

## RTC 230 V~ with NC contact

Order no.: 2470 00

### Operating instructions

## 1 Safety instructions



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

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

Danger of electric shock. Always disconnect before carrying out work on the device or load. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and or load.

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

# 2 Device components

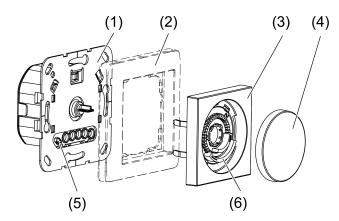


Figure 1: Device components

- (1) Room temperature controller insert
- (2) Cover frame
- (3) Central plate
- (4) Control knob
- (5) Internal temperature sensor
- (6) Adjustment rings temperature limit
- During renovation work, the temperature sensor (5) must not become dirty or be painted over.

## 3 Intended use

- Electronic room temperature controller for controlling electrothermal valve drives for 230 V~
- Control of the room temperature in closed rooms
- Mounting in appliance box with dimensions according to DIN 49073

### 4 Product characteristics

- Manually setting a comfort temperature
- Internal temperature sensor
- Silent switching
- Controller output working method: pulse width modulation (PWM)
- Operates with valve type "deenergised closed"

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Valve protection function (once a week opening and closing of valve)

## 5 Operation

#### Increasing or reducing the room temperature

Turn the control knob to the right or left.

In the centre position, the device regulates to approx. 20 °C setpoint temperature. The lowest setpoint temperature is approx. 5 °C and the highest setpoint temperature is approx. 30 °C (Figure 4).

# 6 Information for electrically skilled persons

### Selecting a suitable installation location

- Recommended installation height: 1.50 m on interior walls
- Do not mount the device near sources of interference, such as ovens, refrigerators, draughts (e.g. next to the door) or direct sunlight. This affects the temperature measurement of the internal temperature sensor.
- Do not mount the device within shelf walls or behind curtains and similar covers
- Do not use the device in multiple combinations with heat-generating devices such as dimmers



#### **DANGER!**

Mortal danger of electric shock.

Disconnect the device. Cover up live parts.

# Connecting and fitting the device

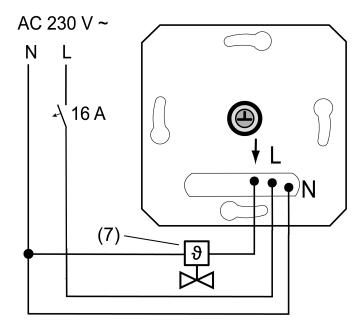


Figure 2: Connection example of the insert

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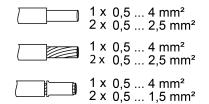


Figure 3: Clampable conductor cross-section

- Connect electrothermal valve drive (7) to insert (1) according to connection diagram (Figure 2). Observe the conductor cross-sections (Figure 3).
- Fit device in appliance box; terminals must be at the bottom.
- Fit cover frame (2), central plate (3) and control knob (4).
- Switch on mains voltage.

## Setting the temperature limits

The room temperature controller has a setting range of 5 ... 30 °C. The adjustment rings on the central plate can be used to limit the temperature setting range.

The specified temperature values may deviate from the actual room temperature depending on the installation location.

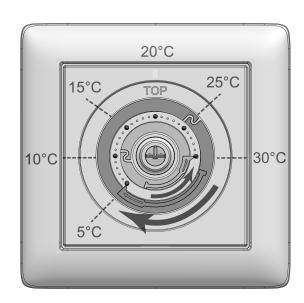


Figure 4: Adjustment rings for temperature limit

- Pull the control knob (4) off the central plate (3) so that the adjustment rings (6) are visible (Figure 4). The temperature values shown in the picture are for orientation purposes.
- Turn the large blue adjustment ring clockwise to the desired minimum temperature. Each notch corresponds to a change of about 1 °C.
- Turn the small red adjustment ring anticlockwise to the desired maximum temperature.
- Replace the control knob, observing the coding of the control knob and rotary axle.

## 7 Technical data

Rated voltage

Mains frequency

Standby power

Connected load

AC 230 V ~

50 / 60 Hz

max. 0.5 W

20 W

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Connection: Thermal valve drive ordering no.: 2169 00	
Number valve drive	1 10
Ambient temperature	-5 +45 °C
Storage/transport temperature	-25 +70 °C
Controller class (EU 811/2013)	IV
Contribution to energy efficiency	2%

Data according to EN 60730-1

Type of action 1.Y
Degree of soiling 2
Measured surge voltage 4000 V

# 8 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade. Please submit or send faulty devices postage paid together with an error 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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