MINCO S211597 Intrinsically Safe and Non-Sparking Temperature Detectors Instructions

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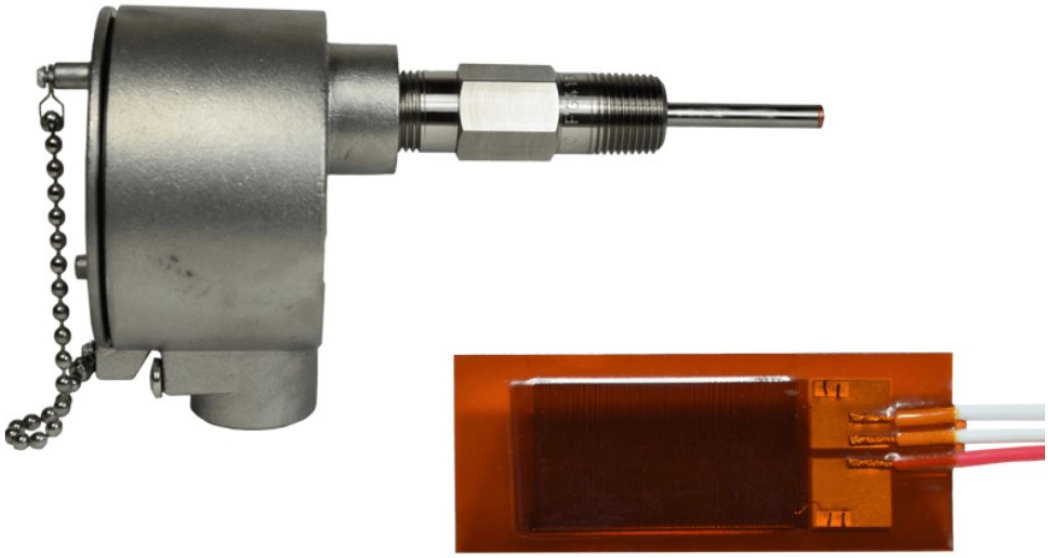


Contents

Description

These resistance temperature detectors (RTD) are designed to be installed in babbitt style bearing shoes.

- Operating temperature range -50°C to 200°C.
- Models available for 2-, 3- or 4-wire measurement circuits and single or dual RTD elements.

Attestation of Conformity

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

Resistance temperature detector (RTD) model S211597.

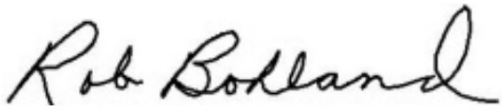
The product defined above is in conformity with the following relevant legislation: ATEX Directive 2014/34/EU

EN 60079-0:2012* Explosive atmospheres – Part 0: Equipment – General requirements
EN 60079-11:2012 Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”
EN 60079-15:2010 Explosive atmospheres – Part 15: Equipment protection by type of protection “n”
IEC 60079-0:2011-06* Explosive atmospheres – Part 0: Equipment – General requirements
IEC 60079-11:2011-06 Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”
IEC 60079-15:2010-01* Explosive atmospheres – Part 15: Equipment protection by type of protection “n”
Korea Ministry of Employment and Labor Notice No. 2013-54 (KCs Certificate No. 17-KA4BO-0017X)

Technical Regulations of the EurAsian Customs Union TR CU 012/2011: On the Safety of Equipment for Work in Explosive Environments (Certificate RU C-US.ГБ08.B.01904)

NOTE: The harmonized standard EN IEC 60079-0:2018 has been compared to the standard used for certification purposes and no changes in the “state of the art” apply to the product. The standards IEC 60079-0:2017/COR1:2020 and IEC 60079-7:2015+AMD1:2017 CSV have been compared to the standard used for certification purposes and no changes in the “state of the art” apply to the product.

