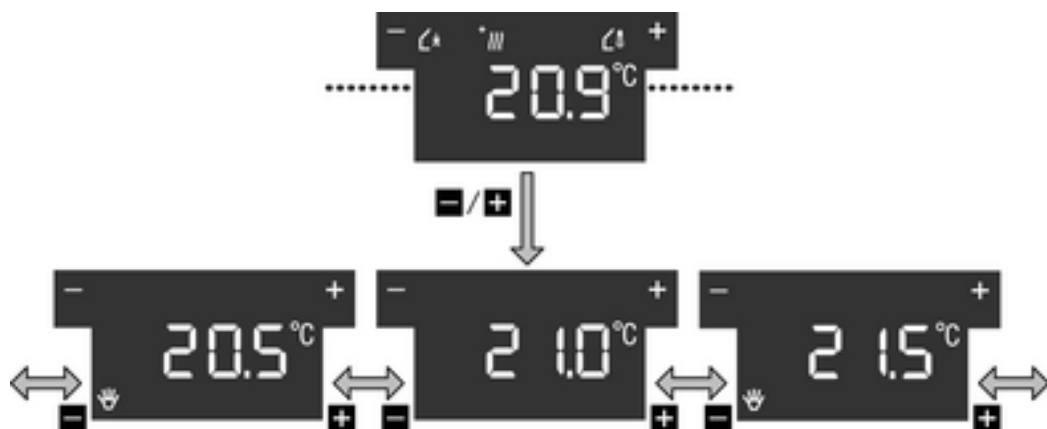
picture 4

When switched on, the display shows, next to the icon for the current operating mode,

- the current time and day
- the current room temperature
- the current exterior temperature
- the current setpoint temperature

Changing the room temperature

For short-term manual modification of the setpoint temperature.



picture 5

The basic display is visible.

- Touch the left or right sensor button (1).

The display shows the current setpoint temperature.

- Reduce setpoint temperature: press the left sensor button **-**.

- or -

- Increase setpoint temperature: press the right sensor button **+**.

The setpoint temperature is adjusted in steps of 0.5 °C.

The adjusted value is applied immediately.

The  icon in the display shows that the setpoint temperature was adjusted.

The system returns to the basic display automatically after a specified time has elapsed or when any sensor button (2) is pressed.

- i** With appropriate programming, manual changes to the setpoint temperature is cancelled by changing the operating mode.

Displaying the main menu

From the main menu, it is possible to access additional functions for controlling and displaying the room temperature, e.g. cleaning function, operating mode switch, setting the setpoint temperatures (picture 6).



picture 6

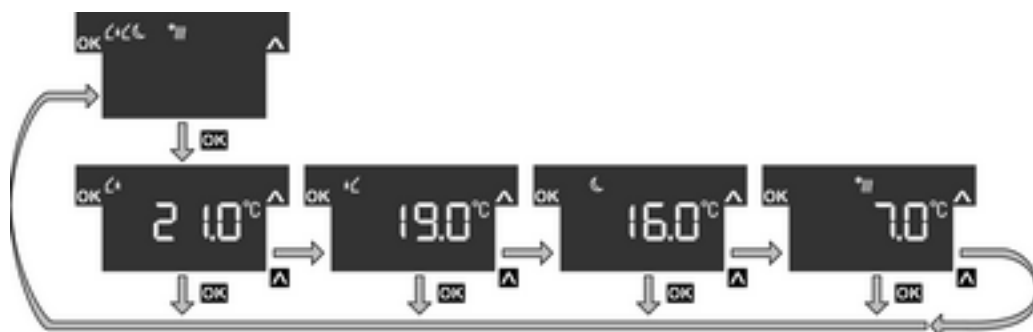
The basic display is visible. The main menu is enabled.

- Press the **+** and **-** sensor buttons simultaneously.

The display shows the menu item **CL60**.

- i** Pressing the sensor button **▲** opens the additional menu items in sequence.

