1 # EU - TYPE EXAMINATION CERTIFICATE

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

3 EU - Type Examination Certificate Number: **Baseefa15ATEX0072X – Issue 2**

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **FCS-9504-1XX, FCS-9508-1XX & FCS-9512-1XX Fieldbus Megablock Enclosures**

5 Manufacturer: **Eaton Electric Limited**

6 Address: **Great Marlings, Butterfield, Luton, Bedfordshire, LU2 8DL**

7 This re-issued certificate extends EC Type Examination Certificate No. Baseefa15ATEX0072X 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.

8 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.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2012 + A11: 2013 EN 60079-1: 2014 EN 60079-7: 2015 + A1: 2018 EN 60079-18: 2015

except in respect of those requirements listed at item 18 of the Schedule.

10 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.

11 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.

12 The marking of the product shall include the following:

Ⓔx II 2G Ex db eb mb IIC T4 Gb (-40°C ≤ T_a ≤ +60°C)

SGS Fimko Oy Customer Reference No. **0703** Project File No. **19/0448**

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13 **Schedule**

14 **Certificate Number Baseefa15ATEX0072X – Issue 2**

15 **Description of Product**

The FCS-9504-1XX, FCS-9508-1XX & FCS-9512-1XX Fieldbus Megablock Enclosures enable individual field devices in a Zone 1 hazardous area to be connected to a high energy trunk cable. The enclosures can be fitted with one, two or three F2xx-XE MTL Relcom Megablock wiring hubs according to the type chosen. These, together with certified terminals, optional TP32 Surge Protection devices and FCS-MBT-XE terminators are housed in a stainless steel IP66 rated enclosure.

The stainless steel IP66 enclosure (min size 406mm x 350mm x 203mm for FCS-9504-1XX 4-Spur and FCS-9508-1XX 8-Spur Megablock configurations, and min size 500mm x 450mm x 206mm for the FCS-9512-1XX 12-Spur Megablock configuration), is populated with the following components terminal blocks, surge protectors and megablocks, all of which are certified. The enclosures are currently afforded certificate numbers BVS 13 ATEX E 014U and marked ⟨Ex⟩ II 2 G Ex e IIC Gb/⟨Ex⟩II 2 D Ex tb IIIC Db, or Baseefa15ATEX0099U and marked ⟨Ex⟩ II 2 G Ex e IIC Gb / ⟨Ex⟩ II 2 D Ex tb IIIC Db.

The enclosures have an IP66 Ex e breather/drain (factory fitted), and up to 15 IP66 Ex e cable glands or stopping plugs (which may or may not be factory fitted). The input power ratings for the assembly are 30V d.c at 0.39A.

The equipment may contain a combination of the following:

Fieldbus XE Megablock wiring hubs and FCS-MBT-XE terminators, the number installed is dependent upon the Process Junction Box type (see details below). These have been assessed and are certified under KEMA 05ATEX2006.

Certified Ex e protective conductor terminal blocks, the number/type installed depends on the type of assembly. WPE4 & WDU2.5 terminals are afforded certificate number DEMKO14ATEX1338U, ZPE4 & ZDU2.5 terminals are afforded certificate number DEMKO15ATEX1467U, WDK2.5V terminals are afforded certificate number DEMKO15ATEX1346U, and ZDK2.5V terminals are afforded certificate number DEMKO16ATEX1729U. The terminals are suitable for an operating temperature range of -50°C to +100°C.

Up to 15 flameproof certified TP32 Surge Protectors are afforded certificate number Baseefa04ATEX0053X.

The permissible combinations of the above components are as follows:

FCS-9504-1XX 4-Spur Megablock Enclosures
Process Junction Box type FCS-9504-170 to 171, 173 to 180 & 282 to 299 -
1 F245-XE or 1 F247-XE Megablock may be fitted. 1 FCS-MBT-XE terminator may optionally be fitted with the F245-XE / F247-XE Megablock. Up to 5 TP32 Surge Protectors for fieldbus trunk and spurs may optionally be fitted.

FCS-9508-1XX 8-Spur Megablock Enclosures
Process Junction Box type FCS-9508-110 to 119 -
1 F251-XE, or 1 F253-XE, or up to 2 F245-XE, or up to 2 F247-XE Megablocks may be fitted.
1 FCS-MBT-XE terminator(s) may optionally be fitted with each F245-XE, F247-XE, F251-XE or F253-XE Megablock. Up to 10 TP32 Surge Protectors for fieldbus trunk and spurs may optionally be fitted.

