

EU - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- 1 EU - Type Examination Certificate Number: **SGS22ATEX0029X – Issue 2**
- 2 Product: **Models FCS-8512-305, FCS-95xx-306 and FCS-95xx-307 Fieldbus Megablock Enclosure**
- 3 Manufacturer: **Eaton Electric Limited**
- 4 Address: **Great Marlings, Butterfield, Luton, Bedfordshire, LU2 8DL, UK**
- 5 This re-issued certificate extends EU Type Examination Certificate No. SGS22ATEX0029X to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.
- 6 SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- 7 The examination and test results are recorded in confidential Report No. **See Certificate History**
- 8 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018 EN IEC 60079-7:2015+A1: 2018 EN 60079-18:2015+A1:2017
except in respect of those requirements listed at item 18 of the Schedule.
- 9 If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- 10 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 11 The marking of the product shall include the following:
⊕ II 2G Ex eb mb IIC T4 Gb (-40°C ≤ Ta ≤ +60°C)

SGS Fimko Oy Customer Reference No. **0703**

Project File No. **23/0357**

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Schedule

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Certificate Number SGS22ATEX0029X – Issue 2

15 Description of Product

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. TUV 19 ATEX 8392 U 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. KEMA 05ATEX2006X.
- FS32-XE, Trunk and Spur Surge Protection Device currently afforded Certificate No. SGS 20ATEX0120U.
- WDU 2.5 wire terminals currently afforded certificate number DEMKO14ATEX1338U.
- UT 2.5 wire terminals currently afforded certificate number KEMA 04ATEX2048U.

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 below:

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

Item	Certificate	Code	Standards
Enclosure GBXE402512	TUV 19 ATEX 8392 U	⊕ II 2G Ex eb IIC Gb ⊕ II 2D Ex tb IIIC Db	EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 EN 60079-31:2014
Fieldbus XE Megablock and Terminator	KEMA 05ATEX2006 X	⊕ II 2G Ex eb mb IIC T4 Gb	EN 60079-0:2012 + A11: 2013 EN 60079-7: 2015 EN 60079-18: 2015
FS32-XE Surge Protection Device	SGS20ATEX0120U	⊕ II 2G Ex eb mb IIC Gb (-40°C ≤ T _a ≤ +80°C)	EN IEC 60079-0:2018 EN 60079-7:2015 EN 60079-18:2015+A1:2017
WDU 2.5 Terminals	DEMKO14ATEX1338U	⊕ II 2G Ex eb IIC Gb	EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018
UT 2.5 Terminals	KEMA 04ATEX2048U	⊕ II 2G Ex eb IIC Gb	EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018

Where the above certified components forming part of the equipment are certified the same or newer editions of the standards than those listed for the FCS-8512-305 Fieldbus Megablock Enclosure, the differences between the editions of the standards listed have been reviewed and determined to have no technical differences affecting the equipment.

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. BAS 15ATEX0099U 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. KEMA05ATEX2006X 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 below:

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

Item	Certificate	Code	Standards
Enclosure Type Ex-cell	BAS 15ATEX0099U	⊕ II 2G Ex eb IIC Gb ⊕ II 2D Ex tb IIIC Db	EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 EN 60079-31:2014
Fieldbus XE Megablock	KEMA 05ATEX2006 X	⊕ II 2G Ex eb mb IIC T4 Gb	EN 60079-0:2012 + A11: 2013 EN 60079-7: 2015 EN 60079-18: 2015
FCS-MBT-XE Terminator	KEMA 05ATEX2006 X	⊕ II 2G Ex eb mb IIC T4 Gb	EN 60079-0:2012 + A11: 2013 EN 60079-7: 2015 EN 60079-18: 2015
FS32-XE Surge Protection Device	SGS20ATEX0120U	⊕ II 2G Ex eb mb IIC Gb (-40°C ≤ T _a ≤ +80°C)	EN IEC 60079-0:2018 EN 60079-7:2015 EN 60079-18:2015+A1:2017
WDU 2.5 Terminals	DEMKO14ATEX1338U	⊕ II 2G Ex eb IIC Gb	EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018

Where the above certified components forming part of the equipment are certified the same or newer editions of the standards than those listed for the FCS-95xx-306 and FCS-95xx-307 Fieldbus Megablock Enclosure, the differences between the editions of the standards listed have been reviewed and determined to have no technical differences affecting the equipment.

The correspondence of specific models FCS-95xx-306 and FCS-95xx-307 Fieldbus Megablock Enclosure with the components installed in them is given below:

For single megablock junction box

FCS-9504-306xx 4 way F245-XE or F247-XE
FCS-9508-306xx 8 way F251-XE or F253-XE
FCS-9510-306xx 10 way F259-XE
FCS-9512-306xx 12 way F271-XE

For double megablock junction box

FCS-9508-307xx 2x 4 way F245-XE or F247-XE
FCS-9516-306xx 2x 8 way F251-XE or F253-XE
FCS-9520-306xx 2x 10 way F259-XE
FCS-9524-307xx 2x 12 way F271-XE

The 'xx' at the end of the model number denotes the range of configurations of the equipment. The differences between the models and configurations do not affect the certification.

16 Report Number

See Certificate History.

17 Specific Conditions of Use

- The equipment shall be effectively earth bonded prior to use.
- 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 minimum 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.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product:

Clause	Subject	Compliance
1.2.7	LVD type requirements	Manufacturer responsibility
1.2.8	Overloading of equipment (protection relays, etc.)	User/Installer responsibility
1.4.1	External effects	User/Installer responsibility
1.4.2	Aggressive substances, etc.	User/Installer responsibility

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
CI9500-31	1 to 2	1	6.6.23	Process Junction Box assembly for F2XX-XE range
CI9500-32	1 of 1	1	20.9.23	Process Junction Box - Certification Label

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
CI9500-30	1 to 2	2	26.7.22	Process Junction Box assembly, FCS-8512-305

The above drawings are common to IECEx BAS 22.0022X.

20 Certificate History

Certificate No.	Date	Comments
SGS22ATEX0029X	5 May 2022	The release of the prime certificate. The associated test and assessment against the requirements of EN IEC 60079-0:2018, EN 60079-7:2015+A1:2018 and EN 60079-18:2015+A1:2017 is documented in Test Report No. GB/BAS/ExTR22.0053/00. Project No. 22/0097.
SGS22ATEX0029X Issue 1	25 January 2023	To permit a minor change to the product design and drawings not affecting the certification assessment, specifically the addition of WDU 2.5 or UT 2.5 type terminals. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR23.0003/00. Project No 22/0493.
SGS22ATEX0029X Issue 2	4 October 2023	This issue of the certificate is to permit the addition of Models FCS-95xx-306 and FCS-95xx-307 Fieldbus Megablock Enclosure. The associated test and assessment is documented in Test Report No. GB/SGS/ExTR23.0121/00. Project No 23/0357.
For drawings applicable to each issue, see original of that issue.		