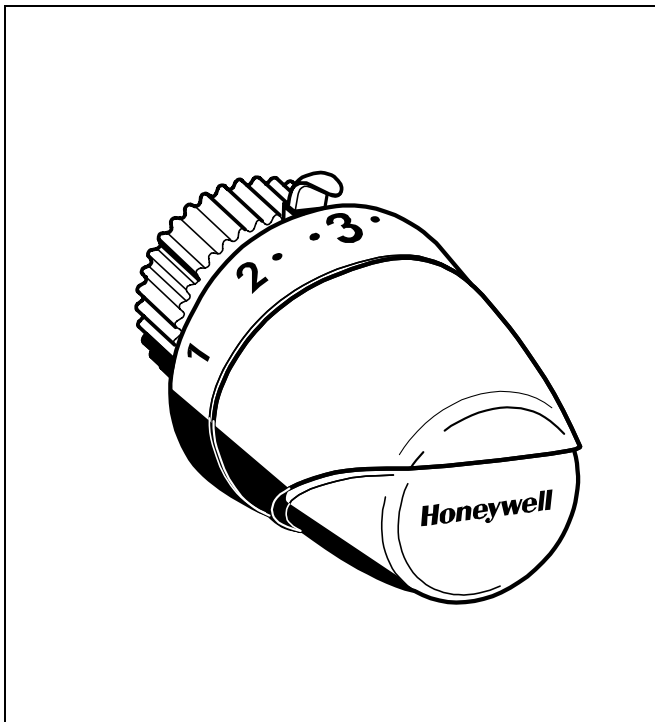


## T2000 SERIES - THERA-4 DESIGN

### COMPACT-SIZE DESIGN RADIATOR THERMOSTATS

#### PRODUCT DATA



### Design

The radiator thermostat consists of:

- Handwheel with lid and socket
- M30 x 1.5 connection and 11.5 mm closing dimension or Danfoss RA Series type connection
- Sensor with support cage
- Liquid-filled sensing element
- Spindle assembly
- Connection nut

### Materials

- Handwheel, lid and socket made of plastic, white to RAL9016 or chromium-plated
- Support cage and spindle construction made of plastic
- Connection nut made of nickel-plated brass

### Application

Thermostats are installed onto thermostatic valve bodies (TRV bodies). The combination of thermostat and TRV body, (TRV), controls the room temperature by regulating the flow of heating water into a heating surface.

TRVs are installed in water-based heating systems at the supply or, less commonly at the return connection of radiators or other heating surfaces.

Thermostats of this type conform to the European Standard EN215 when used with certain Honeywell TRV bodies.

Thermostats of this type with M30 x 1.5 connection are suitable for all TRV bodies and radiator inserts with M30 x 1.5 connection and 11.5 mm closing dimension.

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

### Features

- **Conforms with M30 x 1.5 connection to European standard EN 215**
- **Equipped with liquid-filled sensing element**
- **Modern ergonomical design**
- **Compact size**
- **Easy to clean**
- **Equipped with easy to use limiting tabs**

### Specifications

Thermostat connection	M30 x 1.5 or Danfoss snap connection
Setpoint range	0 - * - 1..5 (with zero-position) * - 1..5 (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 (Thera-4 Design)

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

## Dimensions and Ordering Information

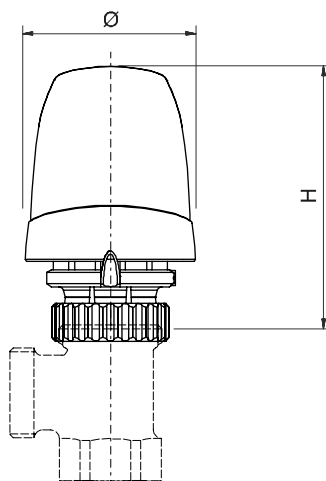


Fig. 1. Dimensions

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
	•		M30 x 1.5	chrome/chrome	Honeywell	T2221
	•	•	M30 x 1.5	chrome/chrome	Honeywell	T2221W0
			DA type	chrome/chrome	Honeywell	T2221DA
		•	DA type	chrome/chrome	Honeywell	T2221DAW0

## EN215 Information

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

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

	Thera-4 Design	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	≤ 0.3K	≤ 1.0K
Influence of differential pressure	0.1...0.5K	≤ 1.0K
Influence of static pressure	0.4K	≤ 1.0K
Influence of heating medium	0.6K	≤ 1.5K
Response time	30 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. Thermostats of this type with zero-position ('0')**

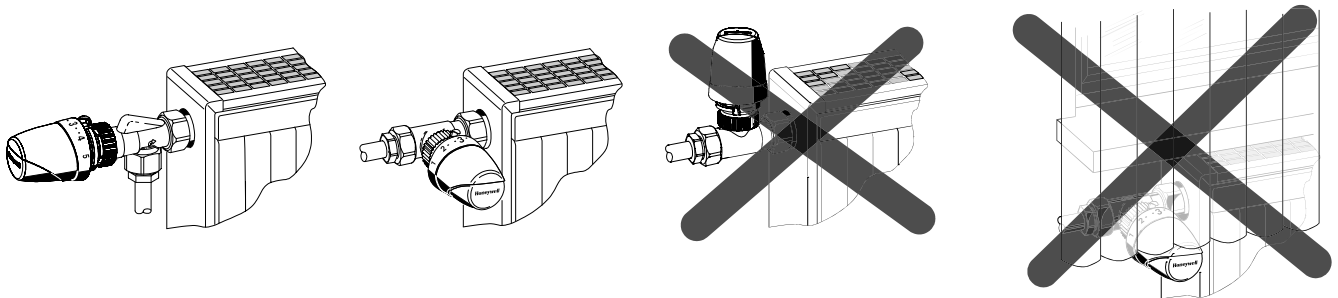
Setpoint	0	*	1	2	3	4	5
°C	1	6	14	18	21	24	28
°F	34	43	57	64	70	75	82

**Table 5. 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 thermostats with zero-position are set at position '0'. Zero-position is also thermostatically controlled - when temperature falls the TRV may open.

## Installation Examples



**Fig. 2. Correct and false installation positions**

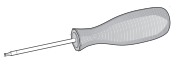
## Accessories

### Theft-protection ring, white



TA6900A001

### Torx-Screwdriver for theft-protection ring



TA6900B001

### Range stops



10 x blue and 10 x red  
20 x white  
20 x white

TA3000C001  
TA3000C002  
TA3000C003

### Cover ring, white



only for M30 x 1.5 connection

TA1000A001

### Special tool for assembly of thermostat



VA8210A001

### Adapter



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

TA1010DA01

### 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

### 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

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