Instructions: TC221952 Non-Sparking Temperature Detector
⟨Ex⟩ II 3 G Ex nA IIC Gc U

Document 2292186 Rev. A

1. Description

The TC221952 temperature detector is designed to be installed in babbitt style bearing shoes.
- Operating temperature range: -50°C to 200°C.
- Models are available for single or dual (simplex or duplex) thermocouple elements.

2. Attestation of Conformity

This Attestation of Conformity is issued under the sole responsibility of the manufacturer.

Temperature detector type: TC221952.

The product defined above is in conformity with the following relevant legislation:
ATEX Directive 2014/34/EU
EN 60079-0:2012+A11:2013 Explosive atmospheres - Part 0: Equipment - General requirements
EN 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Rob Bohland 11 July 2017
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3. Installation Instructions

Installation of the temperature detector in a bearing completes the enclosure and provides protection from mechanical impact. This procedure can be used with other types of bearings and with equipment other than bearings.
1. Drill or bore a .394" (10.0mm) diameter flat bottom hole into the bearing shoe where temperature detection is desired.
2. Insert the detector into the hole until it reaches the bottom.
3. Compress the spring against the sensor case flange to provide contact to the bottom of the hole. Use a retainer (threaded collar, locking washer, etc.) to hold the spring and sensor in place. Alternatively, the sensor may be potted in place using an epoxy suitable for the conditions.
4. When routing the leadwire from the bearing shoe, leave sufficient slack in the leadwire for movement of the shoe when it is in service. Use mechanical retainers to secure the leadwire externally to the shoe, or pot the leadwire in place using epoxy or another suitable potting compound.
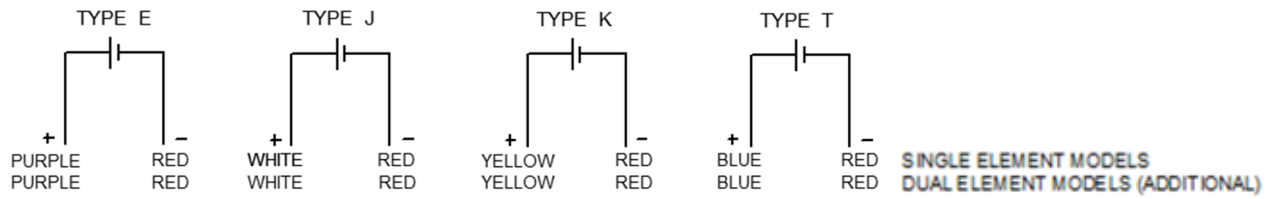
4. Special Conditions of Use

Maximum voltage: ≤ 30 V

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5.   Electrical Data

Maximum voltage: $\leq$ 30 V

6.   Electrical Connections

TYPE E	TYPE J	TYPE K	TYPE T	
+ PURPLE — RED	+ WHITE — RED	+ YELLOW — RED	+ BLUE — RED	SINGLE ELEMENT MODELS
PURPLE RED	WHITE RED	YELLOW RED	BLUE RED	DUAL ELEMENT MODELS (ADDITIONAL)

7.   Marking Example

MINCO
Minneapolis, MN USA
Model: TC221952
Lot batch: 123456-*-*-001
⟨Ex⟩ II 3 G Ex nA IIC Gc U

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