

Function:

When used in combination with Oventrop electrothermal or electromotive actuators and Oventrop radiator valves, the Oventrop room thermostats allow for an individual room temperature control or, depending on the layout of the pipework, a zone control.

A timed temperature control can be realised with the Oventrop room thermostat-clock or the Oventrop electronic room thermostat with adjustable timed programme.

Room thermostat - surface mounting (heating)

Tender specification:

Room thermostat 230 V/24 V

Room thermostat with temperature setback option, nominal value setting via rotary knob, frost protection, thermal feedback.

The control range can be limited by using the concealed limiting elements (on reverse side of the rotary knob).

The model with concealed temperature setting is equipped with a closed casing cover without rotary knob so that the nominal value cannot be modified from outside. The casing cover has to be removed for nominal value setting.

Used in combination with electrothermal actuators "Aktor T 2P" (two point).

Technical data:

Temperature range:	5 °C up to 30 °C
Temperature setback:	about 5 K (via external time switch)
Operating current:	230 V, 50/60 Hz 24 V, 50/60 HZ
Switching current:	10 mA - 10 (4) A with 250 V Connection of a maximum of 12 electrothermal actuators 1 (1) A with 24 V Connection of a maximum of 3 electrothermal actuators
Type of contact:	1 break contact
Switching temperature difference:	about 0.5 K
Protection:	IP 30
Colour:	white
Heating:	Use electrothermal actuators (two point) "closed with current off"
Cooling:	Use electrothermal actuators (two point) "open with current off"

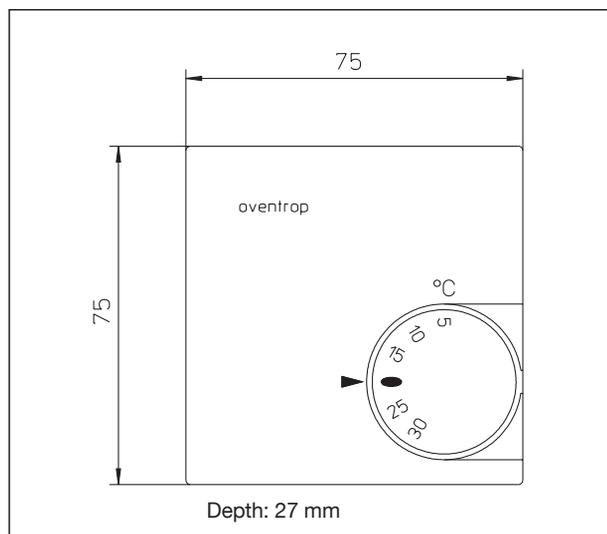
Timed temperature setback by connection to the Oventrop room thermostat-clock or to an electric time switch.

Models:

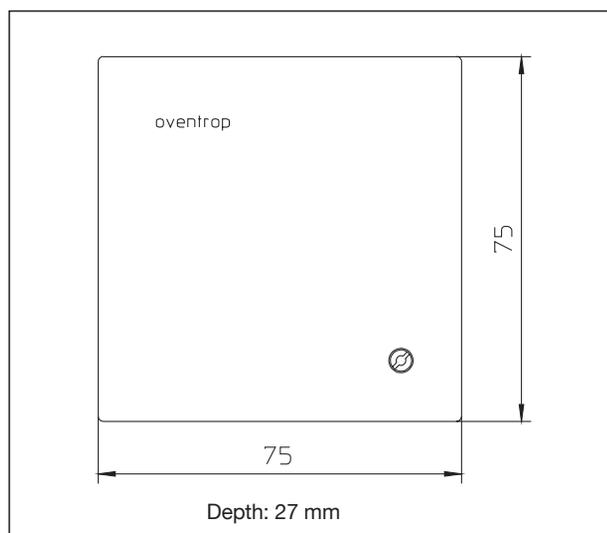
230 V	1152051
24 V	1152052
230 V with concealed temperature setting	1152055

