

Thermistor Room Temperature Sensors

TB/TS Thermistor Room Temperature Sensors



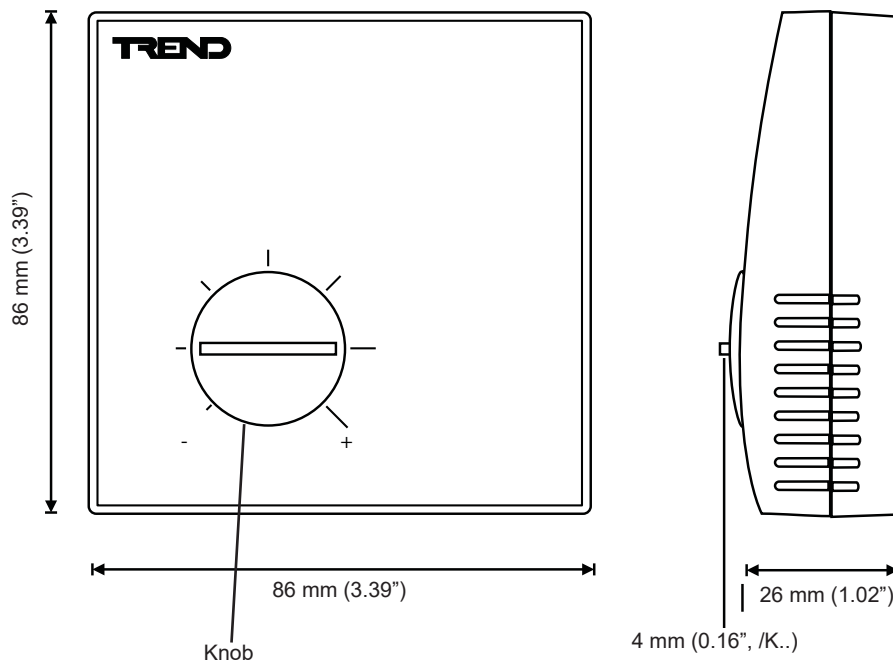
Description

The TB/TS Thermistor Temperature Sensor is a wall-mounted thermistor room temperature sensor in a low-profile enclosure designed for good thermal response. It has a low-profile adjustment knob option (e.g. setpoint trim).

Features

- Surface fitting or fits on standard electrical back box
- Optional low profile adjustment knob (1 to 11 kΩ)

Physical (TB/TS/K shown)



FUNCTIONALITY

Housing: The TB/TS is suitable for mounting on a wall, and can either be mounted on a standard pattress or mounted on a flat surface.

Sensor: The basic TB/TS sensor provides a standard Trend thermistor sensing element (10 k Ω at 25 °C, 77°F) for space temperature measurement.

Options: There is an option for a Knob input.

Knob option (/K): This option gives a 1 to 11 k Ω potentiometer variable resistance. The minimum resistance of 1 k Ω eliminates the sensor module producing an 'Out of Limits' alarm as the controller thermistor input reads 0 V. (This is normally used to detect faulty thermistors).

INPUT CHANNELS AND SENSOR SCALING

Appropriate sensor type scaling must be applied – see the TB/TS, TB/TS/K Installation Instructions (TG200607) for further details.


INSTALLATION


- Choose location
- Mount sensor (via two screws - minimum)
- Connect terminals
- Assemble sensor unit
- Setup Strategy
- Test

For full installation details see TB/TS Installation Instructions (TG200604), or TB/TS/K Installation Instructions (TG200607).

DISPOSAL

COSHH (Control of Substances Hazardous to Health - UK Government Regulations 2002) ASSESSMENT FOR DISPOSAL OF TB/TS.

RECYCLING.  All plastic and metal parts are recyclable. The printed circuit board may be sent to any PCB recovery contractor.



WEEE Directive:

At the end of their useful life the packaging, product, should be disposed of by a suitable recycling centre.

Do not dispose of with normal household waste.
Do not burn.

COMPATIBILITY

	TB/TS	TB/TS/K
IQ1	✓	✓
IQ2	✓	✓
IQ3	✓	✓
IQ4	✓	✓
IQeco31	✓	✓
IQeco35/38	✓	✓
IQeco VAV, 39	✓	✓
IQL11+	✓	✓
IQL13+	✓	✓
IQL15+	✓	✓

ORDER CODES

TB/TS/[OPTION] :Thermistor temperature sensor with option as shown in table. Consists of 2 parts (front panel and backplate) for either flush mounting or mounting on a standard pattress.

[OPTION]	Description
blank	Thermistor Temperature sensor only
K	1 to 11 kohm adjustment knob (e.g. setpoint trim)
TB/TS/BOX 20	Box of 20 sensors
TB/TS/K/BOX20	Box of 20 sensors

SPECIFICATIONS

ELECTRICAL

Connection	:1 part screw terminals for 0.5 to 2.5 mm ² cross section area (14 to 20 AWG) cable. 2 terminals for TB/TS, 3 for TB/TS/K.
Thermistor	:10 k Ω @ 25 °C (77 °F)
Temperature range	:0 to +40 °C (recommended).
Temperature Accuracy	:of sensor, \pm 0.44 °C, \pm 0.79 °F (0 to +40 °C, 32 to 104 °F)
Potentiometer	:1 k Ω to 11 k Ω \pm 20 %.

MECHANICAL

Flush fitting	:86 mm (3.39") x 86 mm (3.39") x 26 mm (1.02") depth. Add 4 mm (0.16") for /K.
Enclosure Material	:Flame retardant (V0) ABS.

ENVIRONMENTAL

EMC	:161326-1:2006
Ambient limits	
Operating Temp	:-10 °C (14 °F) to +50 °C (122 °F)
Operating Humidity	:0 to 90 %RH non-condensing.

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Trend Control Systems Limited

St. Mark's Court, North Street, Horsham, West Sussex, RH12 1BW, UK. Tel: +44 (0)1403 211888, www.trendcontrols.com