

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 17.0045X** Page 1 of 5

Certificate history:

Issue No: 2 Status: Current

Issue 1 (2017-09-04) Issue 0 (2017-06-12)

2024-09-09 Date of Issue:

Eaton Electric Limited Applicant:

Great Marlings Butterfield Luton Bedfordshire LU2 8DL **United Kingdom**

Equipment: FCS-9504-xxx, FCS-9508-xxx & FCS-9512-xxx MTL Foundation Fieldbus Junction Box

Optional accessory:

Increased Safety & Type of Protection 'n' Type of Protection:

Ex ec nA IIC T4 Gc (-40°C \leq Ta \leq +65°C) Marking:

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Certification Manager**

Signature:

(for printed version)

9/9/2024

(for printed version)

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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:

Eaton Electric Limited Great Marlings

Butterfield Luton Bedfordshire LU2 8DL

United Kingdom

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

C 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2015 Edition:5.0

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/ExTR17.0119/00 GB/BAS/ExTR17.0242/00 GB/SGS/ExTR24.0131/00

Quality Assessment Reports:

GB/BAS/QAR06.0022/11 GB/BAS/QAR07.0017/11



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The FCS-9504-xxx, FCS-9508-xxx & FCS-9512-xxx MTL Foundation Fieldbus Junction Box enables up to sixteen 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 F304 or F308 Relcom Megablock Fieldbus Connection Blocks, together with certified terminals and optional FS32 Surge Protection devices and F97 terminators housed in a sheet steel IP66 rated enclosure.

The sheet steel IP66 rated enclosure (min. size 480mm x 480mm x 205mm) in which the equipment is housed is currently 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, A IP66 Ex 'eb' certified breather and up to 20 Ex 'eb' certified cable glands and / or stopping plugs.

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

Up to 4 off F304 or 2 off F308 Ex nA certified Relcom F300 Series Megablock(s) currently afforded Certificate No. IECEx FMG 11.0017X. These can be optionally fitted with F97 Terminators, also covered under the same certificate.

Ex e Terminals of Type WDU2.5 currently afforded Certificate No. IECEx ULD 14.0005U. The number and location of the terminals is dependent on the configuration.

Up to 20 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) Unused terminals inside the equipment shall be tightened.
- 9) 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.



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Equipment (continued):

The FCS-9504-xxx, FCS-9508-xxx & FCS-9512-xxx MTL Foundation Fieldbus Junction Boxes only differ in the number of connections provided for field device in a zone 2 hazardous area. The 'xxx' at the end of the model number denotes the configuration of the equipment. The differences between the models and configurations do not affect the certification.

The following model and configurations are covered by this certificate:

FCS-9504-213, FCS-9504-241 to -260 MTL Foundation Fieldbus Junction Box FCS-9508-120 to -140 MTL Foundation Fieldbus Junction Box FCS-9512-242 to -261 MTL Foundation Fieldbus Junction Box

Input Parameters:

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

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

Item	Certificate	Marking	Standards
Enclosure Type XL	IECEx BAS 15.0071U	Ex eb IIC Gb	IEC 60079-0: 2017 7 th Edition IEC 60079-7: 2017 Edition 5.1
Relcom F300 Series Megablocks & F97 Terminators	IECEx FMG 11.0017X	Ex nA IIC T4 Gc (-50°C ≤ T _a ≤ +70°C)	IEC 60079-0: 2011 Edition 6 IEC 60079-15: 2010 Edition 4
WDU2.5 Terminals	IECEx ULD 14.0005U	Ex eb IIC	IEC 60079-0: 2011 Edition 6 IEC 60079-7: 2007 Edition 4
Eaton Electric FS32 Surge Protection Device	IECEx BAS 17.0015X	Ex ec IIC T4 Gc $(-40^{\circ}\text{C} \le \text{T}_a \le +70^{\circ}\text{C})$	IEC 60079-0: 2011 Edition 6 IEC 60079-7: 2015 Edition 5

Where the above certified components forming part of the equipment are certified to older editions of the standards than those listed for the FCS-9504-xxx, FCS-9508-xxx & FCS-9512-xxx, the differences between the editions of the standards listed have been reviewed and determined to have no applicable technical differences affecting the equipment.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 2.1

To permit the use of an alternative enclosure.

ExTR: GB/SGS/ExTR24.0131/00 File Reference: 23/0288