Item no.:

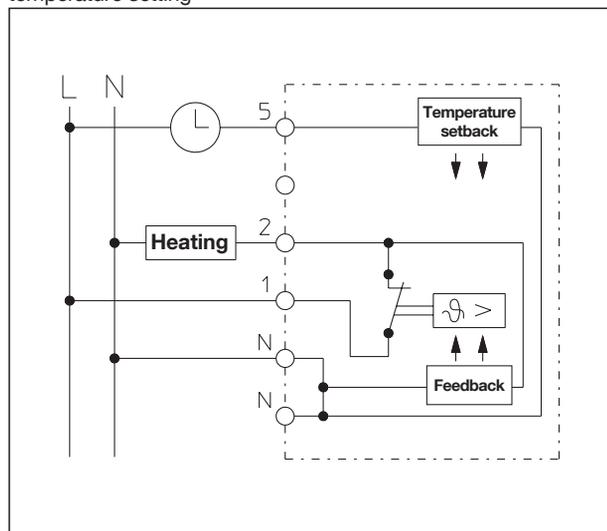
1152051
1152052
1152055



Room thermostat - surface mounting



Room thermostat - surface mounting, with concealed temperature setting



Wiring diagram

Room thermostat- flush mounting (heating)

Tender specification:

Room thermostat with temperature setback option, nominal value setting via rotary knob, frost protection, thermal feedback. The control range can be limited by using the concealed limiting elements (on reverse side of the rotary knob). Installation in a standard flush socket, Ø 55. Used in combination with electrothermal actuators “Aktor T 2P” (two point).

Technical data:

- Temperature range: 5 °C up to 30 °C
- Temperature setback: about 4 K (via external time switch)
- Operating current: 230 V, 50/60 Hz
24 V, 50/60 Hz
- Switching current: 10 mA - 10(4) A
Connection of a maximum of 12 electrothermal actuators
- Type of contact: 1 break contact
- Switching temperature difference: about 0.5 K
- Protection: IP 30
- Colour: white
- Installation: in a standard flush socket Ø 55 (according to DIN 49073)
- Heating: Use electrothermal actuators (two point) “closed with current off”
- Cooling: Use electrothermal actuators (two point) “open with current off”

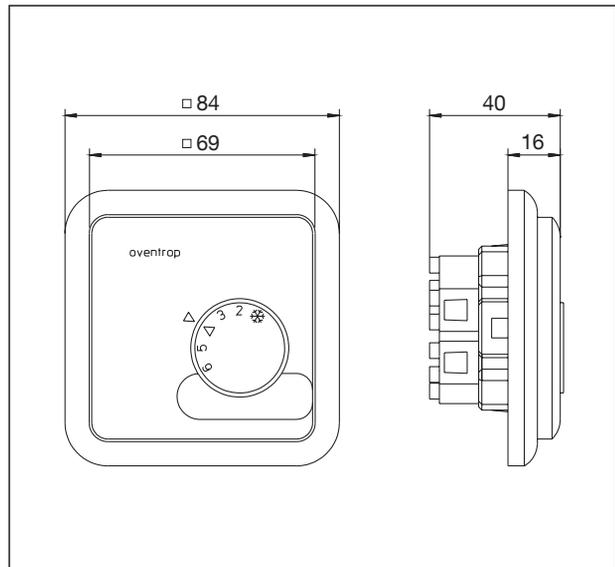
Time temperature setback by connection to the Oventrop room thermostat-clock or Oventrop electronic room thermostat (heating/cooling).

