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## Room thermostat RT 10 D 230

### CAUTION!

You may only use the product if you have fully read and understood these operating instructions. Instruction is also available on AFRISO websites on the Internet.

### WARNING



Do not make any modifications to the product.

Verify that the product is not exposed to water.

Work on electrical circuits may only be performed by trained, qualified electricians.

Mains voltage (AC 230 V) can cause serious injury or death.

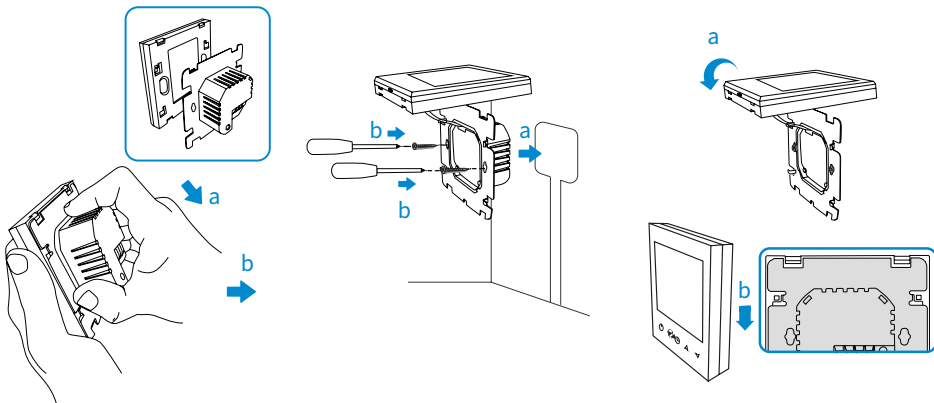
Disconnect the mains voltage supply before performing the work and ensure that it cannot be switched on.

### PRODUCT DESCRIPTION

Each room thermostat RT 10 measures the actual ambient temperature on an ongoing basis and compares the reference temperature to the actual temperature and switches the output to obtain the required reference temperature. In addition to the reference temperature, you can store timer programs (for example, Day/Night). The display shows various values (for example, temperature, time, heating mode).

An additional NTC temperature probe can be connected to the RT 10 room thermostat (not included in scope of delivery) which can be used as a floor temperature sensor or as an alternative room temperature sensor, depending on the configuration.

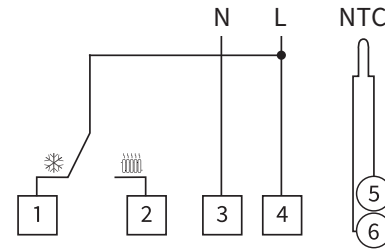
### MOUNTING



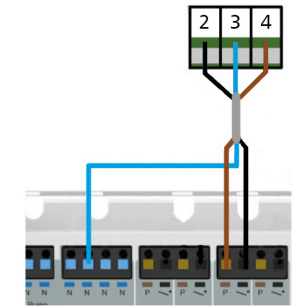
The mounting site of the RT 10 room thermostat must provide protection from the weather. Room thermostat RT 10 is designed for wall mounting in a standard Ø60 mm electrical box. The room thermostat RT 10 must be mounted at eye level, at least 30 cm away from doors and windows. The room thermostat RT 10 is fixed by means of the fixing holes on the back of the housing.

### ELECTRICAL WIRING DIAGRAM

Thermostat electrical connection



### ELECTRICAL CONNECTION WITH WB 10 D




### SERVICE MENU



The service menu of the thermostat contains advanced settings that modify its operation. To enter the service menu, first switch off the thermostat using the button . Then press and hold the and buttons for 5 seconds. The functions available in the service menu are shown below.




Name	Description of the functions	Possible settings	Default setting
SEN	Temperature sensor selection	00: No external NTC sensor (thermostat operates on the basis of the temperature indication from the internal sensor) 01: The thermostat operates on the basis of temperature readings from an external NTC sensor (measurement from the internal sensor is ignored) 02: The thermostat works on the basis of temperature readings from an internal as well as an external sensor	00
OSV	External sensor temperature limitation (only active at setting 02 in SEN parameter)	5÷99°C	42°C
DIF	Hysteresis of external sensor (only active at settings 01 or 02 in SEN parameter)	1÷9°C	2°C
SVH	Limitation of the maximum temperature that can be set	5÷99°C	35°C
SVL	Limitation of the minimum temperature that can be set	5÷99°C	5°C
ADJ	Correction of the measured temperature indication	-5÷+5°C	0,0°C
FRE	Anti-freeze function	00: Deactivated   01: Activated	00
PON	Operation after power loss	00: When the power supply is restored the thermostat automatically switches off 01: When the power supply is restored the thermostat switches on automatically	00
FAC	Factory settings	08: Cancel   00: Restore factory settings	08

## USE OF THE ROOM THERMOSTAT RT 10








**Setting date and time:** To set the time and the date, press the key , and then set the displayed time with the key  and .

Press the key  once to set the hours. Press the key a second time to set the minute and a third time to set the day of the week.

**Locking the keys:** To activate the keyboard lock, hold down the key  for 5 seconds. The keyboard lock is deactivated by pressing the key  for 5 seconds.





