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: **Baseefa04ATEX0260X – Issue 5**

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: **FP32 Fieldbus Surge Protection Device**

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. Baseefa04ATEX0260X 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 Baseefa, Notified Body number 1180, 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.

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 60079-11: 2012**

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 1G Ex ia IIB T3 Ga (-40°C ≤ Ta ≤ +60°C) or Ex ia IIC T4 Ga (-40°C≤ Ta ≤ +70°C) (See Schedule)

SGS Baseefa Customer Reference No. **0703** Project File No. **16/0371**

SGS Baseefa Limited
Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail baseefa@sgs.com web site www.sgs.co.uk/baseefa
Registered in England No. 4305578.
Registered address: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN

pp A Bellman
R S SINCLAIR
TECHNICAL MANAGER
On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number Baseefa04ATEX0260X – Issue 5**

15 **Description of Product**

The FP32 Fieldbus Surge Protection Device is designed as a FISCO Field Device, to provide protection for sensitive electronic Fieldbus compatible equipment, and it is intended to be mounted in a Safe Area immediately following a FISCO Power Supply or within a Hazardous Area.

This unit does not in itself provide any voltage or current limiting functions and must be supplied from a suitably certified intrinsically safe FISCO source. It is a dual channel unit, with screen and earth, but all connections and both channels must form part of the same intrinsically safe circuit.

The unit comprises two series resistors, a diode bridge circuit, two gas discharge tubes, a silicon avalanche diode and two metal oxide varistors mounted on a printed circuit board. This assembly is housed within an MTL7700 Series plastic enclosure, which is provided with four input and four output terminals in addition to a base spring, which provides mounting on a DIN earthing rail. The lower part of the enclosure is encapsulated to consolidate the mounting arrangement.

The FP32 Fieldbus Surge Protection Device is considered to be coded ⟨Ex⟩ II 1G Ex ia IIB T3 (-40°C ≤ Ta ≤ +70°C) when supplied from a Certified [Ex ia] Group IIB source.

Field Connectors - S1, S2, Screen and Earth.

U_i = 17.5V
I_i = 380mA
P_i = 5.32W
C_i = 0
L_i = 0

Surge Protected Connectors – S3, S4, Screen and Earth

U_o = U_i
I_o = I_i
P_o = P_i

OR

The FP32 Fieldbus Surge Protection Device is considered to be coded ⟨Ex⟩ II 1G Ex ia IIC T4 (-40°C ≤ Ta ≤ +70°C) when supplied from a Certified [Ex ia] Group IIC source.

Field Connectors - S1, S2, Screen and Earth

U_i = 17.5V
I_i = 183mA
P_i = 2.56W
C_i = 0
L_i = 0

Surge Protected Connectors – S3, S4, Screen and Earth

U_o = U_i
I_o = I_i
P_o = P_i

The cable parameters associated with the Field and Surge Protected Connectors will be determined by the source supplying the intrinsically safe circuit.

16 Report Number

GB/BAS/ExTR16.0328/00

17 Specific Conditions of Use

1. The FP32 Fieldbus Surge Protection Device is not capable of withstanding the 500V voltage withstand test for one minute without breakdown to earth. This must be taken into consideration in any installation.

2. When the FP32 Fieldbus Surge Protection Device is mounted within a Hazardous Area the plastic enclosure is considered to present a potential electrostatic risk. Do not rub or clean with solvents.

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
1.4.1	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
1100439	1-6	E	8.16	FP Series Certification Drawing for ATEX

The above drawings are associated and held with IECEx BAS 13.0095X Iss. 1

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
None				

20 Certificate History

Certificate No.	Date	Comments
Baseefa04ATEX0260X	29 July 2004	The release of the prime certificate. The associated test and assessment against the requirements of EN 50014: 1997 + A1 & A2, EN50020: 2002, EN 50284: 1999 is documented in Test Report No. 04(C)0054.
Baseefa04ATEX0260X/1	09 September 2004	To permit the use of an alternative encapsulant. There is no separate report. Project file is 04/0679.
Baseefa04ATEX0260X/2	11 October 2004	To permit the correction of dimensional information on the general assembly drawing. There is no separate report. Project file is 04/739.
Baseefa04ATEX0260X/3	07 August 2006	To permit the maximum permitted ambient temperature for the FP32 Fieldbus Surge Protection Device to be increased from 60°C to 70°C. This increase applies to existing Surge Protection Devices, when supplied from either a Group IIB source, as in the original schedule or a Group IIC source as detailed in Variation 0.1. There is no separate report. Project File is 06/0512.

Certificate No.	Date	Comments
Baseefa04ATEX0260X/4	24 October 2013	To confirm that the FP32 Fieldbus Surge protection device complies with the requirements of EN 60079-0: 2012 and EN 60079-11: 2012. Report GB/BAS/ExTR13.0221/00, Project File No. 13/0621.
Baseefa04ATEX0260X Issue 5	12 June 2017	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and confirms the current design meets the requirements of EN 60079-0: 2012 + A11: 2013. The certificate also permits the manufacturer's name to be changed on the certificate and the equipment marking. No other changes are made to the equipment design. The associated assessment is documented in Certification Report No. GB/BAS/ExTR16.0328/00, Project File No. 16/0371.
For drawings applicable to each issue, see original of that issue.		