Models:

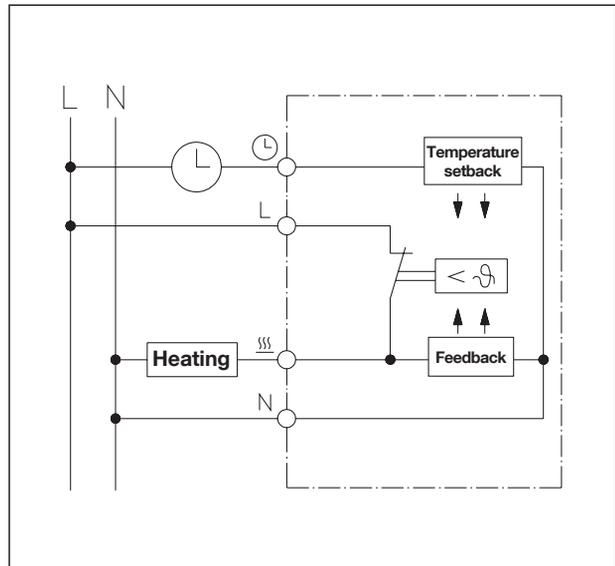
- 230 V
- 24 V

Item no.:

- 1152071
- 1152072



Room thermostat - flush mounting



Wiring diagram

Room thermostat-clock - surface mounting (heating)

Tender specification:

Room thermostat with time switch for timed temperature setback, additional manual control of constant operation and constant setback, nominal value setting via rotary knob, frost protection, temperature setback adjustable, output signal PWM (pulse-width modulation).

The control range can be limited by using the concealed limiting elements (on reverse side of the rotary knob).

Used in combination with electrothermal actuators "Aktor T 2P" (two point).

Technical data:

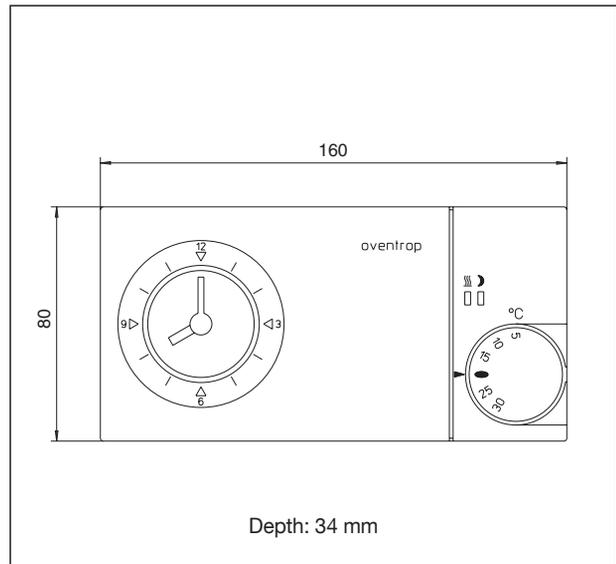
- Temperature range: 5 °C up to 30 °C
- Setback temperature: 5 °C up to 30 °C
(infinitely adjustable, under the cover)
- Regulation behaviour: Proportional control (similar to steady control due to pulse-width modulation)
- Proportional band: 1.5 K
- Operating current: 230 V, 50/60 Hz
24 V, 50/60 Hz
- Power consumption: < 1.5 W
- Switching current: 10 mA ... 16 A $\cos \varphi = 1$
max. 4 A $\cos \varphi = 0.6$
Connection of a maximum of 20 electrothermal actuators
- Switching voltage: 24 V up to 250 V AC
- Type of contact: 1 change-over contact, volt free
- Programme switch: Day/Automatic/Night
(under the cover)
- Time switch output: 230 V: max. 50 mA
24 V: max. 150 mA
maximum of 20 temperature setback inputs
- Setting of switching times: for room thermostat with daily setting programmable in 15 min. intervals,
for room thermostats with weekly setting programmable in 1 h intervals
- Power reserve time switch: about 100 h
- Protection: IP 30
- Protective system: II
- Colour: white
- Operating temperature: -10 °C up to +40 °C,
without condensation
- Storage temperature: -25 °C up to +65 °C
- Heating: Use electrothermal actuators
(two point) "closed with current off"
(terminal 2)

Models:

