IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx BAS 20.0079U**

Certificate history:
Issue 0 (2020-12-11)

Status: **Current**

Issue No: 1

Date of Issue: 2021-08-18

Applicant: **Eaton Electric Limited**
Great Marlings
Butterfield
Luton
Bedfordshire
LU2 8DL
United Kingdom

Ex Component: FS32-XE Surge Protection Device

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased Safety, Encapsulation**

Marking: **Ex eb mb IIC Gb (-40°C < Ta +80°C)**

Approved for issue on behalf of the IECEx Certification Body: **Mr R S Sinclair**

Position: **Technical Manager**

Signature:
(for printed version)

Date: 20/8/2021

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom

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Manufacturer: **Eaton Electric Limited**
Great Marlings
Butterfield
Luton
Bedfordshire
LU2 8DL
United Kingdom

Additional manufacturing locations: **MTL Instruments Pvt Limited**
No 3 Old Mahabalipuram Road
Sholinganallur
Chennai 600119
India

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/BAS/ExTR20.0198/00 GB/BAS/ExTR21.0147/00

Quality Assessment Reports:

GB/BAS/QAR06.0022/08 GB/BAS/QAR07.0017/09

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Ex Component(s) covered by this certificate is described below:

The FS32-XE Surge Protection Devices are designed to provide protection for sensitive electronic equipment, and it is intended to be mounted within a Hazardous Area.

The component comprises a diode bridge, two 3-terminal gas discharge tubes, a pair of varistors and a fuse, all mounted on a printed circuit board. This assembly is fully encapsulated within a plastic enclosure, which is provided with three input terminals (+, S & -) in addition to a mounting foot, which provides the earth connection.

Input: Field Terminals (+, S, -)

Max rated input: 36Vdc, 2A

Output: Surge Protected Terminals (+, S, -)

As input.

SCHEDULE OF LIMITATIONS:

1. The FS32-XE demonstrates a surface temperature rise of <5°C when operating in the most onerous operating conditions. A Temperature Classification of T4 in a +80°C ambient would be considered applicable.
2. The FS32-XE is suitable for use within equipment with an Equipment Protection Level of Gb. The FS32-XE may also form part of a Group III circuit within equipment with an Equipment Protection Level of Db or be used within equipment supplying equipment located within a Group III area (i.e. Equipment Protection Level of [Db]).
3. The FS32-XE must be installed in equipment such that it is afforded a degree of protection of at least IP54 in accordance with EN IEC 60079-0, EN 60079-7 and EN 60529.
4. The equipment in which the FS32-XE is installed will not be capable of withstanding a 500Vac isolation test voltage between all inputs to earth. This must be taken into account during installation.
5. The PCB Header connector must be mated with an appropriately certified connector. See manufacturer's instructions.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Variation 1.0

To correct the protection code to Ex eb mb IIC Gb (-40°C < Ta +80°C).

ExTR: **GB/BAS/ExTR21.0147/00**	File Reference: **18/0549**