Honeywell

T6000 Series
Thera-3

RADIATOR THERMOSTATS WITH ERGONOMICAL DESIGN

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 heat exchanger.

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

Thera-3 type thermostats conform to the European Standard EN215 when used with Honeywell TRV bodies according to table 2 on page 8.

Thera-3 with **M30 x 1,5 connection** are suitable for all Honeywell TRV bodies and radiator inserts as well as other TRV bodies and radiator inserts with M30 x 1,5 connection and 11,5 mm closing dimension.

Thera-3-DA with **Danfoss type connection** are suitable for TRV bodies and valve inserts with a Danfoss RA type compatible snap connection.

Thera-3-HZ with **Herz type connection** are suitable for TRV bodies with M28 x 1,5 connection and 9,5 mm closing dimension.

Features

- **Thera-3 with M30 x 1.5 connection conforms to European standard EN215**
- **Available with liquid- or wax-filled sensing element**
- **Modern ergonomical design**
- **Equipped with easy to use limiting tabs**

Design

The thermostat consists of:
- Handwheel with lid and socket
- Sensor with support cage
- Spindle assembly
- Connection nut

Materials

- Handwheel, lid and socket made of plastic, white to RAL9010 or anthracite
- Support cage and spindle construction made of plastic
- Sensor filled with liquid or wax
- Connection nut made of brass, nickel-plated

Specifications

Thermostat connection	• M30 x 1,5 • Danfoss type snap connection • M28 x 1,5 (HZ-type)
Setpoint range	• 0 - ❄ - 1..5 (with zero-position) • ❄ - 1..5 (without zero-position)

Temperature range	With zero-position ('0'):
	    1...28°C (34...82°F)
	
	Without zero-position:
	    6...28°C (43...82°F)

Closing dimension	11,5 mm (Thera-3) 9,5 mm (Thera-3-HZ)

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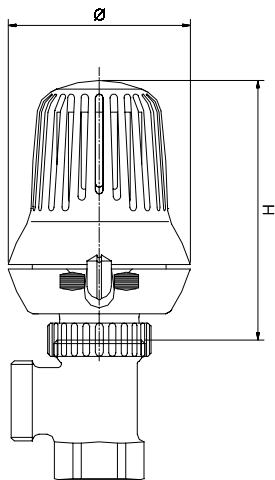
Dimensions

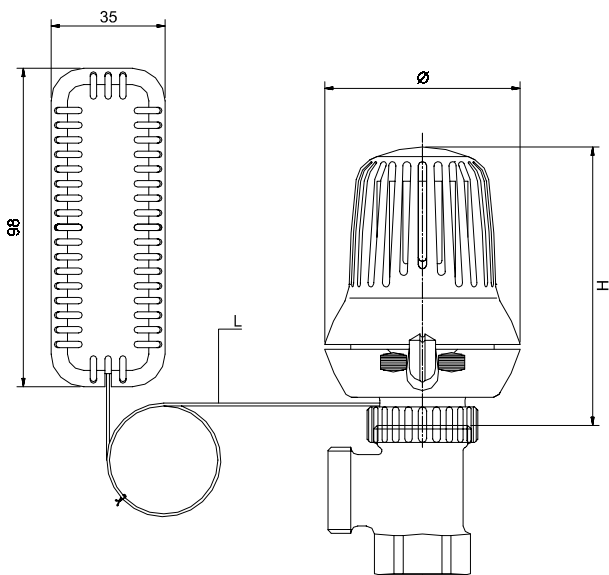**Fig. 1. Thera-3 with internal sensor**
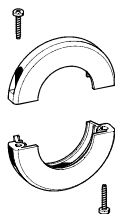

Fig. 2. Thera-3 with remote sensor

Table 1. Dimensions

Item	H closed	H open	Ø	L
Fig. 1 and Fig. 2	87	93	60	0,8 – 2,0 – 5,0 – 8,0 m

All dimensions in mm if not stated differently.

Accessories

Theft-protection ring, white

TA6900A001

Screwdriver for theft-protection ring
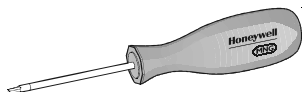
TA6900B001