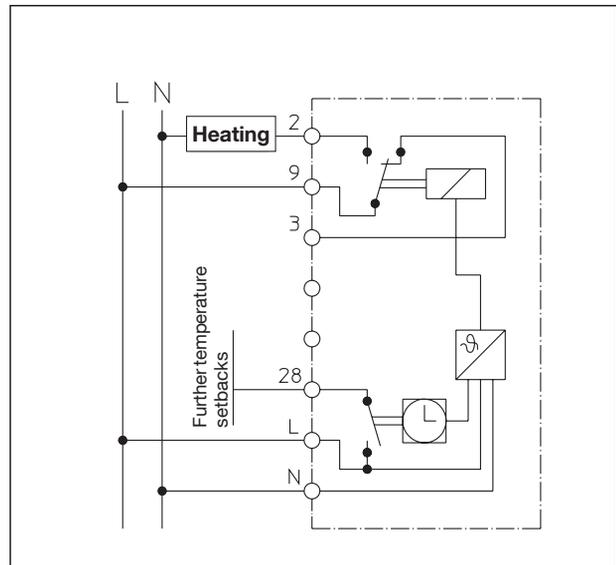
- 230 V, with daily setting
- 230 V, with weekly setting
- 24 V, with weekly setting

Item no.:

- 1152551
- 1152552
- 1152554



Room thermostat-clock - surface mounting



Wiring diagram

Room thermostat - surface mounting (heating and cooling)

Tender specification:

Room thermostat 24 V, with one proportional output 0-10 V each for heating and cooling (may be used in four-pipe systems). Nominal value setting via rotary knob, adjustable neutral zone. The control range can be limited by using the concealed limiting elements (on reverse side of the rotary knob). Used in combination with the electrothermal actuator "Aktor T ST L", item no. 1012953, and the electromotive actuators "Aktor M ST L", item no. 1012705/06.

Technical data:

Temperature range:	5 °C up to 30 °C
Operating current:	24 V AC/DC, 50/60 Hz
Power consumption:	0.35 W with 24 V
Outputs:	0-10 V DC
Max. output voltage:	13 V
Max. current load:	3 mA
	Connection of a maximum of 12 electromotive actuators
	Connection of a maximum of 20 electrothermal actuators
Neutral zone:	2 K (0.5 up to 7.5 infinitely adjustable)
Proportional band:	1.5 K
Temperature sensor:	NTC (intern)
Protective system:	shockproof
Protection:	IP 30
Colour:	white
Item no.:	1152151

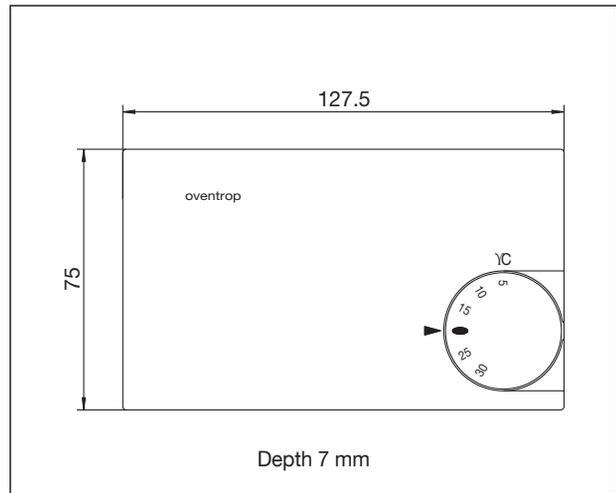
Function:

The nominal value adjusts the temperature at which a voltage of 1.5 V is reached at the output "heating".

