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 22.0022X**

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Certificate history:
Issue 2 (2023-10-10)
Issue 1 (2023-01-30)
Issue 0 (2022-05-05)

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: **Models FCS-8512-305, FCS-95xx-306 and FCS-95xx-307 Fieldbus Megablock Enclosure**

Optional accessory:

Type of Protection: **Increased safety and Encapsulation**

Marking: **Ex eb mb IIC T4 Gb (-40°C ≤ Ta ≤ +60°C)**

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

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.
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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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Certificate No.: **IECEx BAS 22.0022X**

Date of issue: 2024-09-27 Issue No: 3

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, 600 119
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 60079-18:2017 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/ExTR22.0053/00 GB/BAS/ExTR23.0004/00 GB/BAS/ExTR24.0004/00
GB/SGS/ExTR23.0121/00

Quality Assessment Reports:

GB/BAS/QAR06.0022/09 GB/BAS/QAR07.0017/10

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

The FCS-8512-305 Fieldbus Megablock Enclosure enables up to twelve individual field devices in a Zone 1 hazardous area to be connected to a high energy trunk cable. The equipment is fitted with one F2xx-XE series MTL Relcom Megablock wiring hub and optionally FS32-XE Surge devices housed in a Glass Reinforced Polyester with graphite added IP66 rated enclosure.

The Glass Reinforced Polyester with graphite added IP66 rated enclosure type GBXE402512 (min. size 400mm x 250mm x 120mm) in which the equipment is housed is currently afforded certificate No. IECEx TUR 19.0040U and marked Ex eb IIC Gb. 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.

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

- One of the following F2xx-XE Megablocks:

F245-XE, 4 way; F247-XE, 4 way + internal terminator; F251-XE, 8 way; F253-XE, 8 way + internal terminator; F259-XE, 10 way + internal terminator; F271-XE, 12 way + internal terminator currently afforded Certificate No. IECEx DEK 16.0036U.

- FS32-XE, Trunk and Spur Surge Protection Device currently afforded Certificate No. IECEx BAS 20.0079U.
- WDU 2.5 wire terminals currently afforded certificate number IECEx ULD 14.0005U.
- UT 2.5 wire terminals currently afforded certificate number IECEx KEM 06.0027U.

The equipment is suitable for use in an ambient temperature of -40°C to +60°C.

The power ratings of the equipment are 30V d.c. at 1.5A.

The internal parts within the enclosure are listed on the table 1 in the Annex.

The models FCS-95xx-306 and FCS-95xx-307 Fieldbus Megablock Enclosure differ from the model FCS-8512-305 in that they are housed in a stainless steel IP66 rated enclosure and enable up to twelve or twenty four individual field devices in a Zone 1 hazardous area to be connected to a high energy trunk cable.

The stainless steel enclosure, min. size 406mm x 305mm x 152mm for single F2xx megablock (up to 12-ways) and min. size 406mm x 508mm x 152mm for double F2xx megablock (up to 24-ways), in which the equipment is housed, is currently afforded certificate No. IECEx BAS 15.0071U and marked Ex eb IIC Gb.

Additionally, the models FCS-95xx-306 and FCS-95xx-307 Fieldbus Megablock Enclosure can optionally include FCS-MBT-XE Terminator, which is currently afforded certificate No. IECEx DEK 16.0036X and marked Ex eb mb IIC Gb. The FCS-MBT-XE Terminator can be fitted on the same DIN rail as the ‘Ex e’ terminals and is only an option when using the F245-XE (4 spur) or F251-XE (8 spur) megablocks.

The models FCS-95xx-306 and FCS-95xx-307 Fieldbus Megablock Enclosure are suitable for use in an ambient temperature of -40°C to +60°C.

The power ratings of the equipment are 30V d.c., 1.5A – for 12 spur enclosure or 3A – for 24 spur enclosure.

The internal parts within the enclosure are listed on the table 2 in the Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The equipment shall be effectively earth bonded prior to use.
2. All cable entry devices shall be suitably certified for protection type of ‘eb’, and all unused openings shall be fitted with suitable blanking elements with protection type of ‘eb’ so that min. ingress protection of IP64 is maintained.
3. The equipment is not capable of withstanding a 500Vac isolation test voltage between all inputs to earth. This must be taken into account during installation.
4. For models FCS-95xx-306 and FCS-95xx-307 only: 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.

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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**

Annex:

IECEx BAS 22.0022X Annex Issue 3.pdf

Table 1 - List of Ex Certified components model FCS-8512-305

Item	Certificate	Code	Standards
Enclosure GBXE402512	IECEx TUR 19.0040U	Ex eb IIC Gb Ex tb IIIC Db	IEC 60079-0: 2017 Edition: 7.0 IEC 60079-7: 2017 Edition: 5.1 IEC 60079-31: 2013 Edition: 2
Fieldbus XE Megablock and Terminator	IECEx DEK 16.0036U	Ex eb mb IIC T4 Gb	IEC 60079-0: 2011 Edition: 6.0 IEC 60079-7: 2015 Edition: 5.0 IEC 60079-18: 2014 Edition: 4.0
FS32-XE Surge Protection Device	IECEx BAS 20.0079U	Ex eb mb IIC Gb (-40°C ≤ T_a ≤ +80°C)	IEC 60079-0: 2017 Edition: 7.0 IEC 60079-7: 2017 Edition: 5.1 IEC 60079-18: 2017 Edition 4.1
WDU 2.5 Terminals	IECEx ULD 14.0005U	Ex eb IIC Gb	IEC 60079-0: 2017 Edition: 7.0 IEC 60079-7: 2017 Edition: 5.1
UT 2.5 Terminals	IECEx KEM 06.0027U	Ex eb IIC Gb	IEC 60079-0: 2017 Edition: 7.0 IEC 60079-7: 2017 Edition: 5.1

Table 2 - List of Ex Certified components models FCS-95xx-306 and FCS-95xx-307

Item	Certificate	Code	Standards
Enclosure Type Ex-cell	IECEx BAS 15.0071U	Ex eb IIC Gb Ex tb IIIC Db	IEC 60079-0: 2017 Edition: 7.0 IEC 60079-7: 2017 Edition: 5.1 IEC 60079-31: 2013 Edition: 2
Fieldbus XE Megablock	IECEx DEK 16.0036U	Ex eb mb IIC T4 Gb	IEC 60079-0: 2011 Edition: 6.0 IEC 60079-7: 2015 Edition: 5.0 IEC 60079-18: 2014 Edition: 4.0
FCS-MBT-XE Terminator	IECEx DEK 16.0036U	Ex eb mb IIC T4 Gb	IEC 60079-0: 2011 Edition: 6.0 IEC 60079-7: 2015 Edition: 5.0 IEC 60079-18: 2014 Edition: 4.0
FS32-XE Surge Protection Device	IECEx BAS 20.0079U	Ex eb mb IIC Gb (-40°C ≤ T_a ≤ +80°C)	IEC 60079-0: 2017 Edition: 7.0 IEC 60079-7: 2017 Edition: 5.1 IEC 60079-18: 2017 Edition 4.1
WDU 2.5 Terminals	IECEx ULD 14.0005U	Ex eb IIC Gb	IEC 60079-0: 2017 Edition: 7.0 IEC 60079-7: 2017 Edition: 5.1