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(1) TYPE EXAMINATION CERTIFICATE



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

TÜV 22 ATEX 8881 X

Issue: 00

(4) Equipment:

Surge protector, Type M-LB-42**

(5) Manufacturer:

Pepperl+Fuchs SE Lilienthalstraße 200

(6) Address:

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/Ex8881.00/22

(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 60079-7:2015

EN IEC 60079-7:2015/A1:2018

- (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 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 3G Ex ec IIC T4 Gc

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2023-02-01

Dipl.-Ing. Christian Mehrhoff

This Type Examination Certificate without signature and stamp shall not be valid.

This Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln

Tel. +49 (0) 221 806-0 Fax. +49 (0) 221 806 114





(13) Annex

Type Examination Certificate TÜV 22 ATEX 8881 X Issue: 00

(15) Description of equipment

15.1 Equipment and type:

Surge protector, Type M-LB-42**

15.2 Description / Details of Change

General product information

Type M-LB-42** is a modular version with a basic part and a module type M-LB-42**.

The type designation M-LB-4272 indicates a pure lightning current arrester.

The surge protector is a universal lightning and surge arrester. The differential voltage is limited by a gas-arrester and a one or two TVS diodes. The common mode voltage to earth is limited by two gas-arresters (600 V).

Technical Data

Electrical data:

1). Input circuit Terminals No. 1 – 2

Types **M-LB-4272**

Maximum input voltage	180 V
Allowable maximum input current	1,2 A

Types M-LB-4222 and M-LB-4224

Maximum input voltage	15 V
Allowable maximum input current	0,6 A
at the maximum ambient temperature Ta = 80 °C	
Allowable maximum input current	0,75 A
at the maximum ambient temperature Ta = 70 °C	
T M.I.D. 4044	

Types **M-LB-4244**

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Types M-LB-4244

Maximum input voltage Allowable maximum input current at the maximum ambient temperature Ta = 80 °C Allowable maximum input current at the maximum ambient temperature Ta = 70 °C	33 V 0,6 A 0,75 A
Types M-LB-4254	
Maximum input voltage Allowable maximum input current at the maximum ambient temperature Ta = 80 °C Allowable maximum input current at the maximum ambient temperature Ta = 70 °C	54 V 0,6 A 0,75 A
Types M-LB-4242	
Maximum input voltage Allowable maximum input current at the maximum ambient temperature Ta = 80 °C Allowable maximum input current at the maximum ambient temperature Ta = 70 °C	36 V 0,6 A 0,75 A
Types M-LB-4252	
Maximum input voltage Allowable maximum input current at the maximum ambient temperature Ta = 80 °C Allowable maximum input current	56 V 0,6 A 0,75 A
at the maximum ambient temperature Ta = 70 °C Types M-LB-4212 an M-LB-4214	
	0.5.\/
Maximum input voltage	8,5 V

(16) Test-Report No.

557/Ex8881.00/22

(17) Special Conditions for safe use

Allowable maximum input current

Allowable maximum input current

at the maximum ambient temperature Ta = 80 °C

at the maximum ambient temperature Ta = 70 °C

- 1. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- 2. The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0.

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0,6 A

0,75 A





- 3. The environmental data must be taken into account see 4. Technical data and the operating instructions.
- (18) <u>Basic Safety and Health Requirements</u>

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2023-02-01

Dipl.-Ing. Christian Mehrho

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