Ex ia certification	**Ex nA certification**:
Certificate IECEx LCIE 14.0003 X	Certificate IECEx DEK 11.0001X
Certificate LCIE 14ATEX3008 X	Certificate DEKRA 14ATEX0008 X
LCIE Bureau Veritas – Site de Fontenay aux Roses	DEKRA Certification B.V. (0344)
33, avenue du Général Leclerc	Meander 1051
92260 Fontenay-aux-Rose	6825 MJ Arnhem
FRANCE	The Netherlands


06 Mar 2023

Rob Bohland, Ex Authorized Person
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7300 Commerce Lane
Minneapolis, MN 55432 USA

Installation Instructions

The installation of the temperature detector in a bearing completes the enclosure and provides protection from mechanical impact.

Potting Method: The Potting Method procedure can be used with other types of bearings, and with equipment other than bearings.

1. Drill or bore a .193″ (4.90mm) diameter hole (#10 drill) into the bearing shoe where temperature detection is desired. The hole bottom may be left in the shape of the drill tip. However, a flat hole bottom will result in the detector having a faster response time to temperature change.
2. If the hole has a drill point, apply a small amount of silicone heat sink compound to the tip end of the temperature detector (Dow Corning's #340 or similar compound is recommended). Apply enough compound to fill the drill tip cone at the bottom of the hole when the detector is installed.
3. Insert the detector into the hole until it reaches the bottom.
4. Pot the leadwire in place where it enters the shoe: use an epoxy or other suitable potting compound compatible with the bearing shoe materials, temperature, and service conditions. During application and curing of the potting compound, make certain the detector remains at the bottom of the hole.
5. 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 other suitable potting compound.

Special Conditions of Use

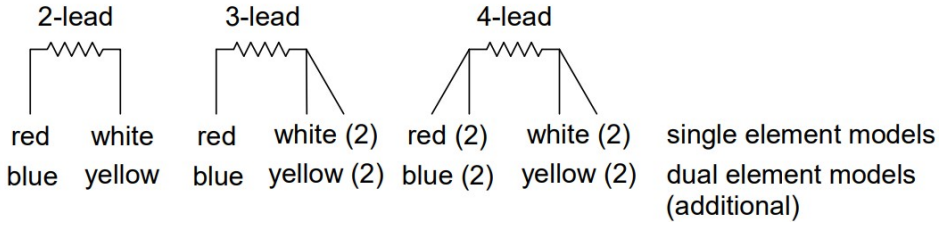
See ATEX and IECEx certificates.

Electrical Data

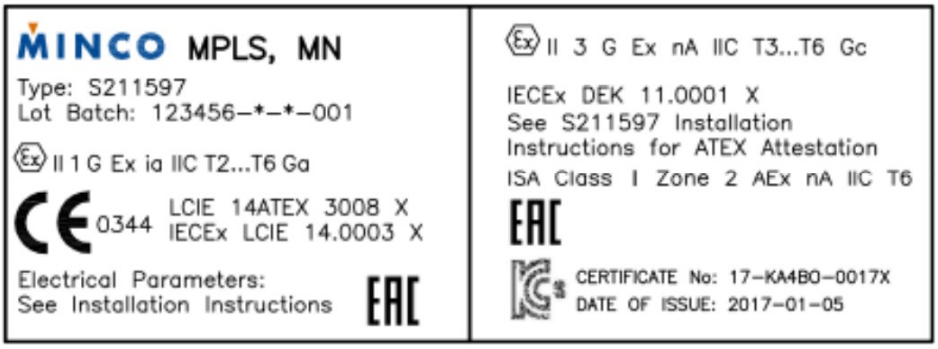
Ui ≤ 28V, Ii ≤ 30mA, Pi ≤ 0.1W, Ci ≤ 100pF/m, Li ≤ 2µH/m

Measuring current: ≤ 1 mA
Power (under fault conditions): ≤ 0.45 W

Electrical Connections



Marking Example



Documents / Resources

	MINCO S211597 Intrinsically Safe and Non-Sparking Temperature Detectors [pdf] Instructions S211597 Intrinsically Safe and Non-Sparking Temperature Detectors, S211597, Intrinsically Safe and Non-Sparking Temperature Detectors, Non-Sparking Temperature Detectors, Temperature Detectors, Detectors

References

- Home - Minco