

T2798I1000 Remote Sensor Specifications

RSPT1000

Technical Specifications

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1. Application

Temperature sensor for Duct measurement in ventilation and air conditioning vents. The RSPT1000 sensors with Pt 1000 sensing element are used in ventilating and air conditioning systems to measure discharge, return or outside air temperature. They are designed for duct mounting. PG9 cable entry and sealing rings for housing supplied with the sensors as bypack.

1.1. Type

RSPT1000

1.2. Specifications

Transport and storage temperature

40 +80°C (-40 ...+176°F)

Humidity

5...95 %rh, non condensing

Safety

Protection standard terminal box and tube

IP54 in acc. with EN60529

Flame retardant terminal box

V1 in acc. with UL94

Plastic (PC)

Dimensions

See page 2

Temperature Sensor

Nominal value- Pt 1000 1000 Ω @ 0°C

Sensitivity- Pt 1000 . 3.85 Ω / K

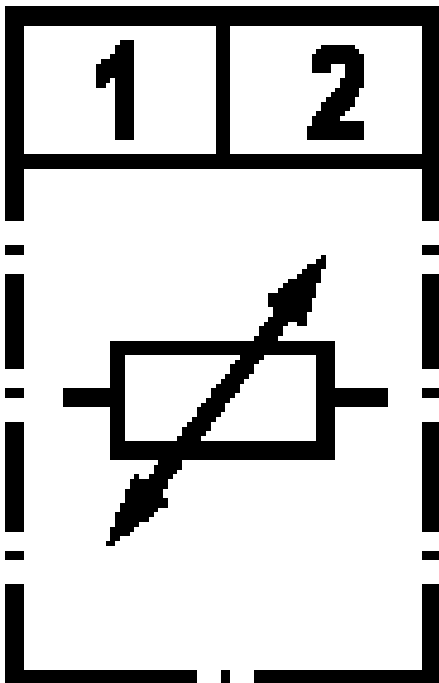
Accuracy- $\Delta T/K = \pm(0.3 + 0.005 \cdot t)$
[t in °C] acc. to DIN IEC 751

Class B

Response time $\tau_{0.5} \cdot 30$ s @ air velocity 5 m/s (16.4 ft/s)

