# 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 06ATEX0180** Issue Number: **5**

(4) Product: **Current Loop Supply Type A3DYH-2.-..**

(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 209530200 Issue 5.

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

**EN IEC 60079-0 : 2018** **EN 60079-11 : 2012**

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 Ga] IIC**

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 06ATEX0180** Issue No. **5**

(15) **Description**

Current Loop Supply Type A3DYH-2.-.. is a galvanic isolator with repeater function for a 4 - 20 mA signal with or without HART communication between an intrinsically safe circuit and a non-intrinsically safe circuit.
The Current Loop Supply is located outside the hazardous area.

Ambient temperature range -20 °C to +55 °C.

**Electrical data**

Supply (terminals 11 and 12):
U = 24 V dc; $U_m$ = 250 V.

Output (terminals 7 and 8):
U = 24 V, I = 4 to 20 mA; $U_m$ = 250 V.

Intrinsically safe device interface with HART communication

Supply and signal input (terminals 1/4 and 2/3/5):
in type of protection intrinsic safety Ex ia IIC, Ex ia IIB or Ex ia IIA, with the following maximum values:
$U_o$ = 26.25 V; $I_o$ = 88.4 mA, $P_o$ = 580 mW;
$C_o$ = 75 nF (IIC), 650 nF (IIB) or 2.15 µF (IIA);
$L_o$ = 2.2 mH (IIC), 16.2 mH (IIB) or 28 mH (IIA).

Signal input (terminals 2/5 and 3):
in type of protection intrinsic safety Ex ia IIC, Ex ia IIB or Ex ia IIA, only for connection to a certified intrinsically safe circuit, with the following maximum values:
$U_o$ = 1.1 V; $I_o$ = 45 mA; $P_o$ = 13 mW; $C_o$ = 100 µF; $L_o$ = 17.5 mH and
$U_i$ = 30 V; $I_i$ = 250 mA; $P_i$ = 1 W; $C_i$ = 0 nF; $L_i$ = 0 mH.

**Installation instructions**

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

(16) **Report Number**

209530200 Issue 5.

(17) **Specific conditions of use**

None.

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

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. 209530200 Issue 5.