

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

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

EX COMPONENT CERTIFICATE

Certificate No.:

IECEx CSA 23.0021U

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Certificate history:

Status:

Current

Issue No: 0

Date of Issue:

2023-10-17

Applicant:

Conax Technologies LLC 2300 Walden Ave.

Buffalo, New York 14225 **United States of America**

Ex Component:

Miniature Bearing Temperature Sensors (MBS) Models: Thermocouples P/N 10-4025 thru 10-4029, Resistance

Temperature Device (RTD) P/N 10-4030 thru 10-4034

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:

Increased Safety "eb" & Intrinsic Safety "ia" "ic"

Marking:

Ex la IIC Ga Ex eb IIC Gb Exic IIC Gc

Approved for issue on behalf of the IECEx Certification Body:

Dave Magee

Position:

Senior Director of Operations, Toronto

Signature:

(for printed version)

(for printed version)

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This certificate is not transferable and remains the property of the issuing body.
The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

CSA Group 178 Rexdale Boulevard Toronto, Ontario M9W IR3 Canada





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Manufacturer:

Conax Technologies LLC

2300 Walden Ave.

Buffalo, New York 14225 United States of America

Manufacturing locations:

Conax Technologies LLC 2300 Walden Ave.

Buffalo, New York 14225 United States of America

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 products 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 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

Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-11:2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 Edition:5.1

This Contificate does not in the second

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

TEST & ASSESSMENT REPORTS:

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

Test Report:

CA/CSA/ExTR23.0013/00

Quality Assessment Report:

CA/CSA/QAR16.0005/07



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

Miniature Bearing Temperature Sensors (MBS) Thermocouples P/N 10-4025 thru 10-4029 and RTDs P/N 10-4030 thru 10-4034.

Refer to the certificate Annex for additional information.

SCHEDULE OF LIMITATIONS:

1. Service Temperature: -40°C to 230°C.

- 2. For device assemblies designated Levels of protection "Ex eb" and "Ex ic", the measurement heads shall be installed in a sealed bearing per manufacturer instructions. The assembly extension wires shall be installed in an appropriately certified enclosure (e.g. Ex e) respectively, or greater explosion protection concept), with a minimum ingress protection of IP54 and meets the enclosure requirements of IEC/EN 60079-0 and IEC/EN 60079-7. The suitability of the enclosure is subject to investigation by the local Authority Having Jurisdiction at the time of installation.
- End-user shall ensure proper earthing of the device upon installation in accordance with IEC 60079-14. The mounting of the device for installation must ensure that the metallic body is reliably connected to system earth, continuity to be checked and confirmed.
- 4. The device assemblies designated for Intrinsically Safe "Ex Ia" installation are declared prior to installation on the Manufacturer's Ex Marking label using a permanent marking method. These assemblies shall only be powered by an "[Ex ia]" associated apparatus (barrier device).
- 5. The device assemblies designated for Increased Safety "Ex eb" installation are declared prior to installation on the Manufacturer's Ex Marking label using a permanent marking method. These assemblies shall only be powered by a supply having either a limited energy electric circuit in accordance with IEC 61010-1, or in accordance with IE 62368-1. The device assemblies designated for Level of protection "Ex Ic" installation are declared prior to installation on the Manufacturer's Ex Marking label using a permanent marking method. These assemblies shall only be powered by an "[Ex ic]" associated apparatus (barrier device).
- 6. The nonmetallic markings label (tag) shall be cleaned only with a damp cloth, and the equipment shall be mounted to avoid building static electric charge from nonconductive process flow, strong air currents, or other potential charging through friction.

Annex:

IECEx CSA 23.0021U Annexe Issue 0.pdf