

Electronic Room Thermostat without Timer

HRT 6004

Important notes

ATTENTION

Work on the 230 V mains supply must only be carried out by authorised electricians.

The safety regulations of the VDE and the local utility company must be observed when connecting the device. The connection work must not be carried out when the mains supply is switched on. The mains supply cable must be protected by means of a 12 A miniature circuit-breaker.

In rooms with moisture (e.g. bath rooms) a 30 mA residualcurrent circuitbreaker must be installed in accordance with VDE 0100

In the event of a fault the mains voltage may be present on the sensor line.

Application / function

Application

The electronic room thermostats without timer are designed as individual room temperature controllers. Both electrical and hot water heaters can be connected to it. In the latter case, 230 V “normally closed” control valves must be used.

Function

The device consists of:

- the control module for setting the required room temperature using a dial and
- with inner sensor for room heating from 5° to 30 °C.

The ON/OFF slide switch can be used to make a single-pole disconnection of the heating system from the mains supply and thus switch off the heating.

Technical data

Mains voltage:	230 V ~ ± 10%, 50 Hz
Max. switched current:	approx. 8 (4) A
Max. switching capacity:	1.8 kW
Switching temperature differential:	Approx. 0.7 K
Relay contact:	opens with overtemperature
Required control valve for hot water heaters:	230 V, normally closed
Temperature sensor:	NTC with 2 kΩ at 25°C to DIN 44574, length approx. 4 m , Ø approx. 8 mm
Setting range:	Position 1-6, corresponds to 5° to 30°C
Ambient temperature:	-10 to + 40°C
Connection cables:	The cross-section of the connection cables must be 2.5 mm ² for a heat output 2.5 kW and higher
Energy class:	IV = 2.0%

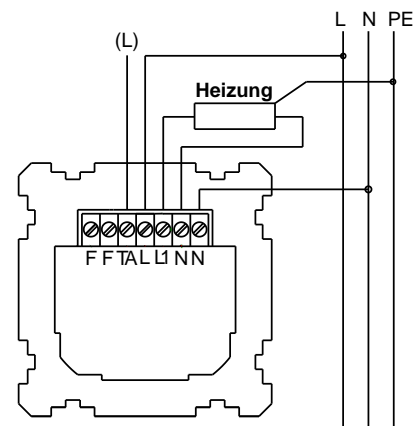


Fig.1

Installation

Temperature reduction (night reduction)

An external time switch or our thermostats with a timer can be used to implement a timed operating mode, especially for night reduction. For this the time switch voltage (L conductor of the 230 V mains supply) must be connected to the terminal marked TA. Otherwise terminal TA should remain unconnected.

The thermostats are installed using standard flush mounting boxes (to DIN 49073, Part 1). When using additional intermediate terminals, we recommend the use of a deep switch box (Ø 55 mm).

- Connections should be carried out in compliance with Fig. 1
- Fit the slide switch element supplied with the cover onto the corresponding slide switch of the device.
- Then position the central dial onto the flush mounting unit and screw it tight.
- Finally fit the adjusting dial with the groove onto the device.

Restricting the temperature range

The temperature setting range of the thermostats can be restricted using the dial.

Example: Setting temperature range to 2-4

- Adjust the dial to set the device to the average range, in this example therefore 3.
- Remove the dial carefully using the screwdriver.
- Use pliers to carefully pull out the retaining pin (located at the bottom in the middle).
- To turn the blue cog wheel to the lower setting limit 2.
- Then turn the red cog wheel to the upper setting limit 4.
- Refit the retaining pin.
- Refit the setting dial carefully.

You can now only move the dial between settings 2 and 4.

NOTE

The mains supply does not have to be switched off to set the temperature range.

Operation

Switching OFF the heater

To switch off the heater, move the slide switch (see Fig. 3, pos. 1) down (circle symbol) to OFF

Switching ON the heater

To switch on the heater, move the slide switch up to the ON position (circle/point symbol)

In this mode, the LED will light up when heat is required

Troubleshooting

Symptom

Heater not functioning

Possible cause/Solution

- Switch on / check mains supply
- Check heater
- Check set temperature

Mains supply failure

The heater will switch off in the event of a mains supply failure, break or short-circuit in the sensor cable.

