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: **Baseefa06ATEX0035X – Issue 4**

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: **TP-P**-*-NDI Range of Surge Protection Devices**

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. Baseefa06ATEX0035X 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 60079-1: 2014

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 :

⟨Ex⟩ **II 2G Ex db IIC T6 (T_{amb} =-40°C to + 60°C) Gb**
or T5 (T_{amb} =-40°C to + 80°C) Gb
or T4 (T_{amb} =-40°C to + 85°C) Gb

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

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R S SINCLAIR
TECHNICAL MANAGER
On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number Baseefa06ATEX0035X – Issue 4**

15 **Description of Product**

The TP-P**-*-NDI Series Surge Protection Devices are designed to provide protection for sensitive electronic equipment, and are designed to be mounted within a hazardous area.

Within the TP-P**-*-NDI series of Surge Protection Devices, two different working voltages are available, the TP-P48 and TP-P32 denoting 48V and 32V versions respectively.

The TP-P**-*-NDI Series Surge Protection Devices consist of a solid drawn hexagon bar of stainless steel drilled along its axis to accept a printed circuit board with up to three permanently attached cables. The printed circuit board is potted into the housing which has a choice of the male thread forms for attachment purposes. The designation of the surge protection devices depends upon external thread form and the units are given the identification letter N, I, or G for ½" NPT, M20 ISO, and G1/2" thread forms respectively.

The type designations are summarised in the table below:

Voltage (V d.c.)	Thread Form	Type Designation
48	½" NPT	TP-P48-N-NDI
48	M20 ISO	TP-P48-I-NDI
48	G1/2"	TP-P48-G-NDI
32	½" NPT	TP-P32-N-NDI
32	M20 ISO	TP-P32-I-NDI
32	G1/2"	TP-P32-G-NDI

The opposite end of the bar is threaded with a female thread for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. Unused entries to be fitted with a flameproof stopping plug. The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component) under an EC-Type/EU-Type Examination Certificate.

A terminal block is provided, potted into the female end for connection of a male terminal connector allowing connection of cables from the conduit.

The devices are rated at up to a maximum of 48V d.c. with a surge capacity up to 10kA for 20 ms.

A range of temperature classes for different ambient temperature ranges are permitted as described in the table below:

Ambient Temperature Range	Temperature Class
Ta = -40°C to +85°C	T4
Ta = -40°C to +80°C	T5
Ta = -40°C to +60°C	T6

16 **Report Number**

SGS Baseefa Certification Report Number GB/BAS/ExTR16.0298/00

17 Specific Conditions of Use

1. The permanently attached cables shall be suitably protected against pulling, mechanical damage and terminated within a terminal or junction facility suitable for the conditions of use.
2. These devices are not provided with an external connection facility for an earthing or bonding conductor. It is the user's responsibility to ensure adequate earth continuity via the mounting arrangements.
3. This equipment is also afforded Intrinsically Safe Certification to Baseefa06ATEX0034X, and hence the equipment is dual marked. It is the user's responsibility to determine the protection concept to be applied and permanently mark the equipment in the space provided for guidance in installation and maintenance.

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	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
1100463	1	G	8.16	TP-P** Certification drawing for ATEX - Index sheet
*1100463	2	G	8.16	TP-P**-*-NI Certification Label
1100463	3	G	8.16	TP-P**-*-NDI Certification Label
1100463	4	G	8.16	TP-P** Alternative Vega NI Certification Label
1100463	5	G	8.16	TP-P** Common Circuit Diagram
1100463	6	G	8.16	TP-P** Common Internal Components
*1100463	7	G	8.16	TP-P**-*-NI Enclosure
1100463	8	G	8.16	TP-P**-*-NDI Enclosure
*1100463	9	G	8.16	TP-P**-*-NI Full Assembly
1100463	10	G	8.16	TP-P**-*-NDI Full Assembly

All drawings are common to and held with Baseefa06ATEX0034X Iss. 6
*These drawings are not relevant to this certificate but are listed for reference.

Current drawings which remain unaffected by this issue:

None

20 Certificate History

Certificate No.	Date	Comments
Baseefa06ATEX0035X	29 November 2006	The release of the prime certificate. The associated test and assessment against the requirements of EN 50014:1997 +A1&2 and EN 50018:2000+A1 is documented in Test Report No. 06(C)0068.

Certificate No.	Date	Comments
Baseefa06ATEX0035X/1	02 November 2008	To permit the use of an alternative manufacturing location and minor changes to the marking code. Also to permit changes to the intrinsically safe certificate but which raise the issue of all the certified drawings. No changes affecting the flameproof concept. There is no report associated with this variation. Project File 08/0820.
Baseefa06ATEX0035X/2	20 September 2010	To permit alternative grades of stainless steel for the body shell. There is no report associated with this variation. Project File 16/0717.
Baseefa06ATEX0035X/3	27 February 2012	To permit minor drawing changes related to gauging of NPT threads and review the equipment against the requirements of EN 60079-0: 2009 and EN 60079-1: 2007 including the revision of the equipment marking in accordance with these standards.
Baseefa06ATEX0035X Issue 4	22 November 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 and EN 60079-1: 2014 including the revision of the equipment marking in accordance with these standards. This issue of the certificate also permits a change in the company name and the associated marking changes. The assessment is recorded in Test Report GB/BAS/ExTR16.0298/00. Project File 16/0371.
For drawings applicable to each issue, see original of that issue.		