JUNG CD 2178 ORTS SW Push Button Interface 4 Gang Room Autostat User Manual

Contents

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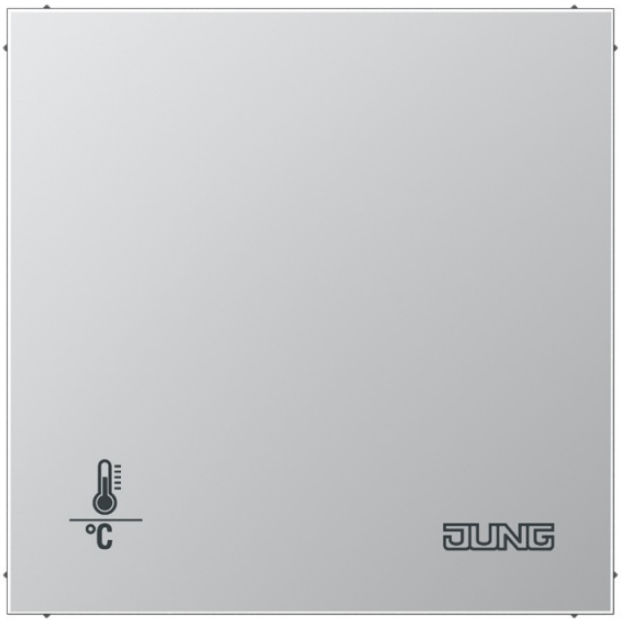

Specifications

- **Product Name**: Room autostat with push-button interface 4-gang
- **Model:** Art. no. ..2178 ORTS..
- **Compliance:** KNX system
- Compatible with: KNX commissioning software version ETS3.0d onwards
- **Installation Height:** Approximately 1.5 m

Product Usage Instructions

Safety Instructions

Electrical devices may only be mounted and connected by electrically skilled persons. Please read and follow the manual fully to prevent serious injuries, fire, or property damage. Do not connect external voltage to the inputs to avoid damaging the device.

Device Components

The device components include connection terminal insert, design frame, electronics cover, cover, retaining screw, programming LED, and programming button.

System Information

The device is part of the KNX system and requires technical knowledge obtained in KNX training courses for proper understanding. Commission the device with KNX-certified software.

Mounting and Electrical Connection

To mount and connect the device:

1. Separate the connection terminal insert and electronics cover.
2. Connect the bus line to the device connection terminal in the connection terminal insert.
3. Connect NO or NC contact as switch or push-button to the binary inputs E1…E4.
4. Connect LED or electronic relay to the binary outputs A1…A2.

FAQ

- **Can I use this device without KNX-certified software?**
  No, full functionality requires KNX commissioning software version ETS3.0d onwards.
- **What is the recommended installation height for the device?**
  The optimum installation height is approximately 1.5 m.

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.

Device components

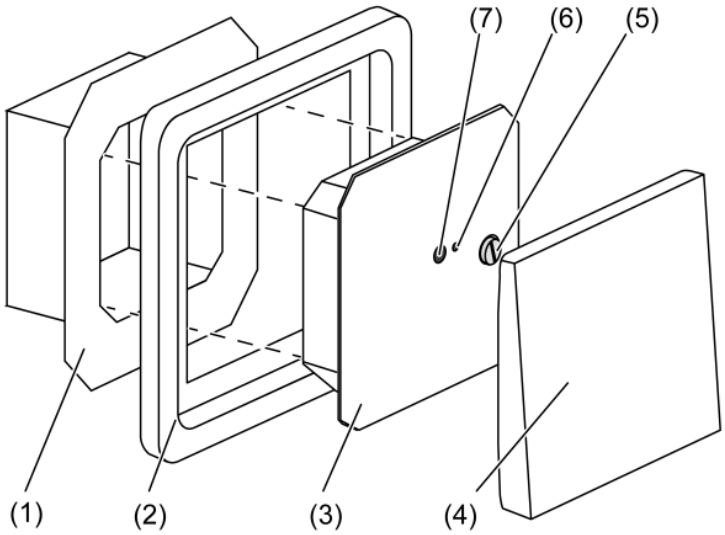

Figure 1

1. Connection terminal insert
2. Design frame
3. Electronics cover
4. Cover
5. Retaining screw
6. Programming LED
7. Programming button

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 soft-ware 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 soft-ware. Full functionality with KNX commissioning software version ETS3.0d onwards.
- Updated versions of the product database, technical descriptions, conversion pro-grams and other auxiliary programs are available on our website.

Intended use

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

Product characteristics

- Measurement of the room temperature and comparison with the setpoint tem-perature
- 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 exten-sion unit, brightness or temperature value transmitter
- Optional: external temperature sensor, connectable (accessories)

Information for electrically skilled persons

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 de-velopment will influence the temperature measurement of the controller.
- Do not mount controllers near sources of interference, such as electric cookers, refri-gerators, draughts or direct sunlight. This would influence the temperature measure-ment of the controller.
- When routing input cables parallel to mains cables: minimum distance of 10 cm. Oth-erwise there might be EMC interference.
- Observe the routing conditions for SELV.

- 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).

