IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: IECEx BVS 18.0057U

Issue No: 0

Certificate history:
Issue No. 0 (2019-01-21)

Status: **Current**

Date of Issue: **2019-01-21**

Applicant: **Insta Control Private Ltd.**
No. 1-4, "G" Block, Vishnu Malati Industrial Estate, Shivane
Pune - 411 023
India

Ex Component: **RTD (Resistance Temperature Detector) Soldered Version and RTD (Resistance Temperature Detector) Crimped Version type RTD-SV and RTD-CV**

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Equipment protection by increased safety "e"**

Marking:
Ex eb IIC Gb

Approved for issue on behalf of the IECEx Certification Body: Jörg Koch

Position: Head of Certification Body

Signature:
(for printed version)

Date: 21.1.19

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

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Manufacturer:	**Insta Control Private Ltd.** No. 1-4, "G" Block, Vishnu Malati Industrial Estate, Shivane Pune - 411 023 **India**	

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex Component covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The Ex Component and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-7 : 2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the Ex Component listed has successfully met the examination and test requirements as recorded in

Test Report:

DE/BVS/ExTR19.0001/00

Quality Assessment Report:

DE/BVS/QAR17.0013/00

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Schedule

Ex Component(s) covered by this certificate is described below:

Subject and Type

RTD (Resistance Temperature Detector) Soldered Version type: RTD-SV and
RTD (Resistance Temperature Detector) Crimped Version type: RTD-CV

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

RTD (Resistance Temperature Detector) Soldered Version type: RTD-SV and Crimped Version type: RTD CV is a Pt100 or PT1000 resistance temperature detector and designed in type of protection Increased Safety "e". It is intended for the temperature measurement inside of windings of motors in type of protection Increased Safety "e".

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		

SCHEDULE OF LIMITATIONS:

When embedding the sensors into a motor winding the connection, the insulation and the dielectric strength have to fulfil the requirements of type of protection Increased Safety "e" (IEC 60079-7:2015).

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

Additional requirements stated in the installation instructions
The lead wires have to be connected inside the motor or inside of a terminal box according to the requirements of type of protection Increased Safety "e" (IEC 60079-7:2015) and has to include all wires of the sensor.

The construction of the motor insulating system has to consider for that the sensors will be tested in the dielectric strength test according IEC 60079-7.2015, clause 7 up to a test voltage of max. 2500 V.