FCS-9512-1XX 12-Spur Megablock Enclosures
Process Junction Box type FCS-9512-171 to 180
1 F271-XE, or 1 F251-XE, or 1 F253-XE, or 1 F251-XE & 1 F245-XE, or 1 F253-XE & 1 F247-XE, or up to 3 F245-XE, or up to 3 F247-XE Megablocks may be fitted. 1 FCS-MBT-XE terminator(s) may optionally be fitted with each F245-XE, or F251-XE Megablock. Up to 15 TP32 Surge Protectors for fieldbus trunk and spurs may optionally be fitted.

The component parts are listed on Table 1 as follows:

Item	Certificate	Code	Standards
Enclosure type N-TB…	BVS13ATEXE014U	⟨Ex⟩II 2G Ex e IIC Gb ⟨Ex⟩II 2D Ex tb IIIC Db	EN 60079-0: 2012 + A11: 2013 EN 60079-7: 2007 EN 60079-31: 2014
Type Ex-Cell Enclosure	Baseefa15ATEX0099U	⟨Ex⟩II 2G Ex e IIC Gb ⟨Ex⟩II 2D Ex tb IIIC Db	EN 60079-0: 2012 + A11: 2013 EN 60079-7: 2007 EN 60079-31: 2014
Fieldbus XE Megablock	KEMA05ATEX2006X	⟨Ex⟩ II 2 G Ex eb mb IIC T4 Gb	EN 60079-0: 2012 + A11: 2013 EN 60079-7: 2015 EN 60079-18: 2015
Feed Through Terminal Blocks WPE4	DEMKO14ATEX1338U	⟨Ex⟩ II 2 GD Ex eb IIC Gb T6 (- 60°C ≤ Tamb ≤ +40 °C) T5 (- 60°C ≤ Tamb ≤ +55 °C) T4 (- 60°C ≤ Tamb ≤ +70 °C)	EN IEC 60079-0: 2018 EN 60079-7: 2015 + A1: 2018
Feed Through Terminal Blocks WDK2.5V	DEMKO15ATEX1346U	⟨Ex⟩II 2 GD Ex eb IIC Gb T6 (- 60°C ≤ Tamb ≤ +40 °C) T5 (- 60°C ≤ Tamb ≤ +55 °C) T4 (- 60°C ≤ Tamb ≤ +70 °C)	EN IEC 60079-0: 2018 EN 60079-7: 2015 + A1:2018
Feed Through Terminal Block ZPE4	DEMKO15ATEX1467U	⟨Ex⟩ II 2GD Ex eb IIC Gb T6 (-60°C ≤ Tamb ≤ +40°C) T5 (-60°C ≤ Tamb ≤ +55°C) T4 (-60°C ≤ Tamb ≤ +70°C)	EN 60079-0: 2012 + A11: 2013 EN 60079-7: 2015
Feed Through Terminal Block ZDK2.5V	DEMKO16ATEX1729U	⟨Ex⟩ II 2 GD Ex eb IIC Gb T6 (- 60°C ≤ Tamb ≤ +40 °C) T5 (- 60°C ≤ Tamb ≤ +55 °C) T4 (- 60°C ≤ Tamb ≤ +70 °C)	EN 60079-0: 2012 + A11: 2013 EN 60079-7: 2015
Feed Through Terminal Block WDU2.5	DEMKO14ATEX1338U	⟨Ex⟩ II 2 GD Ex eb IIC Gb T6 (- 60°C ≤ Tamb ≤ +40 °C) T5 (- 60°C ≤ Tamb ≤ +55 °C) T4 (- 60°C ≤ Tamb ≤ +70 °C)	EN IEC 60079-0: 2018 EN 60079-7: 2015 + A1: 2018
Feed Through Terminal Block ZDU2.5	DEMKO15ATEX1467U	⟨Ex⟩ II 2GD Ex eb IIC Gb T6 (-60°C ≤ Tamb ≤ +40°C) T5 (-60°C ≤ Tamb ≤ +55°C) T4 (-60°C ≤ Tamb ≤ +70°C)	EN 60079-0: 2012 + A11: 2013 EN 60079-7: 2015
Surge Protection Units type TP32	Baseefa04ATEX0053X	⟨Ex⟩ II 2G Ex db IIC T6 Gb -40°C to +70°C	EN 60079-0: 2012 + A11: 2013 EN 60079-1:2014

Table 1: Component List

Where the above listed certified components forming part of the equipment are certified to older editions of the standards than those listed for the FCS-9504-1XX, FCS-9508-1XX & FCS-9512-1XX Fieldbus Megablock Enclosures, the differences between the editions of the standards listed have been reviewed and determined to have no technical differences affecting the equipment.

