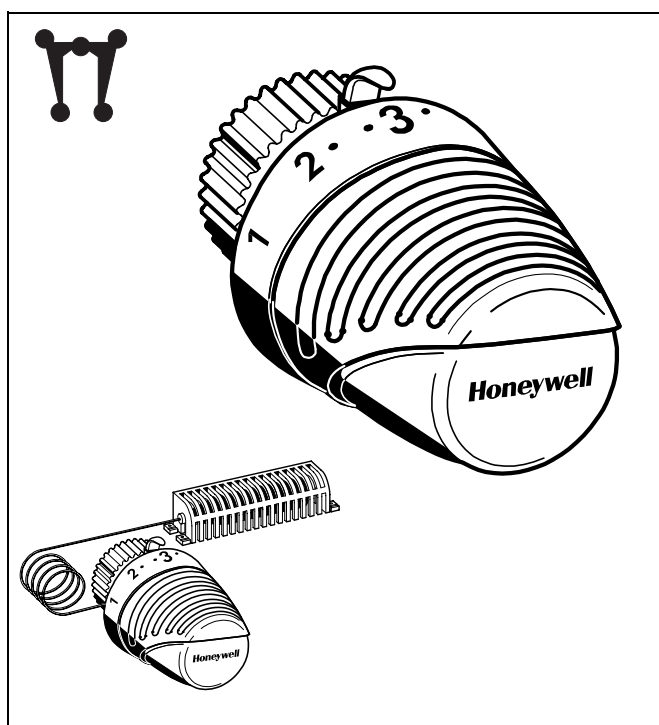


T3000 Series Thera-4 Classic

COMPACT-SIZE RADIATOR THERMOSTATS



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
- Internal or remote sensor
- Liquid- or wax sensor
- Spindle assembly
- Connection nut

Materials

- Handwheel, lid and socket made of plastic, white to RAL9016
- Socket, support cage and spindle assembly made of plastic
- Sensor filled with liquid or wax
- 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 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

- **Conforms with M30 x 1.5 connection to European standard EN 215**
- **Available with liquid- or wax 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) 6...28°C (43...82°F)	(with zero-position) (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

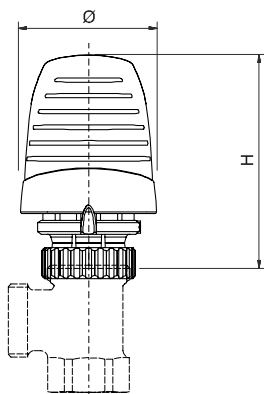


Fig. 1. Thera-4 Classic with internal sensor

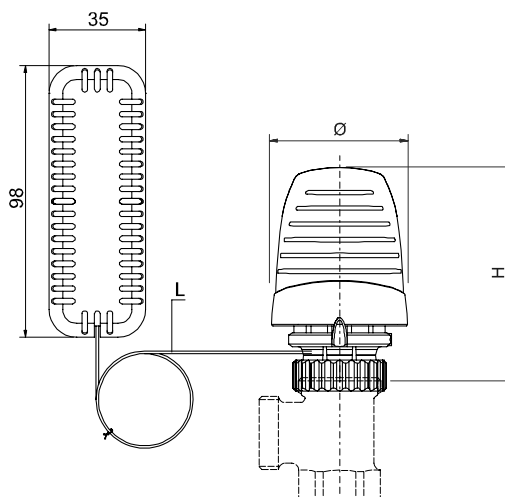


Fig. 2. Thera-4 Classic with remote sensor

Table 1. Dimensions (mm)

Type	H closed	H open	Ø	L
Thera-4 Classic	73	79	49	2.0 - 5.0 m

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	Capillary tube length	Colour	OS-No.
Thera-4 Classic and Thera-4 Classic-DA with liquid sensor	•		M30 x 1.5	-	white	T3001
	•	•	M30 x 1.5	-	white	T3001W0
			DA type	-	white	T3001DA
		•	DA type	-	white	T3001DAW0
Thera-4 Classic and Thera-4 Classic-DA with remote sensing element	•		M30 x 1.5	2.0 m	white	T300120
	•	•	M30 x 1.5	2.0 m	white	T300120W0
			DA type	2.0 m	white	T300120DA
		•	DA type	2.0 m	white	T3001230DAW0
	•		M30 x 1.5	5.0 m	white	T300150
	•	•	M30 x 1.5	5.0 m	white	T300150W0

