

EU-Type Examination Certificate

Components intended for use on/in an Equipment or Protective System intended for use in potentially explosive atmospheres
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 19 ATEX E 036 U**

Product: **BTD (Bearing Temperature Detector) Soldered Version and type: BTD-SV and BTD (Bearing Temperature Detector) Crimped Version type: BTD-CV**

Manufacturer: **Insta Control Private Ltd.**

Address: **No. 1-4, "G" Block, Vishnu Malati Industrial Estate, Shivane, Pune - 411 023, India**

This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential Report No. BVS PP 19.2060 EU.

The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018 General requirements
EN IEC 60079-7:2015 + A1:2018 Increased Safety "e"

Except in respect of those requirements listed under item 18 of the appendix.

The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system respectively product.

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

Ex II 2G Ex eb IIC Gb

DEKRA Testing and Certification GmbH
Bochum, 2019-05-15


Managing Director

13 **Appendix**

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15 **Product description**

15.1 **Subject and type**

**BTD (Bearing Temperature Detector) Soldered Version type: BTD-SV and
BTD (Bearing Temperature Detector) Crimped Version type: BTD-CV**

A separate order code defines the number of internal sensors, the dimensions of the sensor as also wire size, number of wires, wire type and the wire length.

15.2 **Description**

BTD (Bearing Temperature Detector) Soldered Version type: BTD-SV and Crimped Version type: BTD CV is a Pt100 or Pt1000 resistance temperature detector and designed in type of protection Increased Safety "e". They are intended for the temperature measurement motor / generator bearings of motors / generators in type of protection Increased Safety "e". The sensors are potted into metal housings. They are designed for use in tapped holes on bearing housings of motors / generators in type of protection Increased Safety "e".

15.3 **Parameters**

Nominal voltage	max.	24 V
Nominal current	max.	5 mA
Operating temperature	-30 °C up to +180 °C	
Rated resistance (Pt100)	100 Ohm @ 0 °C, 138.5 Ohm @ +100 °C	
Rated resistance (Pt1000)	1000 Ohm @ 0 °C, 1385.06 Ohm @ +100 °C	

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17 **Installation Instructions**

After installation of the sensors into a bearing of a motor or generator enclosure the connection, the insulation and the dielectric strength have to fulfil the requirements of type of protection Increased Safety "e" (EN IEC 60079-7:2015+A1:2018).

During the installation of the sensor carving and bending have to be avoided. The lead wires shall not be subjected to any pulling force.

18 **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed under item 9. For this product the standard EN IEC 60079-0:2018 is equivalent to the harmonized standard EN 60079-0:2012 + A11:2013 in terms of safety.

19 **Drawings and Documents**

Drawings and documents are listed in the confidential report.