GIRA

# Operating instructions

## RTC 230 V~ with NC contact
**Order no. 2470 00**


Product image non-binding

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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. 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.**

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

# 2 Device components

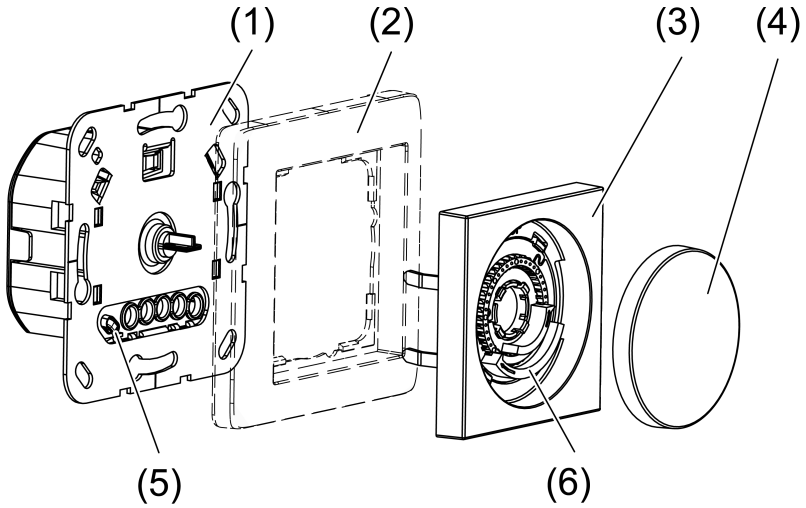


Figure 1: Device components

(1) Room temperature controller insert
(2) Cover frame
(3) Central plate
(4) Control knob
(5) Internal temperature sensor
(6) Adjustment rings for 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"
- 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 (see 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

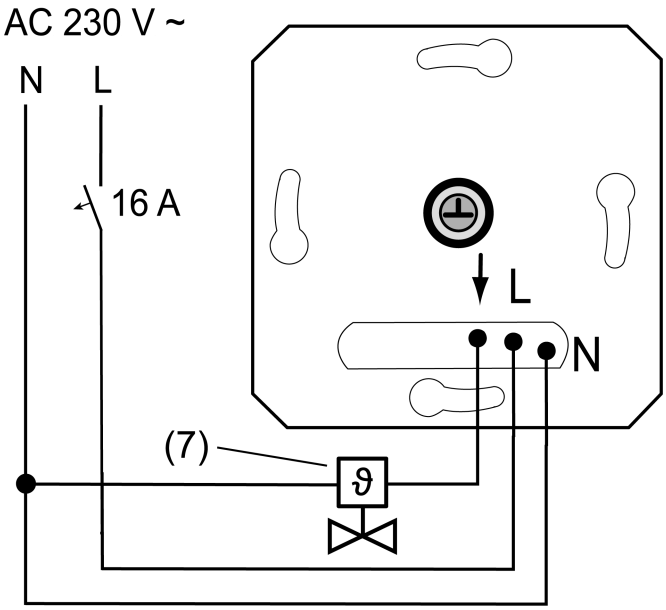


Figure 2: Connection example of the insert

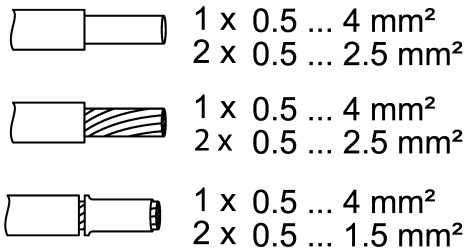


Figure 3: Clampable conductor cross-section

- Connect electrothermal valve drive (7) to insert (1) according to connection diagram (see figure 2). Observe the conductor cross-sections (see figure 3).

i Device defect due to incorrect or excessive load. Observe information on valve drives (technical data), check performance data if necessary.

- Fit device in appliance box; device connection terminals must be at the bottom.
- Fit cover frame (2), central plate (3) and control knob (4).
- Switch on mains voltage.

i When testing the function of the device, make sure that the output is activated with a delay of up to 30 seconds.

## 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.

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

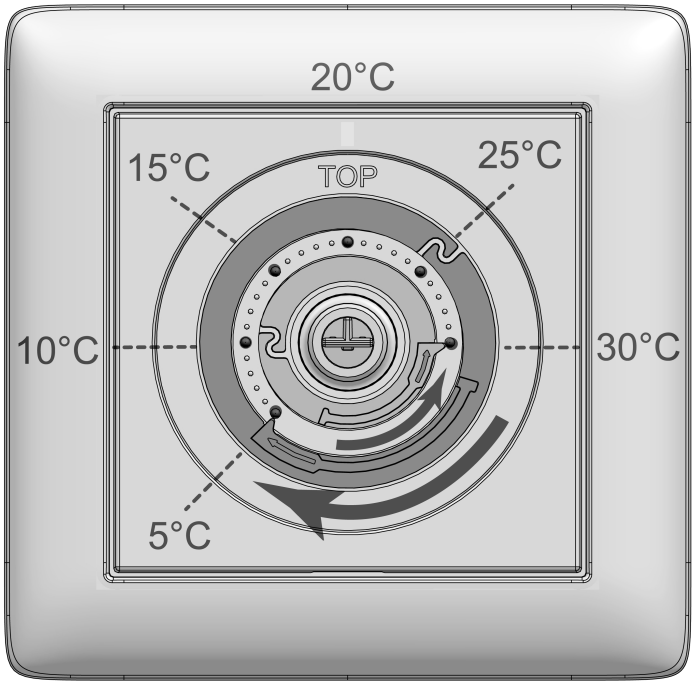


Figure 4: Adjustment rings for temperature limit

- Pull the control knob (4) off the central plate (3) so that the adjustment rings (6) are visible (see 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 | AC 230 V ~ |
| Mains frequency | 50 / 60 Hz |
| Standby power | Max. 0.5 W |
| Connected load | 20 W |
| Sum of switch-on currents (100 ms) | Max. 5.5 A |
| Connection of thermal valve drives | |
| Order no.: 2169 00 | 1 … 10 |
| Valve drive from other manufacturers | 1 … 3 |
| 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 DIN EN 60730-1 | |
| Type of action | 1.Y |
| Degree of soiling | 2 |
| Measured surge voltage | 4000 V |

## 8 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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