16 Report Number

See Certificate History

17 Specific Conditions of Use

1. The equipment shall be effectively earth bonded prior to use.
2. Only Ex e certified cable glands, breathers or blanking plugs may be used with the equipment.
3. Entry device shall maintain a minimum ingress protection of at least IP54.
4. The enclosure lid must be opened and closed in a vertical position so that the hinges are surely protected against excessive mechanical forces.
5. Terminal blocks shall be protected against sun and UV light.
6. Under any condition no part of the equipment shall exceed the temperature range.
7. When used below -10°C field wiring suitable for minimum ambient temperature shall be used for the WPE 4 terminal blocks.
8. Unused terminals shall be tightened.

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, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	Protection against other hazards (LVD type requirements)
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
CI9500-1	1 to 2	3	12/19	Process Junction Box Assembly 4 & 8 Spur
CI9500-2	1 to 2	3	12.19	Process Junction Box Assembly, 12 Spur
CI9500-3	1 of 1	4	12.19	Process Junction Box Certification Label

The above drawings are associated and held with IECEx Certificate No. IECEx BAS 17.0122X Iss. 1

No drawings remain unaffected by this issue:

20 Certificate History

Certificate No.	Date	Comments
Baseefa15ATEX0072X	19 August 2015	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0: 2012 + A11: 2013, EN 60079-1: 2014, EN 60079-7: 2007 and EN 60079-18: 2009 is documented in Test Report No. 15(C)0228.

Certificate No.	Date	Comments
Baseefa15ATEX0072X Issue 1	21 February 2018	To permit: - i) The manufacturer's name to be changed. ii) The equipment title to be changed to FCS-9504-1XX, FCS-9508-1XX & FCS-9512-1XX Fieldbus Megablock Enclosures. iii) Minor circuit and drawing changes not affecting the original assessment. iv) The correction of the certification marking shown on page 1 of the certificate to: - ⟨Ex⟩ II 2G Ex db e mb IIC T4 Gb -40°C ≤ Ta ≤ +60°C v) To confirm the current designs of the FCS-9504-1XX, FCS-9508-1XX & FCS-9512-1XX Fieldbus Megablock Enclosures have been reviewed against the requirements of EN 60079-18: 2015 in respect of its differences from EN 60079-18: 2009, and none of the differences affect the original assessment. The test and assessment is documented in Certification Report No. GB/BAS/ExTR17.0348/00, held with IECEx Certificate No. IECEx BAS 17.0122X, Project File No. 16/0817.
Baseefa15ATEX0072X Issue 2	9 December 2019	This issue of the certificate permits: i) The use of an alternative component certified enclosure with smaller minimum dimensions. The fitting of the equipment inside the alternative Type Ex-Cell Enclosure, Component Certificate No. Baseefa15ATEX0099U does not affect the previous certification of the equipment. As a result of this, Model No.'s FCS-9504-282 to 299 have been added to the range covered by the certificate. ii) The use of alternative terminals WDU2.5, Component Certificate No. DEMKO14ATEX1338U, and ZDU2.5, Component Certificate No. DEMKO15ATEX1467U in all variants of the equipment. iii) To confirm the current designs of FCS-9504-1XX, FCS-9508-1XX & FCS-9512-1XX Fieldbus Megablock Enclosures have been reviewed against the requirements of EN 60079-7: 2015 + A1: 2018 in respect of the differences from EN 60079-7: 2007, and with exception of the marking, none of differences affect the equipment. In accordance with the marking requirements of EN 60079-7: 2015 + A1: 2018, all variants of the equipment are marked:- ⟨Ex⟩ II 2G Ex db eb mb IIC T4 Gb (-40°C ≤ T_a ≤+60°C) iv) The updating of the component information listed in Table 1 in the Certificate Schedule to list updated Component Certificate information as well as add the new enclosure and terminals that can be used in the equipment. The test and assessment is documented in Certification Report No. GB/BAS/ExTR19.0333/00, held with IECEx Certificate No. IECEx BAS 17.0122X Iss. 1, Project File No. 19/0448.
For drawings applicable to each issue, see original of that issue.		