

Operating instructions

Object regulator
Order no. 2101 ..

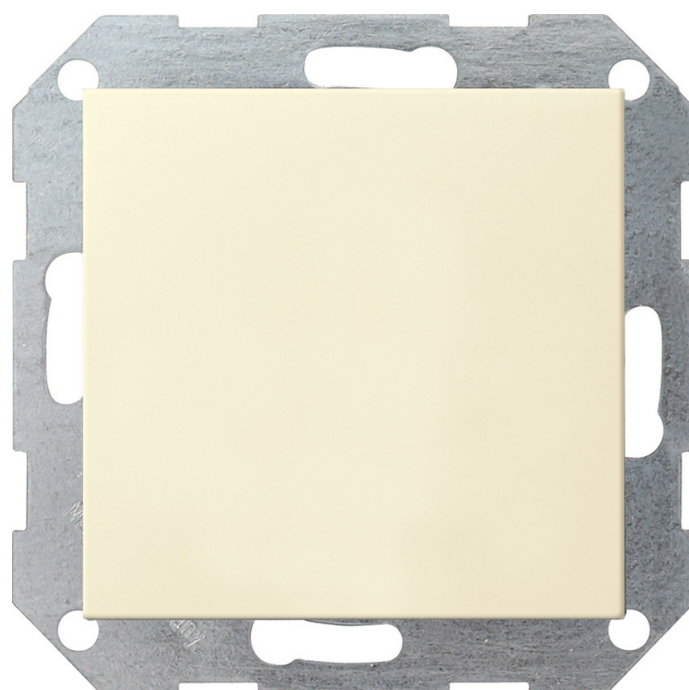


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1 Safety instructions



Electrical devices may be mounted and connected only by electrically skilled persons.

Serious injuries, fire or property damage are possible. Please read and follow the manual fully.

Danger of electric shock at the KNX installation. Do not connect any external voltage to the inputs. The device can become damaged, and the SELV potential on the KNX bus line will no longer be available.

This manual is an integral part of the product, and must remain with the customer.

2 Device components

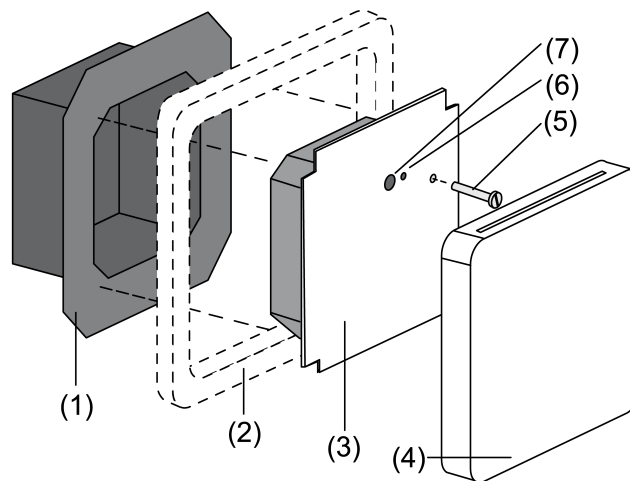


Figure 1

- (1) Connection terminal insert
- (2) Cover frame
- (3) Electronics cover
- (4) Cover
- (5) Retaining screw
- (6) Programming LED
- (7) Programming button

3 System information

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 for proper understanding.

The function of the device depends on the software. Detailed information on the software version and the respective scope of functions as well as the software itself can be obtained from the manufacturer's product database.

The device is planned, installed and commissioned with the aid of KNX-certified software. Full functionality with KNX commissioning software version ETS3.0d onwards.

Updated versions of the product database, technical descriptions, conversion programs and other auxiliary programs are available on our website.

4 Intended use

- Single-room temperature control in KNX installations
- Mounting in appliance box with dimensions according to DIN 49073

5 Product characteristics

- Measurement of the room temperature and comparison with the setpoint temperature
- Setpoint specification by selecting the operating mode
- Operating modes: comfort, standby, night operation, frost/heat protection
- Heating and cooling mode
- Heating and cooling with basic and additional level
- Operation solely via the bus
- Push-button interface with four inputs or two outputs and two inputs, e.g. for window contacts, push-buttons, LEDs, etc.
- Function of the inputs: switching, dimming, shutter control, light scene extension unit, brightness or temperature value transmitter
- Optional: external temperature sensor, connectable (accessories)

6 Information for electrically skilled persons

6.1 Mounting and electrical connection



DANGER!

Electric shock when live parts are touched.

Electric shocks can be fatal.

Cover up live parts in the installation environment.

Mounting notes

Do not use controllers in multiple combinations with electrical devices. Their heat development will influence the temperature measurement of the controller.

Do not mount controllers near sources of interference, such as electric cookers, refrigerators, draughts or direct sunlight. This would influence the temperature measurement of the controller.

Observe the routing conditions for SELV.

Do not route input cables parallel to mains cables. Otherwise there might be EMC interference.

