



EU-TYPE EXAMINATION CERTIFICATE

Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

EU-Type Examination Certificate Number: **KIWA 19ATEX0003X** Issue: **2**

Equipment: Surge Protection Barrier Series: M-LB-Ex-21***, M-LB-Ex-26***

Manufacturer: Pepperl+Fuchs SE

Address: Lilienthalstrasse 200
68307 Mannheim
Germany

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

CSA Group Netherlands B.V., Notified Body No. 2813 in accordance with Article 17 of the 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 the confidential reports listed in item 16.2.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-11:2012 IEC 60079-11:2023 7th Edition

Where additional criteria beyond those given here have been used, they are listed in item 18 in 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" listed in item 17 of this certificate.

This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance with the Directive 2014/34/EU. 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 (additional marking is provided in the Schedule as a part of item 15, if applicable):



II 2(1)G

II(1)D

I(M1)

Ex ia [ia Ga] IIC T6...T4 Gb

[Ex ia Da] IIIC

[Ex ia Ma] I

Signed:

M Halliwell

Title: Senior Director of Operations



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13

SCHEDULE

14

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15

Description:

The Surge Protection Barriers series M-LB-Ex-21*** / M-LB-Ex-26*** 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 M-LB-Ex-21*** 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)

Electrical data

M-LB-Ex-21***:

Module input/output circuits (screw or spring terminals 2,3 resp. 4,5 (terminal 1 is Ground)):
in type of protection intrinsic safety Ex ia IIC, for connection to a certified intrinsically safe circuit, with the following maximum values:

M-LB-Ex-211**, $U_i = 30V$, $I_i = 500mA$, $P_i = 1.4W$ maximum (for derating see manufacturers documentation); $C_i = 0 nF$; $L_i = 20 \mu H$;

M-LB-Ex-214**, $U_i = 30V$, $I_i = 500mA$ maximum (for derating see manufacturers documentation);
 $P_i = any$; $C_i = 0 nF$; $L_i = 20 \mu H$

M-LB-Ex-26***:

Module input/output circuits (screw terminals 1,2,3 resp. 4,5,6):
in type of protection intrinsic safety Ex ia IIC, for connection to a certified intrinsically safe circuit, with the following maximum values:

M-LB-Ex-261**, $U_i = 30V$, $I_i = 400mA$, $P_i = 1.4W$ maximum (for derating see manufacturers documentation);

$C_i = 0 nF$; $L_i = 30 \mu H$;

M-LB-Ex-264**, $U_i = 30V$, $I_i = 400mA$ maximum (for derating see manufacturers documentation);

$P_i = any$; $C_i = 0 nF$; $L_i = 30 \mu H$;

The values of U_o , I_o and P_o are determined by the parameters of the circuit(s) to which the Surge Protection Barriers are connected.

Variation 1 - This variation introduced the following changes:

- Introduction of new Surge Protection Barrier, M-LB-Ex-26*** and introduction of new parameter P_i for model: M-LB-Ex-2****.
- Changed model code: M-LB-Ex-2**** to M-LB-Ex-21***

16

Drawings and documents:

16.1

Technical documents:

Refer to Certificate Annex.



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16.2 **Associated reports and certificate history:**

Issue	Date	Report number	Comment
1	14 June 2019	181101518-2	The release of the prime certificate.
2	07 July 2025	R80236633A	The introduction of Variation 1.

17 **Specific conditions of use** (denoted by "X" after the certificate number):

17.1 The dielectric strength of at least 500 V of the intrinsically safe circuits of the Surge Protection Barriers series M-LB-Ex-21*** and M-LB-Ex-26*** is limited only by the overvoltage protection. Terminals 2, 3, 4 and 5 in M-LB-Ex-21*** and terminals 1, 2, 3, 4, 5 and 6 in M-LB-Ex-26*** are considered to be connected to earth.

17.2 The Surge Protection Barriers series M-LB-Ex-21*** and M-LB-Ex-26***, if placed in a hazardous area, shall be installed and maintained such that hazards caused by electrostatic discharge are excluded.

18 **Essential health and safety requirements of Annex II** (EHSRs):

The relevant EHSRs that are not addressed by the standards listed in item 9 of this certificate have been identified and conformity of the product demonstrated in the reports listed in item 16.2.

19 **Remarks and additional information:**

The use of this certificate is subject to the regulations applicable to holders of CSA Group Netherlands B.V. certificates.

Compliance of the product with the applicable safety requirements of the relevant industrial standards has not been verified and is not covered by this certificate.

19.1 **Conditions of manufacture:**

None.

