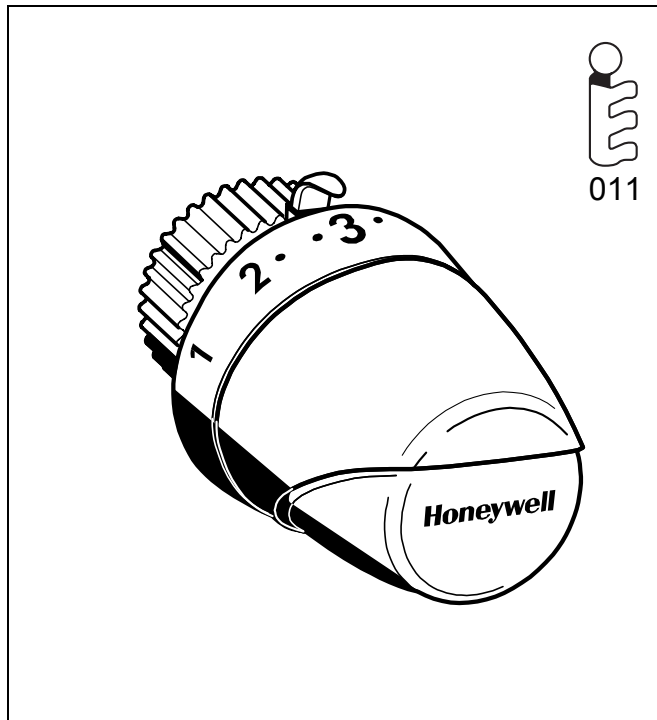


T2000 Series Thera-4 Design

COMPACT-SIZE DESIGN RADIATOR THERMOSTATS

PRODUCT DATA



Design

The radiator thermostat consists of:

- Handwheel with lid and socket
- Honeywell HW M30 x 1.5 connection and 11.5 mm closing dimension or Danfoss snapping RA type connection
- Sensor with support cage
- Liquid sensor
- Spindle assembly
- Connection nut

Materials

- Handwheel, lid and socket made of plastic, white to RAL9016 or chromium-plated
- Socket, support cage and spindle assembly made of plastic
- Sensor filled with liquid
- Connection nut made of nickel-plated brass

Application

A Radiator Thermostat is installed onto a Thermostatic Radiator Valve Body (TRV body). The combination of both, the Thermostatic Radiator Valve (TRV), controls the room temperature by adjusting the flow of hot water through a radiator.

TRVs are installed in water-based heating systems on the supply or, less commonly on the return connection of radiators. Radiator thermostats of this type with liquid sensor fulfill the European Standard EN 215 when used with certified Honeywell TRV bodies.

Honeywell radiator thermostats with Honeywell (HW) M30 x 1.5 connection are suitable for all TRV body and radiator inserts with M30 x 1.5 connection and 11.5 mm closing dimension.

Radiator Thermostats of this type with snapping (DA) type connection are suitable for TRV bodies and valve inserts with Danfoss (RA) type compatible snap connection.

Features

- „A“-class Energy-Efficiency certified according TELL labeling scheme
- Conforms with M30 x 1.5 connection to European standard EN 215
- Equipped with liquid sensor
- Modern ergonomical design
- Compact size
- Easy to clean
- Easy to equip with range stoppers

Specifications

Thermostat connection	M30 x 1.5 Snap connection	HW type or DA type
Setpoint range	0 - * - 1..5 * - 1..5	(with zero-position) (without zero-position)
Temperature range	1...28°C (34...82°F)	(with zero-position)
	6...28°C (43...82°F)	(without zero-position)
Closing dimension	11.5 mm	

NOTE: Zero-position is also thermostatically controlled - when temperature falls the TRV may open.

Function

Radiator thermostats of this type control the TRV body. The air passing around the sensor of the radiator thermostat causes the sensor to expand when the temperature rises. The expanding sensor closes the TRV accordingly. When the room temperature changes the TRV opens or closes proportionally. Only the amount of water required to maintain the room temperature set on the radiator thermostat is allowed to flow through the valve.

Dimensions and Ordering Information

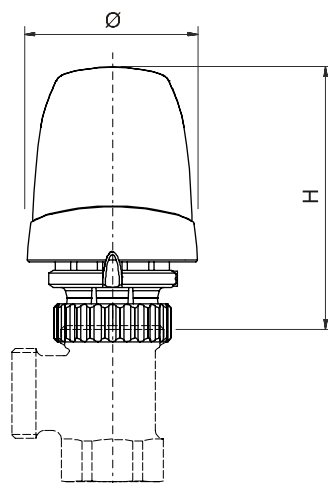


Fig. 1. Dimensions

Table 1. Dimensions

Type	H closed	H open	Ø
Thera-4 Design	73	79	49

NOTE: All dimensions in mm unless stated otherwise.