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 thermostats of this type specs and EN 215 requirements

	Thera-4 Classic	Thera-4 Classic with remote sensing element	EN 215 requirements
Min. setpoint temperature	6°C (43°F)	6°C (43°F)	5...12°C (41...54°F)
Max. setpoint temperature	28°C (82°F)	28°C (82°F)	≤ 32°C (90°F)
Hysteresis	0.4K	0.5K	≤ 1.0K
Influence of differential pressure	0.4K	0.5K	≤ 1.0K
Influence of static pressure	0.4K	0.4K	≤ 1.0K
Influence of heating medium	0.8K	0.45K	≤ 1.5K
Response time	25 min.	10 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

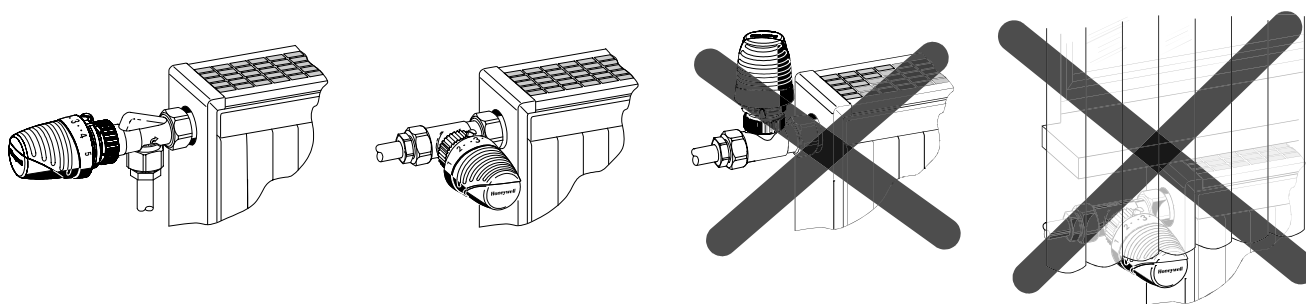


Fig. 3. Correct and false installation positions for radiator thermostats with internal sensor

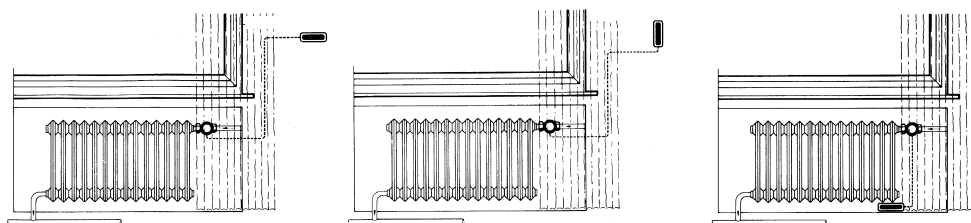


Fig. 4. Thera-4 Classic with remote sensor

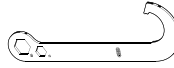
Accessories

Theft-protection ring, white (RAL9016)



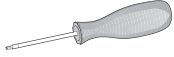
TA6900A001

Special tool for assembly of radiator thermostats



VA8210A001

Torx-Screwdriver for theft-protection ring



TA6900B001

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

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

TA1000A001

white (RAL9016)
1 pair, 2 pieces

TA1000A011

chrome
10 pair, 20 pieces

TA1000A002

chrome
1 pair, 2 pieces

TA1000A022

Environmental and Combustion Control

Honeywell GmbH

Hardhofweg

74821 Mosbach, Germany

Phone: +49 (6261) 810

Fax: +49 (6261) 81393

www.honeywell.com

EN0H-2000GE23 R0109
January 2009

© 2009 Honeywell International Inc.
Subject to change without notice

Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Technologies Sàrl, Rolle, Z.A. La Pièce 16, Switzerland or its authorized representative.

Honeywell