CERTIFICATE

(1) **EU-Type Examination**

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 08ATEX0166 X** Issue Number: **2**

(4) Product: **Lightning Surge Protectors Model MD7 Series**

(5) Manufacturer: **MG CO., LTD.**

(6) Address: **5-2-55 Minamitsumori, Nishinari-ku, Osaka 557-0063, Japan**

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

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of 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 confidential test report number 211889600 issue 2.

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

EN 60079-0 : 2006 **EN 60079-11 : 2007** **EN 60079-26 : 2007** **EN 60079-27 : 2008**

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

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

II 1 G Ex ia IIC T4, T5

Date of certification: 14 November 2023

DEKRA Certification B.V.

R. Schuller
Certification Manager

Throughout this document, a point is used as the decimal separator.

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 08ATEX0166 X** Issue No. **2**

(15) **Description**

Lightning Surge Protectors Model MD7 Series are used for protection of an intrinsically safe signal circuit against induced surge voltages.

Ambient temperature range: -25 °C to +80 °C.

Electrical data

The Surge Protector is connected parallel to the intrinsically safe circuit of the protected apparatus.
Following maximum values apply:

Model	U_i (V)	I_i (mA)	C_i (nF)	L_i (µH)
MD7ST-60	60	any	5	0
MD72W-55	60	150	5	150
MD72WD-32	32	any	15	0
MD72W-32, MD73W	32	150	10	150
MD7ST-24, MD7PL	32	any	10	0
MD7PA, MD7FB	32	any	5	0
MD72W-16	16	150	35	150
MD7TC, MD7PM, MD7LC, MD72WD-16	16	any	35	0
MD72W-07	7	150	50	150
MD7RB, MD74R, MD7LWA, MD72WD-07	7	any	50	0

For temperature class T4 P_i = 1.3 W for Ta ≤ 40 °C or 1.2 W at Ta ≤ 60 °C or 1 W at Ta ≤ 80 °C; for temperature class T5 P_i = 1 W for Ta ≤ 40 °C.

Model MD7PA and MD7FB are suitable for use in a fieldbus system in accordance with FISCO. For temperature class T4 at Ta ≤ 80 °C; for temperature class T5 at Ta ≤ 40 °C.

The values of the internal inductance L_i and the internal capacitance C_i shall be added to the internal inductance and internal capacitance values of the protected intrinsically safe apparatus.

The dielectric strength of at least 500 V of the intrinsically safe circuits of the Lightning Surge Protectors Model MD7 Series is limited only by the overvoltage protection. The voltage limitation per model is detailed in the instruction manual.

Installation instructions

The manufacturers instructions shall be followed in detail to assure safe operation.

(16) **Report Number**

No. 211889600 issue 2.

(17) **Specific conditions of use**

Electrostatic charges on the enclosure shall be avoided.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 08ATEX0166 X** Issue No. **2**

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Test Report No. 211889600 issue 2.