Setting the operating mode



picture 7

The main menu is displayed (picture 6).

- Using the sensor button **▲**, select the menu item Operating mode switch.
- Press the **OK** sensor button.

The active operating mode is displayed with its setpoint temperature (picture 7).

- Press the sensor button **▲** to select the required operating mode.
- Press the **OK** sensor button.

The setting is saved.

The display shows the new operating mode.

The setpoint temperature for the room is set according to the new operating mode.

Activating comfort extension

With automatic change-over of the operating modes, e.g. by an external timer, it is nevertheless possible to retain the comfort mode for some time. This is made possible by the comfort extension. The comfort extension is subject to a time limit.

The device is in the operating mode Night or Frost/heat protection.

A presence button is programmed.

- Actuate the Presence button on the device or other installed operating devices.

The display shows the icons $\angle \text{I} \text{C}$ or $\angle \text{I} \text{*III}$.

The setpoint temperature for comfort mode is set for the set time.

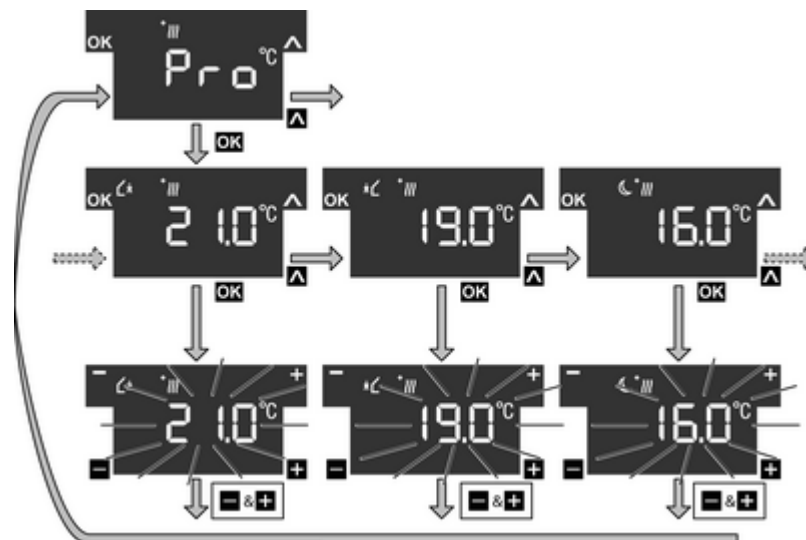
Once the programmed time expires, the original operating mode Night or Frost/heat protection is restored.

- i** The comfort extension can also be activated automatically, e.g. via a presence sensor.

Change setpoint temperatures

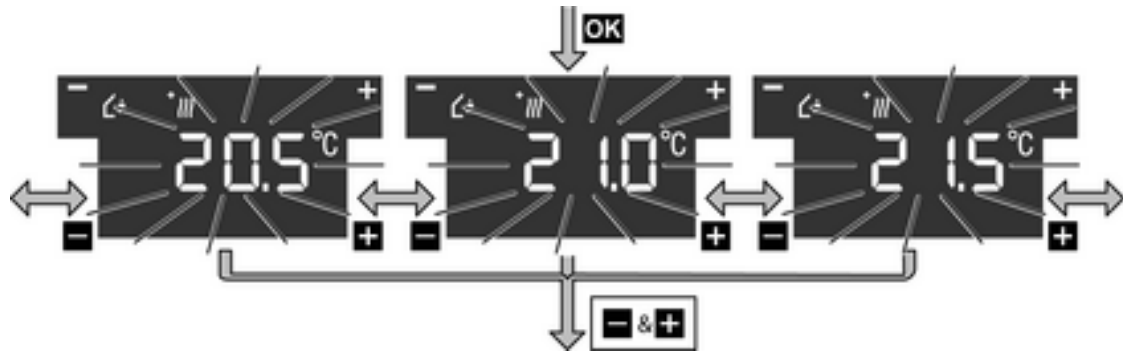
For permanent setting of the setpoint temperatures for the Comfort, Standby and Night operating modes.