Recommendation: Use a deep appliance box.

The optimum installation height is approx. 1.5 m.

Mounting and connecting the device

- Separate the connection terminal insert (1) and the electronics cover (3) (see figure 1).
- Connect the bus line to the device connection terminal (9) in the connection terminal insert (see figure 2).

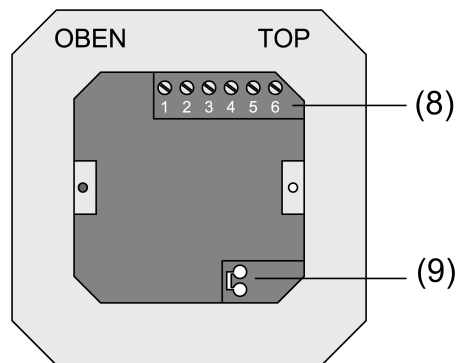


Figure 2

- Binary inputs **E1...E4**: Connect the NO or NC contact as switch or push-button to the connection terminals 1 and 2...5 (see figure 3) of the terminal strip (8) (see figure 2).
 - Binary outputs **A1...A2**: Connect the LED or electronic relay to the connection terminals 1 and 2, 3 (see figure 4) of the terminal strip (8) (see figure 2).
- i** The specification of the function as inputs/outputs depends on the ETS programming.

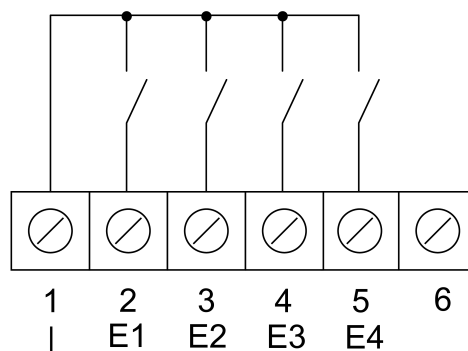


Figure 3

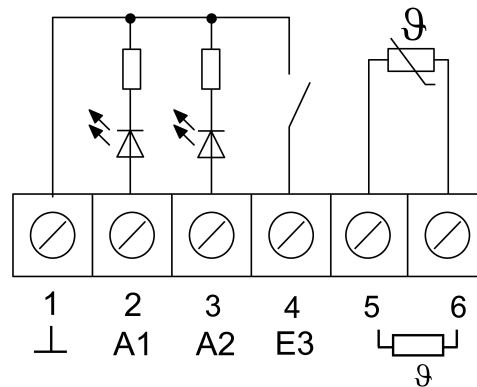


Figure 4

Optional: Route an external temperature sensor in an empty pipe and guide the sensor head out at the measurement location.

Select the installation location for the temperature sensor so that it can measure the temperature without any influence from sources of interference.

- Connect the external temperature sensor to the connection terminals **5** and **6** (see figure 4) of the terminal strip (8) (see figure 2).

i The sensor cable can be extended up to a maximum of 50 m with a twisted pair cable, e.g. J-Y(St)Y-2x2x0.8. When using the KNX bus line: use a second pair of yellow/white cores.

- Insert the connection terminal insert (1) (see figure 1) in the flush-mounted appliance box. Observe the labelling **OBEN / TOP**. The bus connection (9) (see figure 2) must be at the bottom, right.
- Fit the cover frame (2) on the connection terminal insert (1) (see figure 1).
- Insert the electronics cover in the correct position into the connection terminal insert (see figure 1).
- Remove the cover (4) (see figure 1).
- Fasten the electronics cover with the retaining screw (5) (see figure 1).
- Reattach the cover (4) (see figure 1).

6.2 Commissioning

Loading the address and the application software

- Remove the cover (4) (see figure 1).
- Press the programming button (7) (see figure 1).
The programming LED (6) is illuminated (see figure 1).
- Assign a physical address.
The programming LED (6) goes out (see figure 1).
- Note down the physical address on the connection terminal insert and on the back of the electronics cover.

- i** Observe the correct assignment of inserts and covers when assembling after painting or wallpapering.
- Reattach the cover (4) (see figure 1).
 - Download the application software, parameters, etc.

7 Technical data

KNX medium	TP256
Commissioning mode	S mode
Rated voltage	DC 21 ... 32 V SELV
Current consumption KNX	Max. 7.5 mA
Connection bus	Device connection terminal
Ambient temperature	-5 ... +45°C
Storage/transport temperature	-25 ... +70°C
Output current	0.8 mA
Inputs and outputs	
Cable type	J-Y(St)Y 2×2×0.8
Cable length	Max. 5 m
Temperature sensor cable length	Max. 50 m

8 Accessories

Remote sensor	Order no. 1493 00
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9 Warranty

The warranty is provided by the specialist trade in accordance with statutory requirements. Please submit or send faulty devices postage paid together with a fault description to your responsible salesperson (specialist trade / installation company / electrical specialist trade). They will forward the devices to the Gira Service Center.

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