



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx BAS 20.0038X**

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Certificate history:

Status: **Current**

Issue No: 2

[Issue 1 \(2021-03-09\)](#)

[Issue 0 \(2020-07-02\)](#)

Date of Issue: 2024-09-09

Applicant: **Eaton Electric Limited**
Great Marlings
Butterfield
Luton
Bedfordshire
LU2 8DL
United Kingdom

Equipment: **FCS-9332-xxx Fieldbus Temperature Transmitter**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +50°C)**

Approved for issue on behalf of the IECEx
Certification Body:

P Oates

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

9/9/2024

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 www.iecex.com or use of this QR Code.



Certificate issued by:

SGS UK Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire SK17 9RZ
United Kingdom





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Manufacturing
locations: **Eaton Electric Limited**
Great Marlings
Butterfield
Luton
Bedfordshire
LU2 8DL
United Kingdom

Eaton Industries Middle East LLC
2nd Industrial City
Dammam
Eastern Province
KHOBAR 31952 (PO Box 3996)
Saudi Arabia

MTL Instruments PVT Limited
No 3 Old Mahabalipuram Road
Sholinganallur
Chennai .
India

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 equipment 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

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 equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/BAS/ExTR20.0095/00

GB/BAS/ExTR21.0030/00

GB/SGS/ExTR24.0116/00

Quality Assessment Reports:

GB/BAS/QAR06.0022/11

GB/BAS/QAR07.0017/11

GB/BAS/QAR16.0002/05



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The FCS-9332-xxx Fieldbus Temperature Transmitter is designed to be mounted in a zone 0 hazardous area and enables up to sixteen temperature inputs from sensors to be converted to a Foundation Fieldbus or FISCO output. The equipment also provides additional terminal connection facilities for the termination of other IS certified equipment.

The equipment comprises up to 2 off Rosemount Model 848T Multi Sensor Fieldbus Temperature Transmitters (either Fieldbus or FISCO variants) currently afforded Certificate No. IECEx BAS 09.0030X, each transmitter providing connection of up to 8 sensors, and up to 8 Ex eb Terminals of Type WDU4 currently afforded Certificate No. IECEx ULD 14.0005U. The above are all housed in a sheet steel IP66 rated enclosure (508mm x 260mm x 152mm) currently afforded certificate No. IECEx BAS 15.0071U and marked Ex eb IIC Gb. One face of the external wall permits the following entries, An IP66 Ex 'eb' certified breather and up to 18 Ex 'eb' certified cable glands and / or stopping plugs.

The number and location of the additional terminal connection facilities is dependent on the installation but maintain the required segregation from Model 848T connections in accordance with the segregation requirements of IEC 60079-11.

The 'xxx' at the end of the model number, (if marked) denotes the configuration of the equipment. The differences between the models and configurations do not affect the certification.

Input / Output Parameters:

Model 848T I/O Parameters

I.S. Installation Power / Loop Terminals

$U_i = 30V$ $I_i = 300mA$ $P_i = 1.3W$ $C_i = 2.1nF$ $L_i = 0$

The above parameters must be derived from a linear supply with a resistance limited output.

FISCO Installation Power / Loop Terminals

$U_i = 17.5V$ $I_i = 380mA$ $P_i = 5.32W$ $C_i = 2.1nF$ $L_i = 0$

Sensor Input Terminals Channels 1 to 8

$U_o = 12.5V$ $I_o = 4.8mA$ $P_o = 15mW$ $C_o = 1.2\mu F$ $L_o = 1H$

Additional IS Terminal Parameters

$U_i = 60V$

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The Model 848T equipment is not capable of withstanding the 500V isolation test required by IEC 60079-11: 2011 clause 6.3.13. This must be taken in account when installing the equipment.
2. When a hinged lid is fitted, the enclosure shall only be mounted in a vertical orientation on a flat surface, and care is required in the installation process and when opening the hinged lid to ensure the enclosure does not distort. When a fully bolted lid is fitted the enclosure may be mounted in any orientation, but it shall be on a flat surface and care is required in the installation process to ensure the enclosure does not distort.
3. Unused terminals inside the equipment shall be tightened.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 2.1

To permit label changes relating to the addition of an alternative manufacturing site in Chennai, India.

ExTR: **GB/SGS/ExTR24.0116/00**

File Reference: **23/0288**