## Certificate Number Baseefa12ATEX0066X Issue 2

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**EU - TYPE EXAMINATION CERTIFICATE** 

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

- 3 EU Type Examination Certificate Baseefa12ATEX0066X Issue 2
  Number:
- 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: IOP32D Dual Channel IS Surge Protection Device

5 Manufacturer: Eaton Electric Limited

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

- This re-issued certificate extends EC Type Examination Certificate No. Baseefa12ATEX0066X 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.
- 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.

- 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.
- 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.
- The marking of the product shall include the following:

**(a)** II 1 G Ex ia IIC T4 Ga (-30°C ≤ Ta ≤ See Schedule)

SGS Baseefa Customer Reference No. 0703

Project File No. 16/0371

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On behalf of SC

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13 Schedule

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### 15 Description of Product

The IOP32D Dual Channel IS Surge Protection Device is designed to provide protection for sensitive electronic equipment, and is intended to be mounted within a Hazardous Area. The dual channel IOP32D Dual Channel IS Surge Protection Device is designed such that the channels may be considered as separate intrinsically safe circuits. The break-over voltage is 90V and both channels have the same safety input parameters for intrinsic safety purposes. The unit has an earth connection which utilises the mounting foot.

Each channel comprises two series resistors, a 3-terminal gas discharge tube and a silicon avalanche diode mounted on a printed circuit board. The printed circuit board assembly is housed within an MTL7700 Series plastic enclosure, which is provided with four input and four output terminals in addition to the base spring, which provides the earth connection and the mounting of the units on a DIN earthing rail. The lower part of the enclosure is encapsulated to consolidate the mounting arrangement.

The parameters for each channel of the IOP32D Dual Channel IS Surge Protection Device are:-

## Input: Field Terminals J1-1/2 (J2-3/4)

 $\begin{array}{lll} U_i &=& 45 V \\ P_i &=& 1 W & (-30^{\circ}C \leq T_a \leq 80^{\circ}C) \text{ or } \\ P_i &=& 1.2 W & (-30^{\circ}C \leq T_a \leq 60^{\circ}C) \text{ or } \\ P_i &=& 1.3 W & (-30^{\circ}C \leq T_a \leq 40^{\circ}C) \\ C_i &=& 0 \end{array}$ 

 $L_i = 0$   $L_i = 0$ 

For the IOP32D Dual Channel IS Surge Protection Device the terminal identification for the second channel is shown in brackets and each channel may be considered as a separate intrinsically safe circuit.

#### Output: Surge Protected Terminals J3-5/6, (J4-7/8)

 $\begin{array}{rcl} U_o & = & U_i \\ I_o & = & I_i \\ P_o & = & P_i \end{array}$ 

The surge protected output parameters are equal to the parameters of the device connected to the field terminals.

## 16 Report Number

See Certificate History

#### 17 Specific Conditions of Use

- 1. The plastic enclosure may present an electrostatic risk and must not be rubbed with a dry cloth or cleaned with solvents.
- 2. The IOP32D Dual Channel IS Surge Protection Device will not meet the 500V insulation requirements to earth, therefore suitable precautions must be taken when installing the apparatus.

### 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	Compliance
1.2.7	Protection against other hazards (LVD type requirements, etc.)	Manufacturer responsibility
1.2.8	Overloading of equipment (protection relays, etc.)	User/Installer responsibility

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Clause	Subject	Compliance
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	<u>Issue</u>	<u>Date</u>	<u>Description</u>
100468*	1 of 10	D	8.16	IOP Series Certification Drawing for ATEX - Index
100468*	2 of 10	D	8.16	IOP32 & IOP32D Electronic assembly & components
100468*	3 of 10	D	8.16	IOP32 & IOP32D Printed Circuit Board
100468*	4 of 10	D	8.16	IOP32 & IOP32D Internal Components
100468*	5 of 10	D	8.16	IOP32 & IOP32D Mechanical assembly
100468	7 of 10	D	8.16	IOP32D Dual channel external case
100468	9 of 10	D	8.16	IOP32D Dual channel Certification Label
100468*	10 of 10	D	8.16	IOP32 & IOP32D Terminal Labels

Drawing marked \* are associated and held with Baseefa06ATEX0036X Issue 3

Current drawings which remain unaffected by this issue:

None

# 20 Certificate History

Certificate No.	Date	Comments
Baseefa12ATEX0066X	5 March 2012	The release of the prime certificate. The associated test and assessment against the requirements of IEC 60079-0:2011 and EN 60079-11:2012 is documented in Test Report No. 12(C)0128, held with Baseefa12ATEX0066X.
Baseefa12ATEX0066X/1	29 May 2014	To permit minor changes to the drawings which do not affect the original assessment.
		The associated assessment is documented in Certification Report No.14(C)0430, held with Baseefa12ATEX0066X.
Baseefa12ATEX0066X Issue 2	22 November 2017	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and confirms the current designs meet the requirements of EN 60079-0: 2012 + A11: 2013 & EN 60079-11: 2012.
		The certificate also permits the manufacturer's name to be changed on page 1 of the certificate and on the equipment marking.
		The associated assessment is documented in Certification Report No. GB/BAS/ExTR16.0288/00, held with IECEx BAS 07.0045X.