The main menu is displayed.



picture 8

- Press the sensor button $\blacktriangle$ to select the menu item **Pro** for Heating mode *III or Cooling mode -III and press the sensor button **OK**(picture 8).
- Press the sensor button $\blacktriangle$ to select the required operating mode and press the **OK** sensor button.
The setpoint temperature flashes.
- Reduce setpoint temperature: press the left sensor button $-$.
- or -
- Increase setpoint temperature: press the right sensor button $+$.



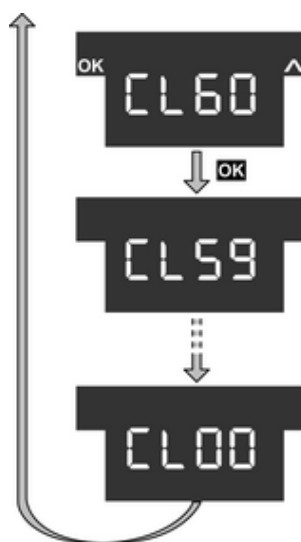
picture 9

- Apply changes: press the + and - sensor buttons simultaneously.
The set setpoint temperature for the set operating mode is saved.
The display returns to the main menu.
- or -
- Do not apply change: press another sensor button.
The device returns to the basic display.
- i If the setpoint temperature should be changed for other operating modes, repeat the described operating steps.

Cleaning the device

The device can be blocked for 60 s to prevent unintentional actions from being executed when the glass is being cleaned.

The main menu is displayed.



picture 10

- Press the sensor button **^** to select menu item **CL60** for the cleaning function and then press the sensor button **OK**(picture 10).
All the functions on the device are blocked for 60 s.
All the status LEDs of the sensor buttons flash.
The display shows the time remaining until the end of the cleaning function.
After 60 s, the device automatically reverts to the basic display, the lock is removed and normal operation possible.

-  Cleaning with a lightly moistened, lint-free cloth, possibly with a mild glass cleaner. Do not use sharp objects or abrasive cleaning agents, e.g. scouring powder.

5 Information for qualified electricians

5.1 Fitting and electrical connection

Preparing the device for mounting on a smooth substrate

The adhesive dots prevent the glass sensor from slipping when mounted on smooth surfaces.

- Free the adhesion points for the adhesive dots on the rear side of the glass sensor (8) from impurities.
- Remove the adhesive dots from the carrier film and stick them to the four adhesion points.
- Free the substrate of impurities.
- Before mounting the glass sensor, remove the protective film from the adhesive dots.

-  Before completing mounting, align the glass sensor and press it in the area of the adhesive dots, in order to fix it in place.



DANGER!

Electrical shock on contact with live parts in the fitting environment.

Electric shocks can be fatal.

Before working on the device, disconnect the power supply and cover up live parts in the working environment.

Fitting and connecting the device

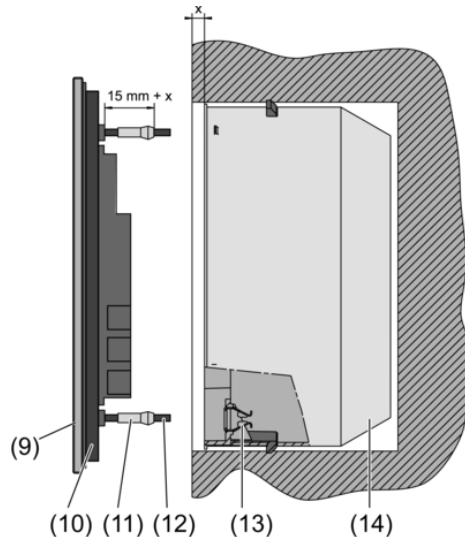
-  Use the double installation socket for the glass sensor (accessory). Mounting on single concealed sockets is not possible.

For increased removal protection or to increase the shadow gap to the wall, use the enclosed adapter ring (10). For this, lock the adapter ring onto the device from behind. Note marking **TOP**.