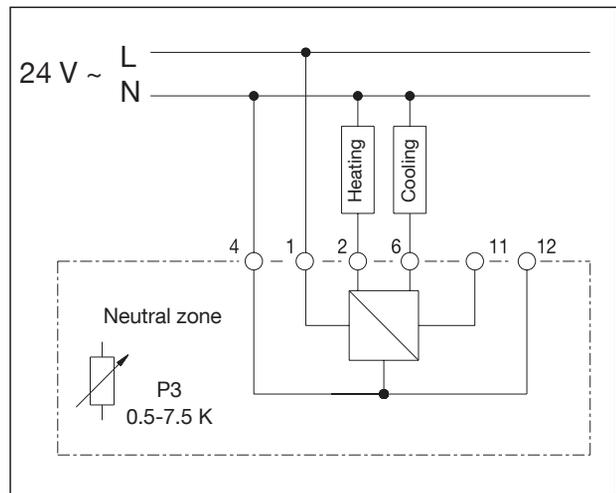
With the temperature rising, the voltage at the output "heating" drops below 1.5 V after having reached the nominal value. When the sensor temperature drops, the voltage at the analogue output "heating" rises up to 10 V within the proportional band $X_p = 1.5$ K.

If the nominal value has been exceeded (heating "off") and the sensor temperature continues to rise, the voltage at the output "heating" drops to almost 0 V and the voltage at the output "cooling" adjusts to 1.5 V after sequence of the neutral zone. If the temperature continues to rise, the voltage at the output "cooling" increases to 10 V within the proportional band $X_p = 1.5$ K.

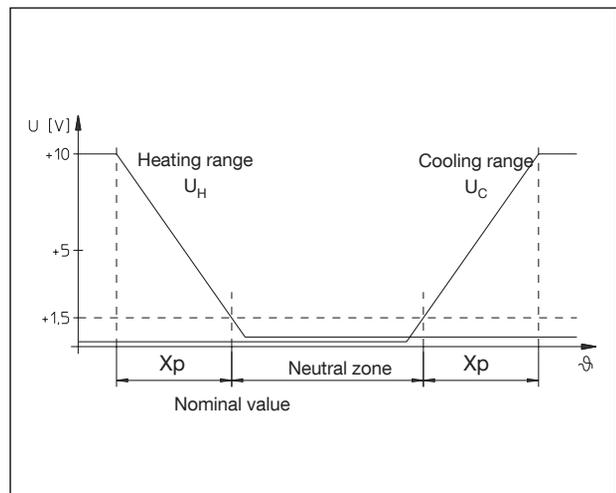
The neutral zone between the two ranges is preset at works to 2 K (P3 marking on 2 K). After removal of the upper body housing, the neutral zone can be set between 0.5 K (limit stop on the left hand side) and 7.5 K (limit stop on the right hand side) with the help of the potentiometer P3 (centre of the PC board).



