KNX thermostat for objects
Order-No. : 7544 12 XX

**Operation- and
Assembly Instructions**

1 Safety instructions

Electrical equipment may only be installed and fitted by electrically skilled persons.

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

Danger of electric shock on the KNX installation. Do not connect any external voltage to the inputs. Doing so may damage the device(s), and the SELV potential on the KNX bus line will no longer be available.

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

2 Device components
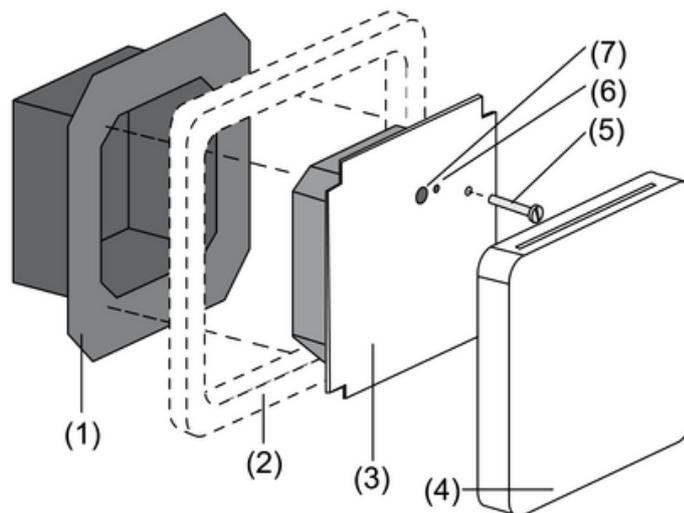
picture 1

(1) Terminal insert
(2) Design frame
(3) Electronics cover
(4) Cover
(5) Retaining screw
(6) Programming LED
(7) Programming button

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 use

- Single-room temperature control in KNX installations
- Installation in appliance box to DIN 49073

Product characteristics

- Measurement of room temperature and comparison with setpoint temperature
- Setpoint specification by selection of the operating mode
- Operating modes Comfort, Standby, Night operation, Frost/heat protection
- Heating and cooling mode
- Heating and cooling with basic and auxiliary step
- 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.
- Options: External temperature sensor connectable (accessories)

4 Information for electrically skilled persons

4.1 Fitting and electrical connection

⚠️ **DANGER!**

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

Electrical shocks can be fatal.

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

Mounting notes

Do not use controller in multiple combinations with electrical devices. Their heat creation influences the temperature measurement of the controller.

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

Observe routing conditions for SELV.

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

Recommendation: Use deep accessory sockets.

The optimum installation height is approx. 1.5 m.

**Mounting and connecting the device**

- Isolate terminal insert (1) from electronic insert (3) (picture 1).
- Connect the bus line to the connection terminal (9) in the terminal insert (picture 2).
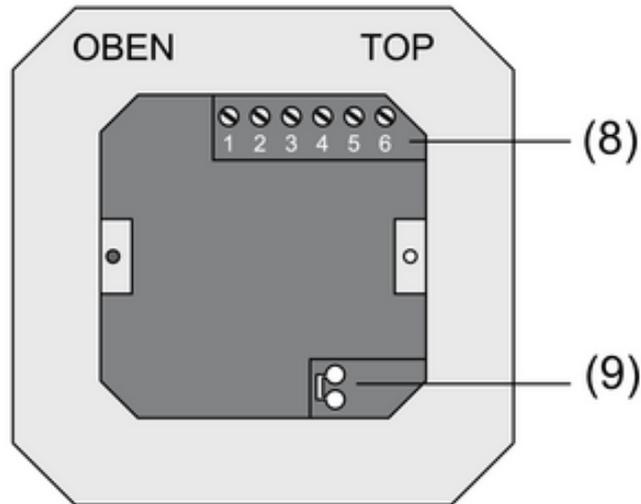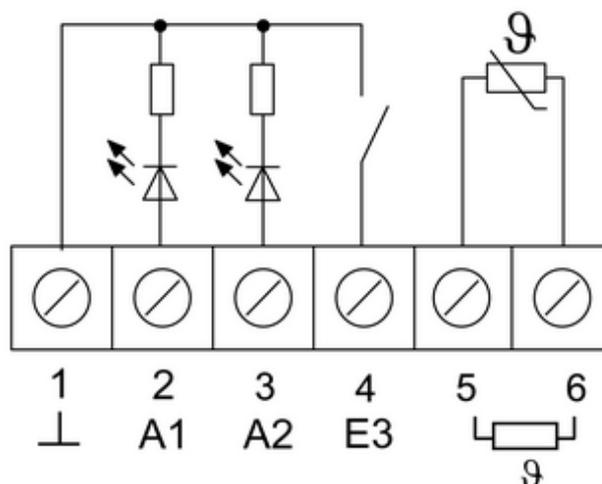
picture 2

