

# 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 05ATEX1017 X** Issue Number: **4**

(4) Product: **Two-Wire Universal Temperature Transmitter Model B3HU-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 207632100 issue 4.

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

**EN 60079-0 : 2012 + A11 : 2013**

**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 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 05ATEX1017 X**

Issue No. 4

(15) **Description**

The Two-Wire Universal Temperature Transmitter model B3HU-2.. converts an input signal from a temperature sensor into a 4 to 20 mA signal with digital communication (HART protocol). The transmitter is fitted in a plastic enclosure.

Ambient temperature range:   -40 °C to +80 °C for temperature class T4,  
  -40 °C to +55 °C for temperature class T5.

**Electrical data**

Supply and output circuit (terminals 7+ and 8-):  
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 30 \text{ V}$ ;  $I_i = 96 \text{ mA}$  (resistively limited);  $P_i = 720 \text{ mW}$ ;  $C_i = 1 \text{ nF}$ ;  $L_i = 0 \text{ mH}$ .

Sensor input (terminals 1, 2, 3 and 4):

in type of protection intrinsic safety Ex ia IIC, with the following maximum values:

$U_o = 6.4 \text{ V}$ ;  $I_o = 30 \text{ mA}$ ;  $P_o = 48 \text{ mW}$ ;  $C_o = 20 \text{ }\mu\text{F}$ ;  $L_o = 10 \text{ mH}$ .

**Installation instructions**

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

(16) **Report Number**

Test Report No. 207632100 issue 4.

(17) **Specific conditions of use**

Because the enclosure is made of plastic, if it is mounted in an area where the use of category 1 G apparatus is required, precautions have to be taken that the enclosure cannot be charged by static electricity.

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

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. 207632100 issue 4.