**Manual mode:** Press the key M. Set the temperature with the keys  and . The mode remains on until the M key is pressed again. Manual mode is indicated by the symbol  being displayed.

**Temporary manual mode:** Press any key. When the symbol  flashes, you can change the temperature with the keys  or . The temperature in this mode will be valid until the end of the current schedule interval.



**Week mode:** Hold down the key M. When "Loop" is displayed, set the days of the week with  or . Press the key M. Set the temperature with the keys  or . Press the key . Set the time with the keys  or . If you press the key M, you switch between the days and the temperatures.

Within the schedule, the week can be divided into: 5, 6 or 7 working days. The following time intervals can be configured for workdays and days off:

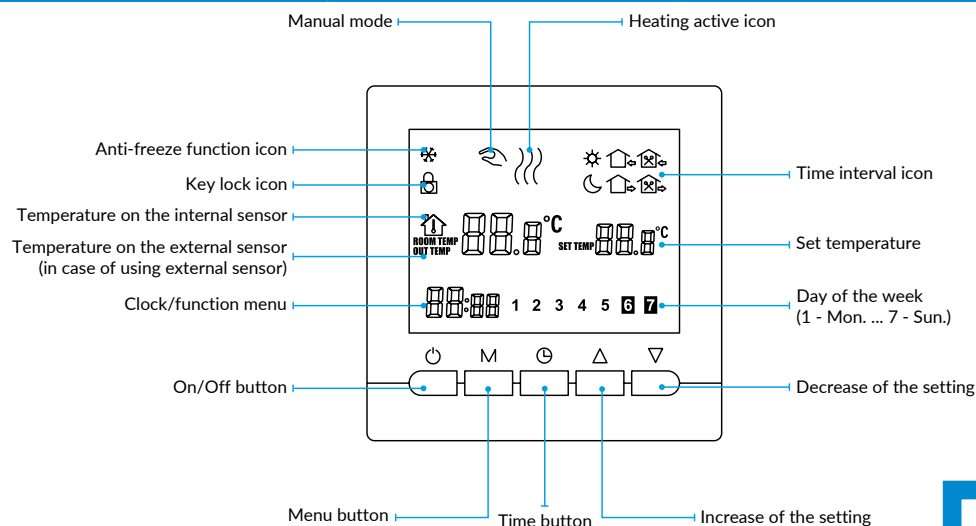
### Time intervals for working days

Icon	Starting time	Default setting
	6:00	20°C
	8:00	15°C
	11:30	15°C
	12:30	15°C
	17:30	22°C
	22:00	15°C

### Time intervals for days off

	8:00	22°C
	23:00	15°C

## INDICATION



## NTC SENSOR FUNCTION DESCRIPTION (ONLY WORKS WHEN SEN PARAMETER = 02)

When the temperature measured by the additional (external) NTC sensor exceeds the temperature set in the OSV parameter, the thermostat will switch off the control output (stop heating), even if the set temperature has not been reached in the heating zone. This function is intended to protect the floor in an underfloor heating system from overheating, which can lead to permanent damage to the floor.

## SENSOR FAILURE

You must correctly select the internal or external temperature sensor against which the thermostat will operate. If the selection is wrong or the sensor is faulty, the display will show Er. The thermostat will not operate until the fault is corrected.

## ANTI-FREEZE FUNCTION DESCRIPTION

The anti-freeze function works independently of schedules and thermostat settings, sending a heating signal when a temperature drop below 5°C is detected. Once the temperature exceeds 7°C, the thermostat stops transmitting the heating signal.

## TECHNICAL SPECIFICATIONS

General parameters	Value
Dimensions (H x B x T)	86 x 86 x 40 mm
Mounting holes spacing	60 mm
Weight	163 g
Ambient temperature	5÷60°C
Measuring range	5÷99°C
Type of the external sensor	NTC
Electrical parameters	Value
Supply voltage	230 V AC
Power consumption	< 0,3 W
Pollution degree	II
Rated impulse voltage	2500 V
Protection class (EN 60730)	II
Degree of protection (EN 60529)	IP20
Contact rating	Maximum 3 A 250 V AC

## APPROVALS AND CERTIFICATES

AFRISO GmbH hereby declares that the product complies with:

- Low Voltage Directive 2014/35/UE,
- EMC Directive 2014/30/UE,
- RoHS II Directive 2011/65/UE.



The complete text of the EU declaration of conformity is available on the Internet at: [www.afriso.pl](http://www.afriso.pl) / [www.afriso.com](http://www.afriso.com).

## DECOMMISSIONING, DISPOSAL



1. Disconnect the product from the power supply.
2. Dismount the product.
3. In the interest of environmental protection, the decommissioned appliance must not be disposed of with unsorted household waste. Return the product to the appropriate collecting point or to the manufacturer's or distributor's collecting point.

## WARRANTY

Product guarantee in accordance with the general conditions of sale and delivery.

## RETURNING THE DEVICE

Get in touch with us before returning your product ([service@afriso.de](mailto:service@afriso.de)).

## ADDRESSES

The addresses of the companies representing the AFRISO Group worldwide can be found at [www.afriso.com](http://www.afriso.com).