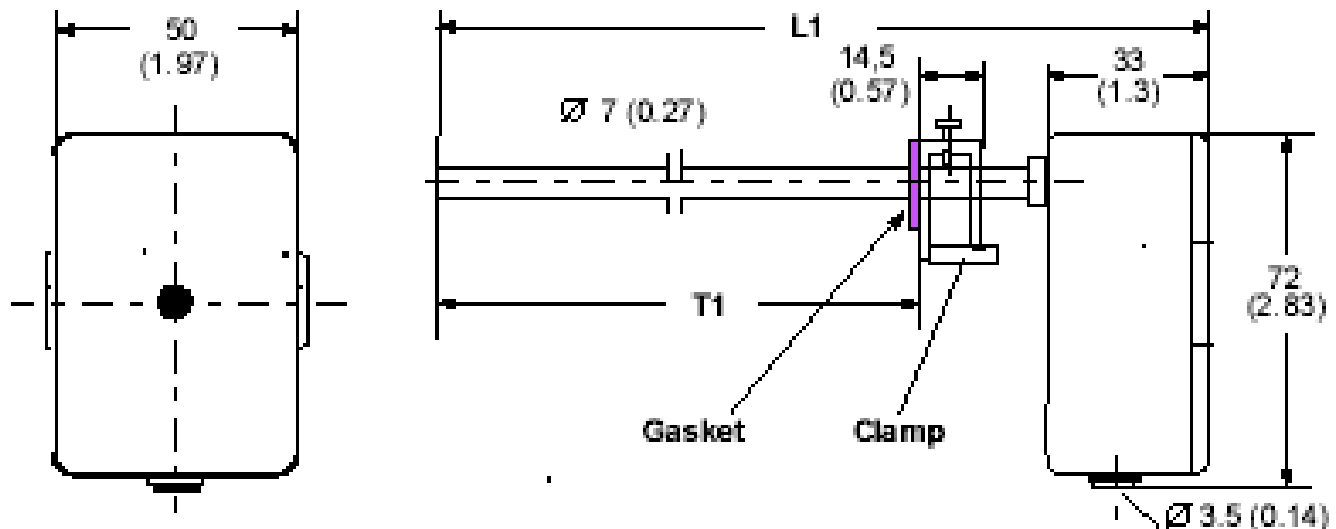
1.3. Electrical connections

The wiring of the temperature sensor RSPT1000 has to be in accordance with the overall wiring circuit diagram. The terminals are not polarized so in the event of the wires being connected in reverse, no malfunction will occur.



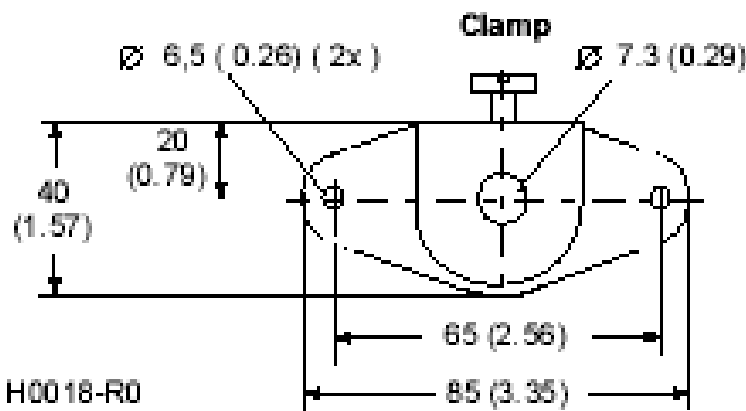
RSPT1000

1.4. Dimensions

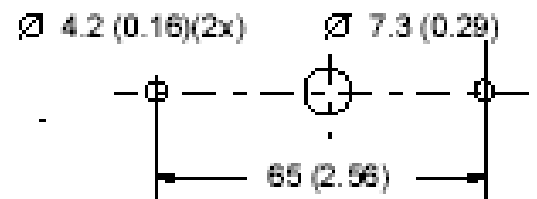


All dimensions in mm (inch)

Case hole dia.
allows Pg9 cable entry



Mounting Holes



Use clamp as template;
holes are for 5.5 (2.2)mm metal screws

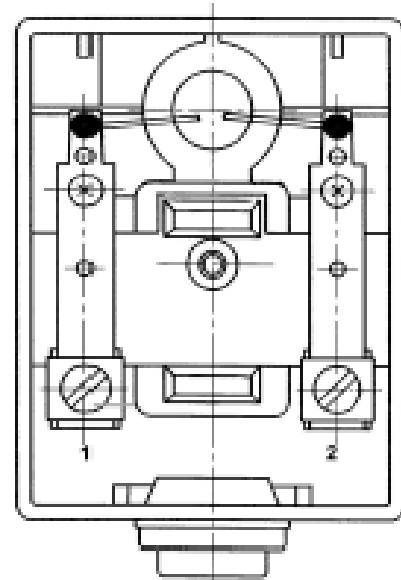
1.5. Installations

Wiring Run	Maximum Length
Sensor to controller	200m (660ft)

Offset due to wire resistance per 10m distance from sensor to controller:

Type of Wire	Temperature Offset
0.5mm ² (AWG20)	1.8K (3.24°F)
1.0mm ² (AWG17)	0.9K (1.62°F)
1.5mm ² (AWG15)	0.6K (1.08°F)

NOTE: Use shielded wiring in areas with high EMI.
 Keep 15cm (5.9") minimum distance between sensor lines and 230Vac power lines.



1.6. Models

Os-No	Temperature Sensing Range	Length mm		Probe
		L1	T1	
RSPT1000-123	-40.....+80Deg Celsius	180	123	
RSPT1000-288	-40.....+80Deg Celsius	345	288	