Table 2. Available versions and OS-Nos (OS=Ordering Specification)

Type	EN215 certification	Zero-position ('0')	Connection	Colour	Cap	OS-No.
Thera-4 Design and Thera-4 Design-DA with liquid-filled sensing element	•		M30 x 1.5	white/white	Honeywell	T2001
	•	•	M30 x 1.5	white/white	Honeywell	T2001W0
			DA type	white/white	Honeywell	T2001DA
		•	DA type	white/white	Honeywell	T2001DAW0
	•		M30 x 1.5	white/chrome	Honeywell	T2021
	•	•	M30 x 1.5	white/chrome	Honeywell	T2021W0
			DA type	white/chrome	Honeywell	T2021DA
		•	DA type	white/chrome	Honeywell	T2021DAW0

EN215 Information

All radiator thermostats of this type with M30x1.5 connection in connection with certified Honeywell TRV bodies conform to the European Standard EN215.

Table 3. Comparison of radiator thermostats of this type specs and EN 215 requirements

	Thera-4 Design T2001, T2021	EN215 requirements
Min. setpoint temperature	6°C (43°F)	5...12°C (41 ... 54°F)
Max. setpoint temperature	28°C (82°F)	≤ 32°C (90°F)
Hysteresis	0.45K	≤ 1.0K
Influence of differential pressure	0.22K	≤ 1.0K
Influence of heating medium	0.8K	≤ 1.5K
Response time	23 min.	≤ 40 min.

NOTE: All °C- and °F-values specified at ideal incident flow. This can differ from stated values depending on installation position and air flow.

NOTE: Influence of differential pressure depends on TRV body used.

Setpoint

Table 4. Radiator thermostats of this type with zero-position ('0')

Setpoint	0	*	1	2	3	4	5
°C	1	6	14	18	21	24	28
°F	34	43	57	64	70	75	82

Table 5. Radiator thermostats of this type without zero-position ('0')

Setpoint		*	1	2	3	4	5
°C		6	14	18	21	24	28
°F		43	57	64	70	75	82

NOTE: All °C and °F-values approximate. Heating can freeze when radiator thermostats with zero-position are set at position '0'. Zero-position is also thermostatically controlled - when temperature falls the TRV may open.

Please Note:

- To avoid stone deposit and corrosion the composition of the medium should conform with VDI-Guideline 2035
- Additives have to be suitable for EPDM sealings
- System has to be flushed thoroughly before initial operation with all valves fully open
- Any complaints or costs resulting from non-compliance with above rules will not be accepted by Honeywell
- Please contact us if you should have any special requirements or needs

Installation Examples

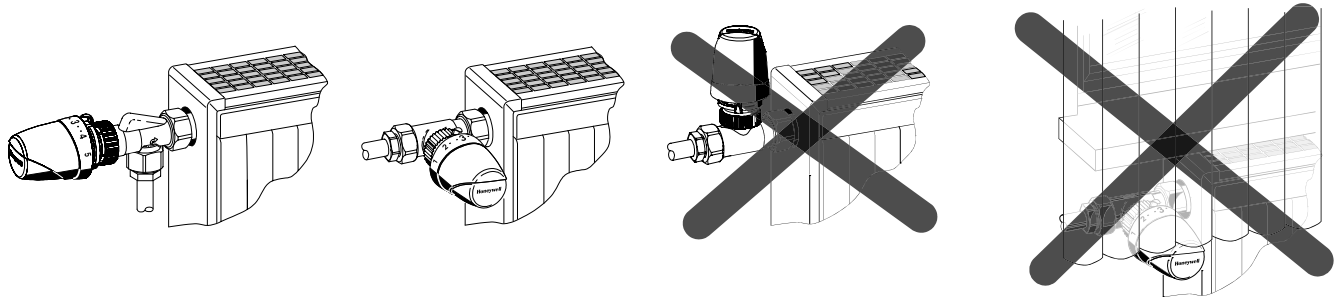


Fig. 2. Correct and false installation positions

Accessories

Theft-protection ring, white (RAL9016)



TA6900A001

Range stops



10 x blue and 10 x red
20 x white (RAL9016)

TA3000C001
TA3000C002

Decorating for connection nut



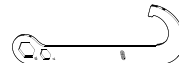
white (RAL9016)
10 pair, 20 pieces

chrome
10 pair, 20 pieces

TA1000A001

TA1000A002

Special tool for assembly of radiator thermostats



VA8210A001

Adapter



HZ-Adapter from M28 x 1.5
with 9.5 mm closing dimension
to M30 x 1.5 with
11.5 mm closing dimension

TA1010HZ01

Adapter



DA-Adapter from Danfoss
snap connection RA to
M30 x 1.5

TA1010DA01

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