

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 07ATEX0030 X** Issue Number: **5**

(4) Product: **4-Digit Loop Powered Indicator model 6DV, 6DV-B, 6DVI and 6DVI-B**

(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 210784200 issue 4.

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

EN 60079-0 : 2009

EN 60079-11 : 2007

EN 60079-26 : 2007

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 Ga

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.

© Integral publication of this certificate and adjoining reports is allowed. This Certificate may only be reproduced in its entirety and without any change.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 07ATEX0030 X**

Issue No. 5

(15) **Description**

The 4 Digit Loop Powered Indicators model 6DV, 6DV-B, 6DVI and 6DVI-B are used in a 4 - 20 mA current loop to display a measurement value. Scaling, linearization and other configurations are selectable via three control buttons. Indicators Model 6DV-B and 6DVI-B are mounted in an outdoor enclosure.

Ambient temperature range -40 °C to +85 °C.

The relation between the temperature class, the ambient temperature and the Model is given in the table below:

Temperature class	Ambient temperature Model 6DV and 6DV-B	Ambient temperature Model 6DVI and 6DVI-B
T5	≤ 60 °C	≤ 60 °C
T4	≤ 80 °C	≤ 85 °C

Electrical data

Model 6DV, 6DV-B

Supply/Output circuit (terminals + and -):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit with linear characteristics, with the following maximum values:
 $U_i = 30 \text{ V}$; $I_i = 100 \text{ mA}$; $P_i = 0.75 \text{ W}$; $C_i = 1 \text{ nF}$; $L_i = 0 \text{ mH}$.

Model 6DVI, 6DVI-B

Supply/Output circuit (terminals + and -):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit with linear characteristics, with the following maximum values:
 $U_i = 28 \text{ V}$; $I_i = 120 \text{ mA}$; $P_i = 0.84 \text{ W}$; $C_i = 1 \text{ nF}$; $L_i = 0 \text{ mH}$.

Installation instructions

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

(16) **Report Number**

No. 210784200 issue 4.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 07ATEX0030 X**

Issue No. 5

(17) **Specific conditions of use**

1. Because the enclosure of the Loop Powered Indicator model 6DV-B and 6DVI-B is made of aluminium alloy, when used in an explosive gas atmosphere requiring the use of apparatus of equipment category 1 G, the Loop Powered Indicator must be installed so, that even in the event of rare incidents, an ignition source due to impact or friction between the enclosure and iron/steel is excluded.
2. On application of the Loop Powered Indicator Model 6DV and 6DVI in an explosive gas atmosphere requiring the use of apparatus of equipment category 1 G, precautions shall be taken to avoid danger of ignition due to electrostatic charges on the enclosure.

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

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Test Report No. 210784200 issue 4.