1 **TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **KIWA 19ATEX0002X** Issue: **2**

4 Equipment: **Surge Protection Barriers Series M-LB-21*** and M-LB-26***.**

5 Applicant: **Pepperl+Fuchs SE**

6 Address: Lilienthalstrasse 200
68307 Mannheim
Germany

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V., certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 2 3 equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-7:2015 + A1:2018 + A11:2024

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

II 3G
Ex ec IIC T6...T4 Gc
-40 °C ≤ Ta ≤ +80 °C

Signed:

Michelle Halliwell
Title: Senior Director of Operations

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CSA Group Netherlands B.V. Utrechtseweg 310, Building B42, 6812AR Arnhem, The Netherlands

SCHEDULE

TYPE EXAMINATION CERTIFICATE **KIWA 19ATEX0002X**
Issue 2

13 DESCRIPTION OF EQUIPMENT

M-LB-21***

The Surge Protection Barriers series M-LB-21*** (2-wire system) are used to protect the electrical devices from overvoltages induced in signal lines caused by indirect lightning strikes, switching operations or similar incidents. The devices are mounted on an earthed DIN mounting rail.

The Surge Protection Barriers are provided for grounded or ungrounded signal circuits and for signals with 1 V DC nominal voltage or 24 V DC nominal voltage. Depending on nominal voltage, suppressor diodes with different break down voltage are used. Both signal lines in the Surge Protection Barrier maybe interrupted using the line disconnectors placed on the front side of the module. This feature maybe used to disconnect the field wiring e.g. for high voltage testing.

The Surge Protectors are provided whether with screw or spring terminals.

Ambient temperature range: -40 °C to +80 °C (for derating see manufacturers documentation)

Module input/output circuits (screw or spring terminals 2,3 resp. 4,5 (terminal 1 is Ground)):
Un = 1 V DC or 24 V DC; In = 500 mA maximum (for derating see manufacturers documentation).

M-LB-26***

The Surge Protection Barriers series M-LB-26*** (3-wire system) are used to protect the electrical devices from overvoltages induced in signal lines caused by indirect lightning strikes, switching operations or similar incidents. The devices are mounted on an earthed DIN mounting rail.

The Surge Protection Barriers are provided for grounded or ungrounded signal circuits and for signals with 1 V DC nominal voltage or 24 V DC nominal voltage. Depending on nominal voltage, suppressor diodes with different break down voltage are used.

The Surge Protectors are provided with screw terminals.

Ambient temperature range: -40 °C to +80 °C (for derating see manufacturers documentation)

Module input/output circuits (screw terminals 1, 2, 3 resp. 4, 5, 6):
Un = 1 V DC or 24 V DC; In = 400 mA maximum (for derating see manufacturers documentation).

Variation 1 – This variation introduced the following changes:

i. Rename model M-LB-2**** to M-LB-21***.
ii. Add new model M-LB-26***
iii. Upgrade standard EN 60079-7:2015 + A1:2018 to EN 60079-7:2015 + A1:2018 + A11:2024
iv. Transfer certificate from KIWA Nederland B.V. to CSA Group Netherlands B.V.
v. Replace drawing 16-1464KI-10 with 16-1464K1-10A for model M-LB-21***.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

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14.2 **Associated Reports and Certificate History**

Issue	Date	Report number	Comment
1	14 June 2019	181101518-1	The release of the prime certificate.
2	07 May 2025	R80235613A	The introduction of Variation 1

15 **SPECIFIC CONDITIONS OF USE** (denoted by X after the certificate number)

15.1 The Surge Protection Barriers series M-LB-21*** and M-LB-26*** shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1 and shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with IEC 60079-0.

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 **CONDITIONS OF MANUFACTURE**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.

17.2 Holders of Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

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