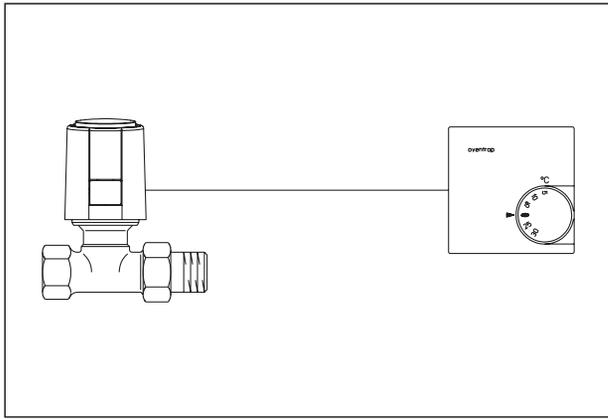
Room thermostat - surface mounting



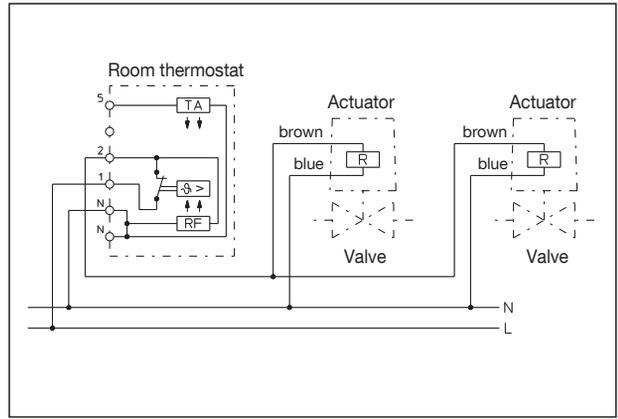
Wiring diagram



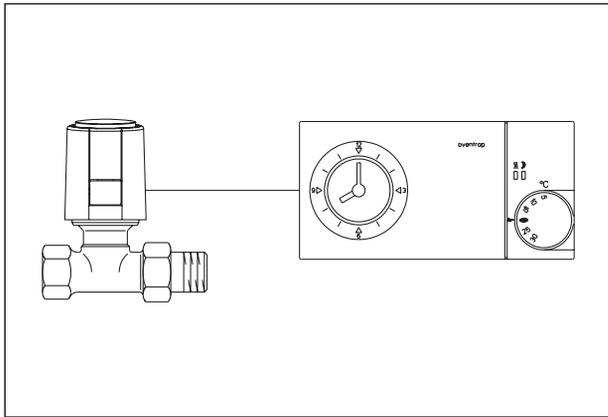
Functional diagram



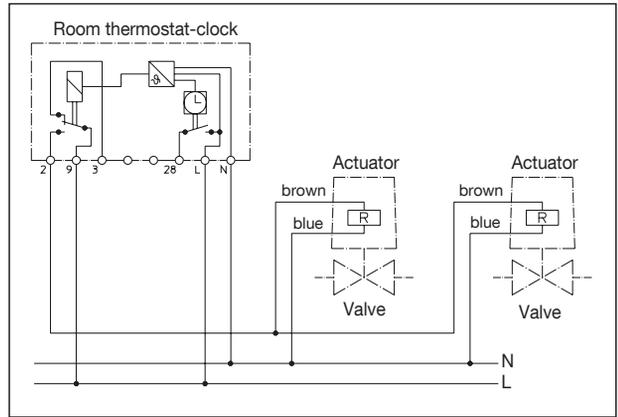
Connection example 1



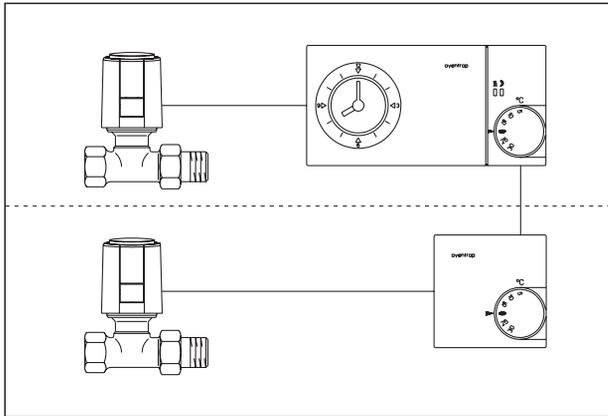
Wiring diagram



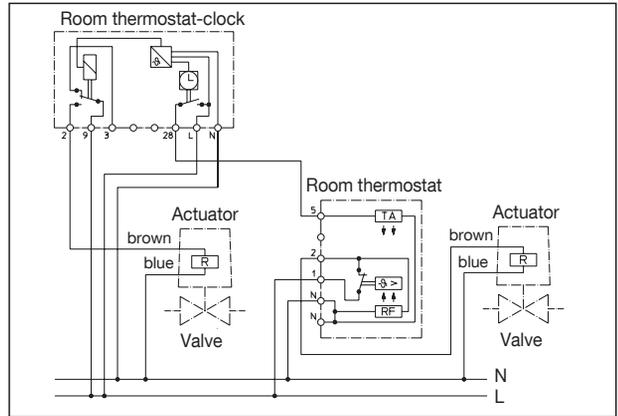
Connection example 2



