

Thermistor Outside Temperature Sensor

Important: Retain these instructions

These instructions shall be used by trained service personnel only. If the equipment is used in a manner not specified by these instructions, the protection provided by the equipment may be impaired.

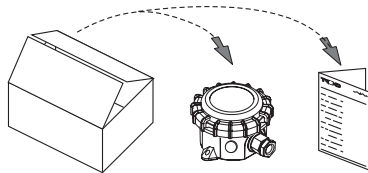
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1 BOX CONTENTS



TB/TO TB/TO thermistor Outside Temperature Sensor Installation Instructions (TG200725)

2 INSTALLATION

1 Dimensions

57 mm (2.24") 97 mm (3.82") 105 mm (4.13")

domed brass probe

2 Requirements

ambient limits
 -40 °C → +50 °C
 (-40 °F) → (+122 °F) ✓

measurement range
 -30 °C → +50 °C
 (-22 °F) → (+122 °F)

0 %RH → 95 %RH ✓
 H₂O Protection :IP67

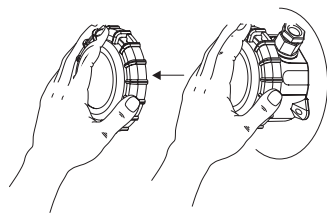
3 Mount on Wall

Drill 2 pilot holes 85 mm (3.35") Tighten screws

2 off No 6 (M3.5) screws

2 INSTALLATION (continued)


4 Remove Lid



5 Insert Cable

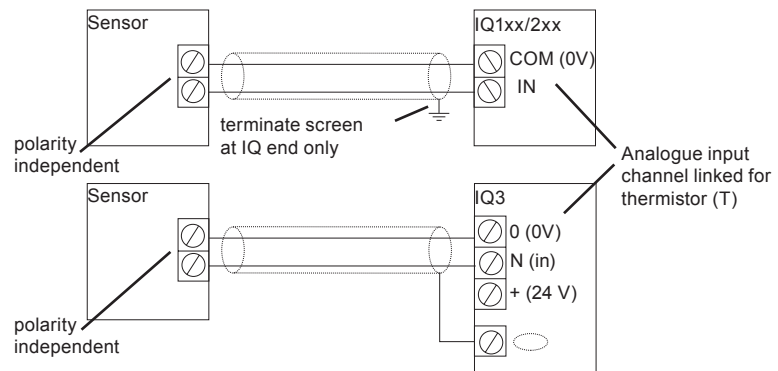
Either: Use M20 flexible conduit

Or: M16 cable gland

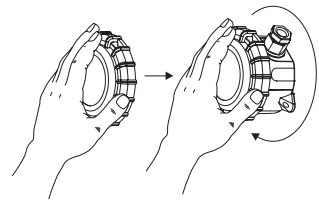


6 Wire to Controller

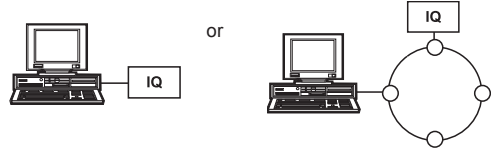
terminal size 0.5 to 2.5 mm² (14 to 20 AWG)
 TP/1/1/22/HP/200 (Belden 8761) cable recommended


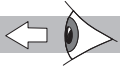


7 Replace Lid



8 Configure IQ



IQ Configuration Manual
 90-1533
 IQ3 Configuration Manual
 TE200768

2 INSTALLATION (continued)

9 Set up IQ Sensor Type

It is recommended to use SET for the setting of the sensor type module. For all IQ2 series controllers with firmware version 2.1 or greater, or IQ3/4 series controllers, the following SET Unique Sensor References should be used:

Thermistor: **Thermistor TBTO (°C)**

Thermistor TBTO F (°F)

Alternatively set scaling mode to 5 (characterise) and enter scaling manually as defined in the tables.

Note that for IQ3/4, scaling mode and exponent do not need to be set up.

For all other IQ controllers see Sensor Scaling Reference Card (TB100521A).

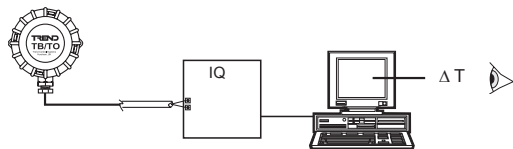
Thermistor (-10 °C to +40 °C, 14 °F to +104 °F)

Units:		°C	°F
Y	Input type	1 (therm V)	
E	Exponent	3	
U	Upper	45	113
L	Lower	-15	-5
P	Points	6	
x	I_x	O_x	
1	3.470	40	104
2	4.460	30	86
3	6.663	10	50
4	7.668	0	32
5	8.102	-5	23
6	8482	-10	14


Thermistor (-30 °C to +50 °C, -22 °F to +122 °F)

Units:		°C	°F
Y	Input type	1 (therm V)	
E	Exponent	3	
U	Upper	55	131
L	Lower	-35	-31
P	Points	11	
x	I_x	O_x	
1	2.641	50	122
2	3.470	40	104
3	4.460	30	86
4	6.663	10	50
5	7.668	0	32
6	8.102	-5	23
7	8.482	-10	14
8	8.807	-15	5
9	9.078	-20	-4
10	9.299	-25	-13
11	9.476	-30	-22

10 Test the System



3 DISPOSAL



WEEE Directive:
At the end of their useful life the packaging and product should be disposed of by a suitable recycling centre.

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

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