(1) EU-TYPE EXAMINATION CERTIFICATE

(2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number

TÜV 22 ATEX 8786 X Issue: 01

(4) Equipment: **Surge Protector**
Types M-LBAS-IA1.IE*, M-LBAS-IA1.DE*, FS-LBAS-IA1*, FN-LBAS-IA1*

(5) Manufacturer: **Pepperl+Fuchs SE**

(6) Address: **Lilienthalstraße 200**
68307 Mannheim, Germany

(7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.
The examination and test results are recorded in the confidential report 557/Ex8786.01/22

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0:2018	**EN 60079-1: 2014**	**EN IEC 60079-7: 2015 / A1: 2018**
EN 60079-11: 2012	**EN 60079-18: 2015 / A1: 2017**	**IEC TS 60079-47: 2021**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

(12) The marking of the equipment shall include the following:

II 2 (1) G Ex ia [ia Ga] IIC T6 Gb
II 2 (1) D Ex ia [ia Da] IIIC T80°C Db
I M2 (M1) Ex ia [ia Ma] I Mb
for DIN rail version

II 2 (1) G Ex ia [ia Ga] IIC T6 Gb
II 2 (1) D Ex ia [ia Da] IIIC T80°C Db
I M2 (M1) Ex ia [ia Ma] I Mb
II 2 G Ex db eb mb IIC T6 Gb
I M2 Ex db eb mb I Mb
II 2 (1) G Ex db [ia Ga] IIC T6 Gb
for Metal tube version

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz Cologne, 2023-04-28

Dipl.-Ing. Christian Mehrhoff

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(13) Annex

(14) # EU Type Examination Certificate

TÜV 22 ATEX 8786 X Issue: 01

(15) Description of equipment

15.1 Equipment and type:

Surge Protector
Types M-LBAS-IA1.IE*, M-LBAS-IA1.DE*,
FS-LBAS-IA1*, FN-LBAS-IA1*

15.2 Description / Details of Change

General product information

The Surge Protectors are used to protect Ethernet-APL devices from overvoltages induced in the signal lines caused by indirect lightning strikes.

Type code	Description
M-LBAS-IA1.IE*	DIN Rail version with plastic enclosure, earthing through GDT
M-LBAS-IA1.DE*	DIN Rail version with plastic enclosure, direct earthing
FS-LBAS-IA1*	Potted version in a metal tube with an M20 ISO thread
FN-LBAS-IA1*	Potted version in a metal tube with an 1/2" NPT thread

* is not Ex relevant

Dependent on the supply circuit, the output circuits may lead into Zone 0, Zone 20 or mining with category M1. The Surge Protector is a FISCO device or an auxiliary device for 2-WISE and has to be supplied according to the FISCO and 2-WISE parameters. The metal tube version can be screwed into an increased safety or flameproof enclosure in Zone 1 or in mining with category M2.
The DIN rail version has to be installed into an additional enclosure, which fulfills IP54 and EN/IEC 60079-0 requirements.

Details of Change:

Some technical changes, which are not relevant for the user.

Technical Data

Electrical data

Supply circuit	U_i = 30 V and I_i = 500 mA or U_n = 30 V and I_n = 500 mA
Output circuit	$U_0 = U_i$ $I_0 = I_i$ Auxiliary device according to 2-WISE and FISCO device.
PA Earth connection	For connection to the equipotential bonding.

Environmental data:

The permitted ambient temperature range:
For the DIN rail version:
-40 °C ≤ Ta ≤ +80 °C
For the metal tube version:
-50 °C ≤ Ta ≤ +80 °C

(16) Test-Report No. 557/Ex8786.01/22

(17) Special Conditions for safe use

For the metal tube version:

1. The device has to be incorporated in the local equipotential bonding when mounted into the wall of a flameproof or increased safety enclosure and it has to be secured against loosening or twisting.

2. When screwed into an enclosure in type of protection increased safety, the necessary degree of protection by enclosure (IP54) at the thread of the Surge Protector has to be ensured by suitable tightness measures e.g. teflon tape (see manual).

3. The device shall only be mounted to a flameproof enclosure with a reference pressure of max. 20 bar.

For the DIN rail version

4. The device must be installed and operated only in surrounding enclosures that
   • comply with the requirements for surrounding enclosures according to IEC/EN 60079-0,
   • are rated with a degree of protection of at least IP54 according to IEC/EN 60529.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz Cologne, 2023-04-28

Dipl.-Ing. Christian Mehrhoff