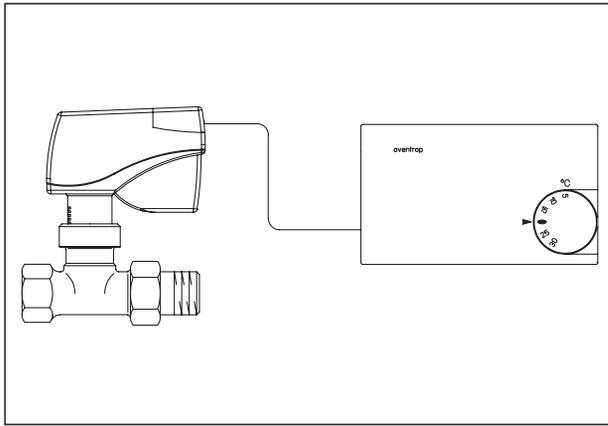
Wiring diagram



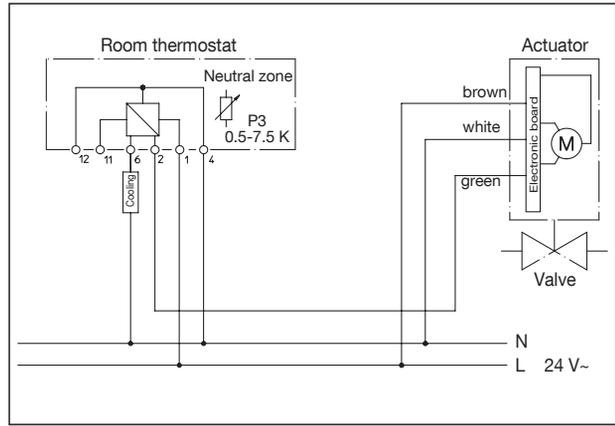
Connection example 3



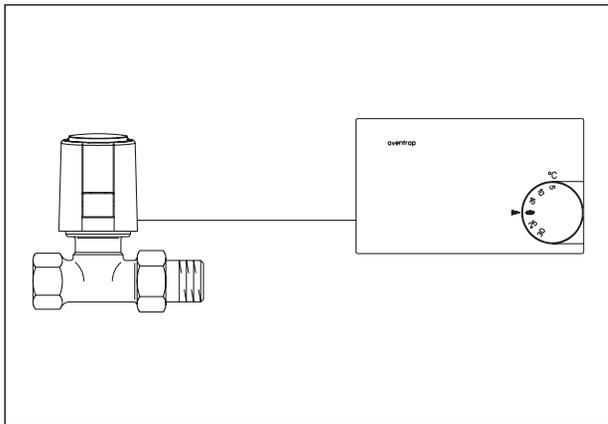
Wiring diagram



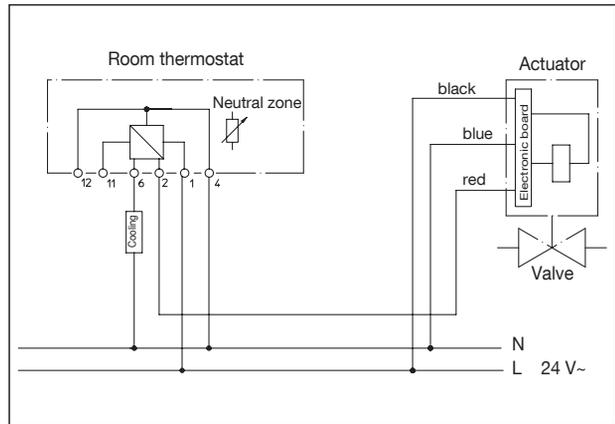
Connection example 4



Wiring diagram



Connection example 5



Wiring diagram

Subject to technical modifications without notice.

Product range 1
ti 113-EN/10/MW
Edition 2018