Cover cap for customer specific logos, white

TA6000A001

Trim ring, white

TA1000B001

Cover ring, white

TA1000A001

Adapters

DA-Adapter from Danfoss snap connection to M30 x 1.5   TA1010DA01

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

Ordering Information

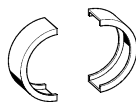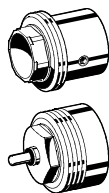| Item	Zero-position ('0')	Connection	Capillary tube length	Colour	Cap	OS-No.
Thera-3, Thera-3-DA and Thera-3-HZ with internal sensor						
Liquid-filled sensing element		M30 x 1,5	—	white	MNG	T6001
		M30 x 1,5	—	white	none	T6001C
		M30 x 1,5	—	white	Honeywell	T6001H
	•	M30 x 1,5	—	white	MNG	T6001W0
	•	M30 x 1,5	—	white	none	T6001W0C
	•	M30 x 1,5	—	white	Honeywell	T6001W0H
		M30 x 1,5	—	anthracite	MNG	T6011
	•	M30 x 1,5	—	anthracite	MNG	T6011W0
		DA type	—	white	MNG	T6001DA
		DA type	—	white	none	T6001DAC
		DA type	—	white	Honeywell	T6001DAH
	•	DA type	—	white	MNG	T6001DAW0
	•	DA type	—	white	none	T6001DAW0C
	•	DA type	—	white	Honeywell	T6001DAW0H
		M28 x 1,5	—	white	MNG	T6001HZ
	•	M28 x 1,5	—	white	MNG	T6001HZW0
Wax-filled sensing element		M30 x 1,5	—	white	MNG	T6002
		M30 x 1,5	—	white	none	T6002C
		M30 x 1,5	—	white	Honeywell	T6002H
	•	M30 x 1,5	—	white	MNG	T6002W0
	•	M30 x 1,5	—	white	none	T6002W0C
	•	M30 x 1,5	—	white	Honeywell	T6002W0H
Thera-3 and Thera-3-DA with remote sensor						
Liquid-filled sensing element		M30 x 1,5	0,8 m	white	MNG	T600108
		M30 x 1,5	2,0 m	white	MNG	T600120
		M30 x 1,5	5,0 m	white	MNG	T600150
		M30 x 1,5	8,0 m	white	MNG	T600180
	•	M30 x 1,5	0,8 m	white	MNG	T600108W0
	•	M30 x 1,5	2,0 m	white	MNG	T600120W0
	•	M30 x 1,5	5,0 m	white	MNG	T600150W0
	•	M30 x 1,5	8,0 m	white	MNG	T600180W0
	•	M30 x 1,5	0,8 m	white	Honeywell	T600108W0H
	•	M30 x 1,5	2,0 m	white	Honeywell	T600120W0H
		DA type	2,0 m	white	MNG	T600120DA
	•	DA type	2,0 m	white	MNG	T600120DAW0

EN215 Information

OS-Nos. T6001, T6001W0, T6002, T6002W0, T6001xx and T6001xxW0 type Thera-3 thermostats in connection with below TRV bodies (marked ●) conform to the European Standard EN215. The highlighted boxes identify available body patterns of one certain valve type.

Table 2. Comparison of Thera-3 specs and EN 215 requirements

	Thera-3	EN 215 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	0,4K	≤ 1,5K
Response time	22 min.	≤ 40 min.

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

Table 3. EN 215 cross reference

Valve type	Angle to DIN	Straight to DIN	Angle to NF	Straight to NF	Compact angle	Compact straight	Horizontal angle	Corner angle	Swanneck	Other	Angle (return)	Straight (return)
BB	•	•	•	•	•	•						
KV$_3$												
KV$_4$												
KV$_5$	•	•	•	•								
UBG	•	•	•	•								
GB										•		
SL	•	•	•	•								
V	•	•	•	•	•	•						
FV	•	•	•	•	•	•						
SC												
H												

Setpoint

Thera-3 type thermostats with zero-position ('0')

Setpoint	0	❄	1	2	3	4	5
°C	1	6	12	16	20	24	28
°F	34	43	54	61	68	75	82

Thera-3 type thermostats without zero-position ('0')

Setpoint		❄	1	2	3	4	5
°C		6	12	16	20	24	28
°F		43	54	61	68	75	82

NOTE: All °C and °F-values approximate.

NOTE: Heating can freeze when thermostats with zero-position are set at position '0'.

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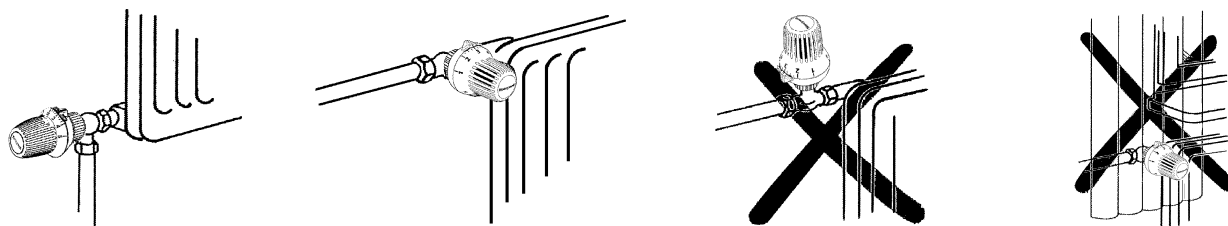
Installation Examples

Fig. 3. Installation of Thera-3 with internal sensor
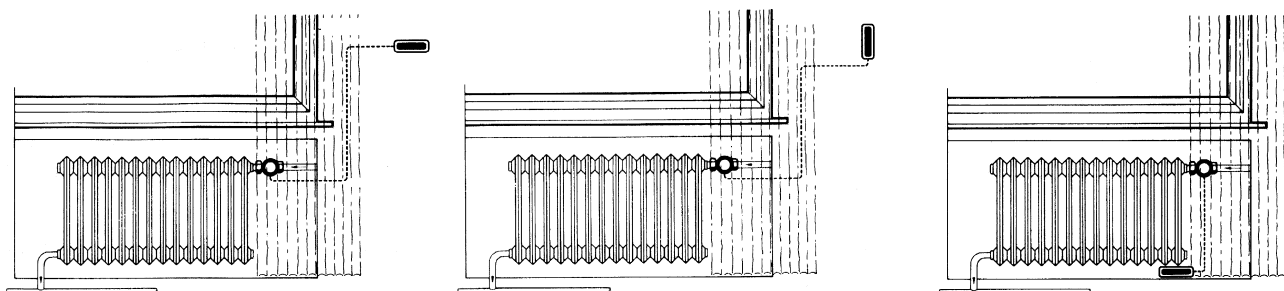
Fig. 4. Installation of Thera-3 with remote sensor

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