- Binary inputs **E1…E4**: Connect NO or NC contacts as switches or buttons to the terminals **1** and **2…5**(picture 3) of the terminal strip (8) (picture 2).
- Binary inputs **A1…A2**: Connect the LED or electronic relay to the terminals **1** and **2, 3** (picture 4) of the terminal strip (8) (picture 2).
- i The specification of the function as an input/output is dependent on the ETS programming.
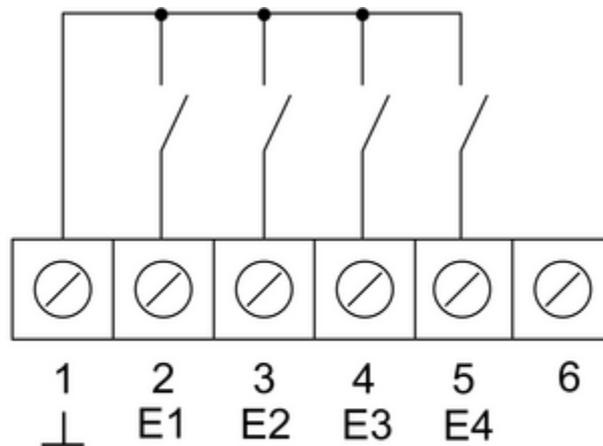
picture 3

picture 4

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

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

- ■ Connect the external temperature sensor to the terminals **5** and **6**(picture 4) of the terminal strip (8) (picture 2).
- ⓘ 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 cable: Use a second pair of cores, yellow-white.
- ■ Insert terminal insert (1) (picture 1) in flush-mounted appliance box. Note label **OBEN / TOP**. The bus connection (9) (picture 2) must be to the right and below.
- ■ Fit the Design frame (2) on terminal insert (1) (picture 1).
- ■ Insert the electronics cover into the terminal insert in the correct orientation (picture 1).
- ■ Removing the cover (4) (picture 1).
- ■ Fasten the electronics cover with the locking screw (5) (picture 1).
- ■ Reattach the cover (4) (picture 1).

4.2 Commissioning

Load the address and the application software
- ⓘ Use commissioning software from ETS2 version 1.2 onwards.
- ■ Removing the cover (4) (picture 1).
- ■ Press the programming button (7) (picture 1).
  The programming LED (6) is illuminated (picture 1).
- ■ Assign physical address.
  The programming LED (6) is extinguished (picture 1).
- ■ Record the physical address on the terminal insert and on the back of the electronics cover.
- ⓘ Observe the correct assignment of inserts and covers when assembling after painting or wallpapering work.
- ■ Reattach the cover (4) (picture 1).
- ■ Download application software, parameters, etc.

5 Appendix

5.1 Technical data

KNX medium	TP 1
Commissioning mode	S mode
Rated voltage	DC 21 ... 32 V SELV
Current consumption KNX	max. 7.5 mA
Connection, Bus	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 x 2 x 0.8 mm
Cable length	max. 5 m
Temperature sensor cable length	max. 50 m

5.2 Accessories

Floor temperature sensor/remote sensor	Order-No. 0161

5.3 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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