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 17.0016X**

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Certificate history:
Issue 2 (2024-09-09)
Issue 1 (2019-08-20)
Issue 0 (2017-03-02)

Status: **Current**

Issue No: 3

Date of Issue: 2024-09-27

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

Equipment: **FCS-9512-xxx MTL Foundation Fieldbus Junction Box**

Optional accessory:

Type of Protection: **Increased Safety & Encapsulation OR Type of Protection 'n' & Encapsulation**

Marking: **Ex ec mb IIC T4 Gc (-40°C ≤ Ta ≤ +65°C) – Models fitted with Fieldbus XE Megablocks**

Ex ec nA IIC T4 Gc (-40°C ≤ Ta ≤ +65°C) – Models fitted with F300 Series Megablocks

Approved for issue on behalf of the IECEx Certification Body: **P Oates**

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version) 27/09/2024

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Certificate issued by:

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

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

Manufacturing locations: **MTL Instruments PvT Limited**
No 3 Old Mahabalipuram Road
Sholinganallur
Chennai 600119
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 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

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

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/ExTR17.0024/00 GB/BAS/ExTR19.0203/00 GB/BAS/ExTR24.0004/00
GB/SGS/ExTR24.0102/00

Quality Assessment Reports:

GB/BAS/QAR06.0022/10 GB/BAS/QAR07.0017/10

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The FCS-9512-xxx MTL Foundation Fieldbus Junction Box enables up to twelve individual field devices in a Zone 2 hazardous area to be connected to a high energy trunk cable. The equipment can be fitted with either one or two F2xx-XE or F3xx Relcom Megablock Fieldbus Connection Blocks, together with certified terminals and optional FS32 Surge Protection devices housed in a sheet steel IP66 rated enclosure.

The sheet steel IP66 rated enclosure (min. size 306mm x 306mm x 160mm) in which the equipment is housed is currently component certified under IECEx BAS 15.0071U for markings of Ex eb IIC Gb and Ex tb IIIC Db. One face of the external wall permits the following entries: an IP66 Ex ‘e’ certified breather and up to 14 Ex ‘e’ certified cable glands and / or stopping plugs. Gas only certified models may optionally have the enclosure painted.

The internal construction of the equipment fitted with the following specific components:

Either:

1 off F271-XE, 1 off F259-XE, 1 off F253-XE, 1 off F251-XE, 2 off F245-XE or 2 off F247-XE Ex eb mb certified Relcom Fieldbus XE Megablock(s) currently afforded Certificate No. IECEx DEK 16.0036U.

Or

1 off F312, 1 off F308 or 2 off F304 Ex nA certified Relcom F300 Series Megablock(s) currently afforded Certificate No. IECEx FMG 11.0017X.

Up to 10 off Ex e Terminals of Type WDU2.5 currently afforded Certificate No. IECEx ULD 14.0005U.

Up to 14 off Ex ec certified Eaton Electric Limited FS32 Surge Protection Devices currently afforded Certificate No. IECEx BAS 17.0015X.

See addition sheet of the certificate for parameters and further details.

SPECIFIC CONDITIONS OF USE: YES as shown below:
1) Models with a hinged lid shall only be mounted in a vertical orientation, and care is required during installation and when opening the hinged lid, to ensure the enclosure does not distort.

2) Cable entry holes shall be fitted with equipment certified cable glands. The operating temperature range and ingress protection rating of the equipment is limited to those of the fitted glands.

3) Unused entry holes shall be fitted with equipment certified stopping plugs. The operating temperature range and ingress protection rating of the equipment is limited to those of the fitted stopping plugs.

4) Only breather/drain devices that are equipment certified may be fitted. They shall be suitable for the enclosure wall thickness to ensure draining can occur. The operating temperature range and ingress protection rating of the equipment is limited to that of the fitted breather/drain device.

5) Only adaptor/reducer devices that are equipment certified may be fitted. The operating temperature range and ingress protection rating of the equipment is limited to those of the fitted adapter/reducer devices.

6) The equipment must be installed in an area of at least Pollution Degree 2, as defined in IEC 60664-1.

7) The equipment shall be effectively earth bonded prior to use. It may not be capable of withstanding the 500V dielectric strength test in accordance with clause 7.1 of IEC 60079 7, and this must be taken into account during installation.

8) All connections to the equipment must not be inserted or removed unless either the area in which the equipment is installed is known to be non-hazardous, or the circuit to which it is connected has been de-energised.

9) Unused terminals inside the equipment shall be tightened.

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Equipment (continued):

The certification code and input parameters of the equipment are dependent on the Relcom Fieldbus Megablock fitted and are as follows: -

FCS-9512-xxx Fitted with Ex eb mb certified Relcom Fieldbus XE Megablock(s)

Ex ec mb IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Input Parameters:

Rated Input Voltage = 30V d.c.
Rated Current = 1.5A

FCS-9512-xxx Fitted with Ex nA certified Relcom F300 Series Megablock(s)

Ex ec nA IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Input Parameters:

Rated Input Voltage = 32V d.c.
Rated Current = 2A

The 'xxx' at the end of the model number can be a number in the range of 182 to 202, or 400 to 450 denoting the configuration of the equipment. The differences between the configurations do not affect the certification.

The enclosure and its internal components are listed on the table below:

Item	Certificate	Marking	Standards
Enclosure Type N-TB	IECEx BVS 13.0026U	Ex e IIC Gb	IEC 60079-0: 2011 Ed. 6 IEC 60079-7: 2007 Ed. 4
Recom Fieldbus XE Megablocks	IECEx DEK 16.0036X	Ex eb mb IIC T4 Gb (-45°C ≤ Ta ≤ +70°C)	IEC 60079-0: 2011 Ed. 6 IEC 60079-7: 2015 Ed. 5 IEC 60079-18: 2014 Ed. 4
Relcom F300 Series Megablocks	IECEx FMG 11.0017X	Ex nA IIC T4 Gc (-50°C ≤ Ta ≤ +70°C)	IEC 60079-0: 2011 Ed. 6 IEC 60079-15: 2010 Ed. 4
WDU2.5 Terminals	IECEx ULD 14.0005U	Ex eb IIC	IEC 60079-0: 2017 Ed. 7 IEC 60079-7: 2017 Ed 5.1
Eaton Electric FS32 Surge Protection Device	IECEx BAS 17.0015X	Ex ec IIC T4 Gc (-40°C ≤ Ta ≤ +70°C)	IEC 60079-0: 2011 Ed 6. IEC 60079-7: 2015 Ed. 5

Where the above certified components forming part of the equipment are certified to different editions of the standards than those listed for the FCS-9512-xxx, the differences between the editions of the standards listed have been reviewed and determined to have no technical differences affecting the equipment.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Variation 3.1

To update the references to IECEx DEK 16.0036X to IECEx DEK 16.0036U.

ExTR: **GB/BAS/ExTR24.0004/00**	File Reference: **24/0221**