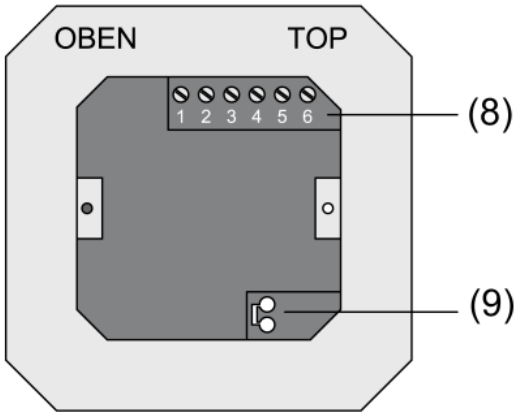

Figure 2

- 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).

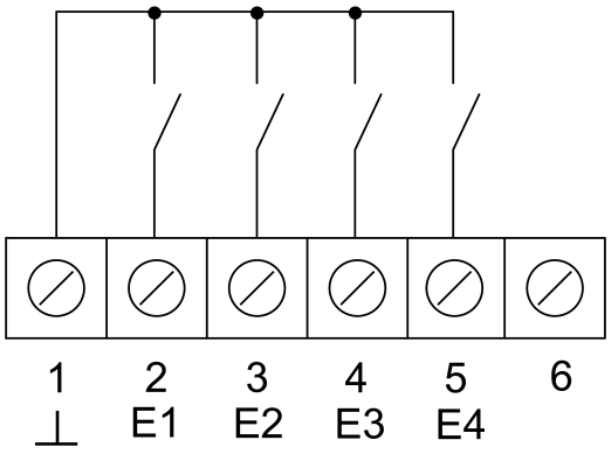

Figure 3

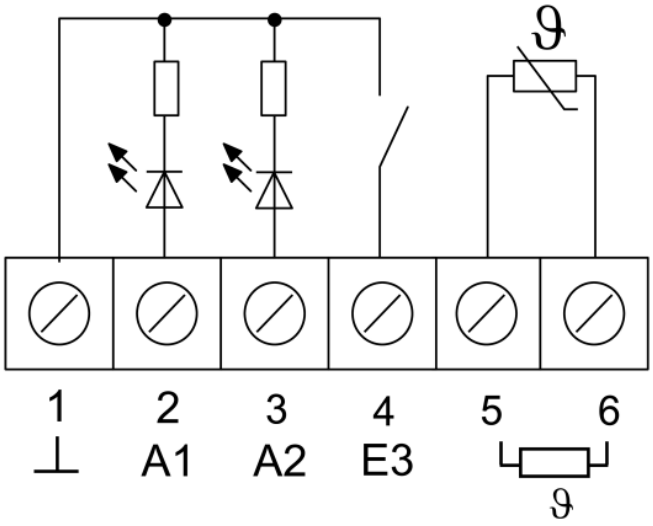

Figure 4

The specification of the function as inputs/outputs depends on the ETS pro-gramming.

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).
  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) 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 design frame (2) on the connection terminal insert (1) (see figure 1).
- Remove the cover (4) (see figure 1).
- Insert the electronics cover in the correct position into the connection terminal insert (see figure 1).
- Fasten the electronics cover with the retaining screw (5) (see figure 1).
- Reattach the cover (4) (see figure 1).

Dismantling the device

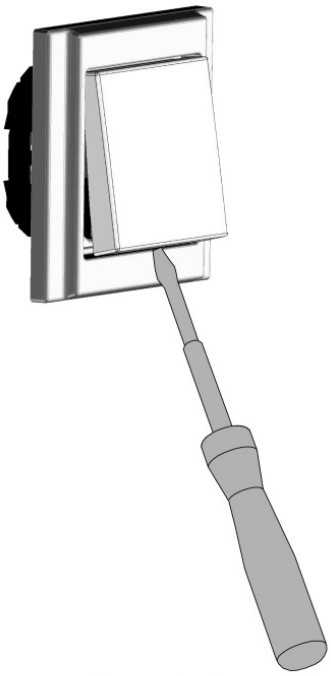

Image 5: Removing the cover

Do not damage the cover (4) and design frame (2).

- Insert the screwdriver in the slot on the bottom (see figure 5) and raise the cover (4) carefully.
- Undo the screw (5).
- Pull the electronics cover (3) off the insert.
  If subsequently mounted, the cover must be placed on the correct insert again. Pay attention to the correct labelling of the insert and cover already during the disassembly. Label them accordingly now if necessary.

Commissioning

Loading the address and the application software

- Remove the cover (4) (see figure 5).
- 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.
  Observe the correct assignment of inserts and covers during the assembly.
- Reattach the cover (4) (see figure 1).
- Download the application software, parameters, etc.

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

Accessories

- **External sensor** Art. no.: FF7.8
- **External temperature sensor** Art. no.: FFNTC

Warranty

The warranty is provided by the specialist trade in accordance with statutory requirements.

ABOUT COMPANY

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Documents / Resources

	JUNG CD 2178 ORTS SW Push Button Interface 4 Gang Room Autostat [pdf] User Manual CD 2178 ORTS SW Push Button Interface 4 Gang Room Autostat, CD 2178 ORTS SW, Push Button Interface 4 Gang Room Autostat, Interface 4 Gang Room Autostat, 4 Gang Room Autostat, Room Autostat, Autostat

References

- JUNG - Switches and systems

- **User Manual**