The double installation socket for the glass sensor has been installed in the installation location.

Bus voltage and an additional power supply are available at the installation location.

-  The yellow and white wire pair of the KNX bus cable can be used to provide an additional power supply.
- If necessary, measure the surface compensation. With deeper installation sockets, adjusting the retaining pegs (11) on the threaded pins (12) allows a surface compensation of up to 20 mm. Unscrew the retaining pegs (11) by the surface compensation x , so that they are at a distance of $155 \text{ mm} + x$ from the socket for the threaded pins.
-  When the adapter ring is used, the distance for the surface compensation is $20 \text{ mm} + x$ from the socket for the threaded pins.



picture 11

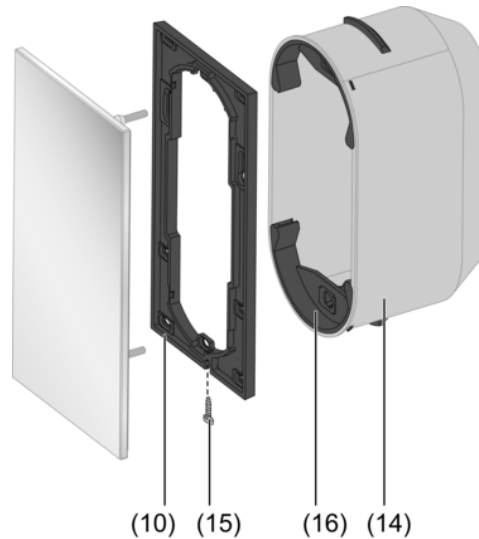
- (9) Glass surface
- (10) Adapter ring
- (11) Retaining peg
- (12) Threaded pin
- (13) Friction spring
- (14) Installation socket for the glass sensor (accessory)

- Connect power supply to the terminal (5).
- Connect the KNX bus voltage to the terminal (7).
- Connect the external temperature sensor to the terminal (6).
- **i** Programming key and LED are accessible only from the back of the device. If possible load the physical address into the device before final mounting(see chapter 5.2. Commissioning).
- Insert the device with the threaded pins (12) into the friction springs (13) of the installation socket (14) and push it in until the retaining pegs noticeably lock into place.
- Align the device and push it in in the area of the retaining points to fix it.

Mounting the device with increased dismantling protection

For increased dismantling protection, the adapter ring is firmly screws to the installation socket or the wall and the device secured using a securing screw on the bottom of the adapter ring.

- Lever the friction spring seats (16) out of the installation socket, in order to reveal the screw holes of the installation socket.
- Align the adapter ring and screw it to the installation socket of the wall. Note marking **TOP**. Use the enclosed set of screws.
- Connect power supply to the terminal (5).
- Connect the KNX bus voltage to the terminal (7).
- Connect the external temperature sensor to the terminal (6).
- **i** Programming key and LED are accessible only from the back of the device. If possible load the physical address into the device before final mounting(picture 12).
- Attach the device onto the adapter ring until it locks in place.
- Tighten the securing screw (15) on the bottom of the adapter ring. Use a Pozi-Drive screwdriver, size 0.



picture 12

Dismantling the device

- If available, slacken the securing screw on the bottom edge. Use a Pozi-Drive screwdriver, size 0.
- Press the enclosed dismantling tool in the centre of the glass sensor.
- Using the dismantling tool, pull the glass sensor evenly out of the anchoring - friction springs or adapter ring.
- Disconnect the connection cables.

