

# INSTRUCTION

## COMPACT CONTROL UNIT TT-R2

INSTALLATION AND OPERATING INSTRUCTIONS  
PLEASE READ BEFORE INSTALLATION!



STAND 04/2025

# Compact control unit TT-R2

Suitable for:



(Delivery scope only control unit, without thermostat)

ORDER NO.

5206 Compact control unit TT-R2



The TT-R2 compact control unit has been specially developed for controlling underfloor heating systems in radiator heating circuits. It enables efficient control of the heating system with a high-efficiency pump and integrated safety temperature limiter.

- **Manifold connection:** G1" external thread for manifold type VA.
- **Pump:** High-efficiency pump HE 15-60/130.
- **Shut-off:** Ball valve DN25.
- **Supply:** Balancing and shut-off fitting DN20.
- **Return:** Pre-adjustable valve DN 20, G $\frac{3}{4}$ " internal thread, connection thread M30x1,5 mm for thermostat TT-MTWZ-M, actuator retrofittable,  $K_{vs}$  2,74.
- **Connections:** G $\frac{3}{4}$ " internal thread.
- **Compact design:** Length of 230 mm.

The delivery includes a supply and return valve, a high-efficiency pump, two ball valves G1", screw fittings for connection to the manifold, a safety temperature limiter (STB-A) and two thermometers, packed in a box with installation instruction.

## Pump setting (ex work CP2)

### Differential pressure constant ( $\Delta p-c$ ):

The differential pressure setpoint H is kept at the set differential pressure setpoint over the permissible flow rate range up to the maximum characteristic curve. We recommend this type of control for underfloor heating circuits.

Hydraulic: passive

## FIXED SETPOINT CONTROL UNIT/THERMOSTAT TT-MTWZ-M



(Delivery scope only thermostat)

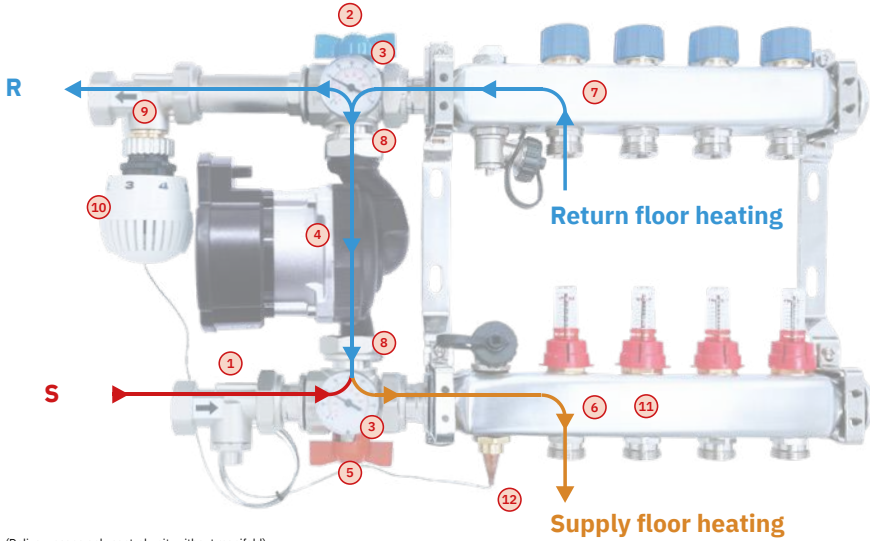
### TEMPERATURE SETTINGS

Scala	2	3	4	5	6	7
Temperature	20 °C	30 °C	40 °C	50 °C	60 °C	70 °C

### ORDER NO.

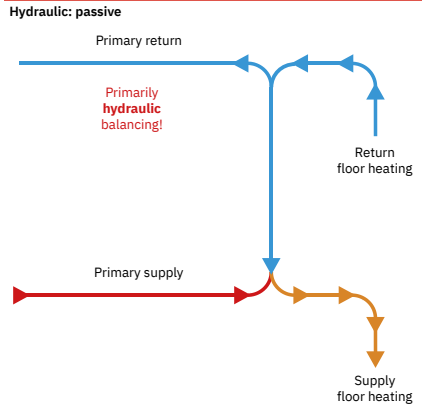
3025602 Thermostat TT-MTWZ-M

Thermostat with loose sensor for control unit  
 Temperature range 20-70 °C  
 Connection with union nut M30x1,5 mm  
 incl. immersion sleeve and clamping band



(Delivery scope only control unit, without manifold)

**FLOW PATHS**



**SCHEMATIC**

1	Balancing and shut-off fitting DN 20 - Primary supply
2	Ball valves Return
3	Thermometer
4	Heating pump
5	Ball valves Supply
6	Floor heating manifold Supply
7	Floor heating manifold Return
8	Backflow preventer (2x)
9	Valve DN 20 - Primary return
10	Thermostat TT-MTWZ-M
11	Mounting point STB-A
12	Immersion sleeve for fixed setpoint control unit TT-MTWZ-M



**Adjustment of the regulating and shut-off screw fitting DN 20 - Primary Supply**

Factory setting on delivery **1¼ turns**

## INSTRUCTIONS: INSTALLATION AND SETTINGS OF THE CONTROL UNIT TT-R2

Attention! Backflow preventer in return!



1. Mount the screwing parts and control unit to the manifold using the enclosed seals.



2. Tighten both screw connections.



3. Mount the thermostatic head on the control valve in the return pipe.



4. Mount the remote sensor with immersion sleeve or hose clamp to the supply manifold.



5. Set the pump to differential pressure constant and the desired delivery head.



6. Connect the pump with STB-A to the power supply.

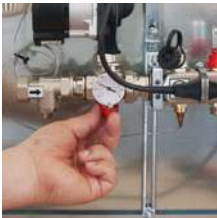


7. Mount STB-A on the supply manifold bar.



8. Set the thermostat to the desired temperature. (see thermostat scale p.2)

## INSTRUCTIONS: FLUSHING AND FILLING THE COMPACT CONTROL UNIT TT-R2



1. Close the ball valves.



2. Open the filling and drain valves slightly.



3. Connect the hoses.



4. Remove the sealing caps and open all flow meters.



5. Open the circle to be flushed and close all other circles. Turn on the water supply.



6. After completion, close the valve and simultaneously open the next valve.



7. Turn on the water supply. Close the fill and drain valves. Remove the hoses and put the caps on.



8. Open all valves and flow meters. Install sealing caps and open the ball valves.