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 10ATEX0020 X** Issue Number: **4**

(4) Product: **Temperature / mA Converter,**
Type ACT20X-HTI-SAO-S, Type ACT20X-HTI-SAO-P
Type ACT20X-2HTI-2SAO-S, Type ACT20X-2HTI-2SAO-P

(5) Manufacturer: **Weidmüller Interface GmbH**

(6) Address: **Klingenbergstraße 16, 32758 Detmold, Germany**

(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 NL/KEM/ExTR10.0015/03.

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

EN IEC 60079-0 : 2018
EN IEC 60079-15 : 2019
EN 60079-11 : 2012
EN 60079-7 : 2015 + A1 : 2018

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/IIB/IIA
II (1) D [Ex ia Da] IIIC
I (M1) [Ex ia Ma] I

Date of certification: 29 October 2022

DEKRA Certification B.V.

R. Schuller
Certification Manager

PRODUCTS RvA C 001

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(13) # SCHEDULE

(14) **to EU-Type Examination Certificate KEMA 10ATEX0020 X** Issue No. **4**

(15) **Description**

Temperature / mA Converters Type ACT20X-HTI-SAO-S, Type ACT20X-HTI-SAO-P and Type ACT20X-2HTI-2SAO-S and ACT20X-2HTI-2SAO-P), for rail mounting are 24 V powered 1 channel (Type ACT20X-HTI-SAO-S and Type ACT20X-HTI-SAO-P) or 2 channel (Type ACT20X-2HTI-2SAO-S and Type ACT20X-2HTI-2SAO-P) isolating barriers, interfacing temperature sensors or current sources located in a hazardous area.

Ambient temperature range -20 °C to +60 °C.

Marking

The equipment marking may additionally include the code II 3 G Ex ec nC IIC T4 Gc.

Electrical data

Supply (terminals 51, 52): U = 19,2 ... 31,2 Vdc.

Outputs (terminals 41, 42 and 43, 44): I = 0 ... 20 mA or 4 ... 20 mA

Status output (terminals 53, 54):
Relay contacts, U ≤ 32 Vdc or 32 Vac, I ≤ 1 Adc or I ≤ 0.5 Aac respectively.
If the Temperature / mA Converter is installed outside the hazardous area, the following data for the relay contacts apply: U ≤ 110 Vdc or 125 Vac, I ≤ 0,3 Adc or I ≤ 0,5 Aac respectively.

For all circuits above: U_m = 253 Vac (max. frequency 400 Hz).

Sensor circuits (terminals 11 ... 14 respectively 21 ... 24):
in type of protection intrinsic safety Ex ia IIC/IIB/IIA/IIIC/I, with following maximum values:
U_o = 8,7 V; I_o = 18,4 mA; P_o = 40 mW; C_o = 5 µF (IIC) or 50 µF (IIB) or 1000 µF (IIA);
L_o = 100 mH (IIC) or 300 mH (IIB) or 700 mH (IIA); L_o/R_o = 892 µH/Ω (all groups);
U_i = 10 V; I_i = 30 mA; C_i = 30 nF; L_i = 820 nH.
for group IIIC, the parameters of group IIB apply;
for group I, the parameters of group IIA apply.

Sensor circuits, when combined to one circuit (terminals 11 ... 14 and 21 ... 24):
in type of protection intrinsic safety Ex ia IIC/IIB/IIA/IIIC/I, with following maximum values:
U_o = 17,4 V; I_o = 18,4 mA; P_o = 80 mW; C_o = 0,3 µF (IIC) or 1,6 µF (IIB) or 8 µF (IIA);
L_o = 80 mH (IIC) or 250 mH (IIB) or 600 mH (IIA); L_o/R_o = 445 µH/Ω (all groups);
U_i = 10 V; I_i = 30 mA; C_i = 15 nF; L_i = 1,7 µH.
for group IIIC, the parameters of group IIB apply;
for group I, the parameters of group IIA apply.

The intrinsically safe output circuits are infallibly galvanically isolated from the non-intrinsically safe circuits, and from each other if applicable.

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(13) # SCHEDULE

(14) **to EU-Type Examination Certificate KEMA 10ATEX0020 X** Issue No. **4**

(16) **Report Number**

No. NL/KEM/ExTR10.0015/03.

(17) **Specific conditions of use**

The Temperature / mA Converter shall be installed in a controlled environment with suitable reduced pollution, limited to pollution degree 2 or better.

The non-intrinsically safe circuits may only be connected to an overvoltage category I or II power source, as defined in EN 60664-1.

If the Temperature / mA Converter is installed in an explosive atmosphere where equipment protection level Gc is required, it shall be installed in a suitable enclosure, providing a degree of protection of at least IP54 according to EN IEC 60079-0.

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

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/KEM/ExTR10.0015/03.

(20) **Certificate history**

Issue 1 -	213256400	Initial certificate
Issue 2 -	216740400	Update to latest standards
Issue 3 -	223250800	Addition of *-P models and removal of EN 60079-26
Issue 4 -	226311500	Assessment per latest standard editions