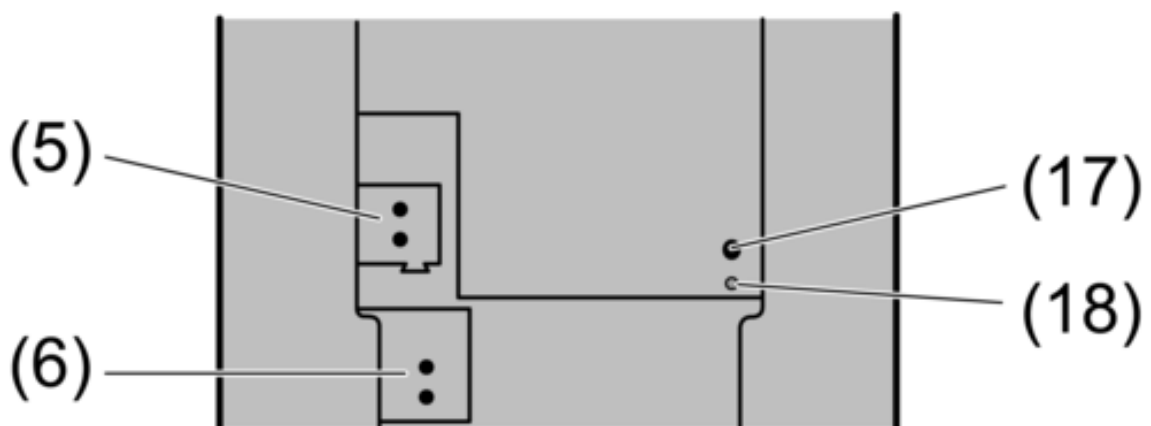
5.2 Commissioning

Loading the physical address and application software

Configuration and commissioning with ETS3.0d Patch A or more recent.

The device is connected and ready for operation.

The rear side of the device must be accessible.



picture 13

(17) Programming key

(18) Programming LED

- Press the Programming key (17).
The programming LED (18) shows the programming state red.

- Assign physical address.
The programming LED goes out.
- Write the physical address on the device label.
- Load application software into the device.

6 Appendix

6.1 Technical data

KNX medium	TP 1
Commissioning mode	S mode
Rated voltage KNX	DC 21 V ... 32 V SELV
Power consumption KNX	typical 150 mW
Connection mode KNX	Connection terminal
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Power supply	
Rated voltage	DC 18 ... 32 V SELV
Power consumption	max. 0.5 W
Internal clock	
Resolution, clock	1 min
Rate deviation	max. 8 min/day
Internal room temperature sensor	
Measuring range	0°C to +40°C ±1%
Resolution:	0.1 K

6.2 Troubleshooting

Glass sensor does not lock in place

Retaining pegs on the threaded pins adjusted incorrectly.
Remeasure the adjustment of the retaining pegs and correct them as necessary.

Glass sensor moves on the wall

Smooth substrate provides insufficient hold.
Use the adhesive dots supplied for mounting.

Glass sensor cannot be removed

The device was mounted with increased dismantling protection.
Slacken the screw on the bottom of the adapter ring.

Glass sensor does not react to operation

Connection to the bus or bus power supply is faulty or has incorrect polarity.
Check, and if necessary, correct the wiring, bus cable and power supply.

Display remains dark

Bus or power supply is faulty or has incorrect polarity.
Check, and if necessary, correct the wiring, bus cable and power supply.
Display switched to dark centrally.

Impossible to switch the operating mode using menu operation

It may be that an open window with a window contact or a presence detector prevents the switch.

Not possible to actuate the sensor buttons

Button lock active. Icon is  shown.
Switch off the button lock.

The menu or submenu cannot be opened in the display

The corresponding functions are not enabled or not programmed.

Remove the locks.

Program the required functions.

Incorrect time is displayed

Incorrect time set on central clock.

Correct the time on the central clock.

The display shows --:-- rather than the time

Missing synchronisation from the central clock.

Check the central clock.

 The device must receive the time from the central clock at least once every 24 hours.

6.3 Accessories

Wall box 2gang
Floor temperature sensor/remote sensor

Order-No. 1870
Order-No. 0161

6.4 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

Our products are under guarantee within the scope of the statutory provisions.

If you have a warranty claim, please contact the point of sale or ship the device postage free with a description of the fault to the appropriate regional representative.

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