

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: **DEKRA 11ATEX0164 X** Issue Number: **4**

(4) Product: **HART-Transparent Driver,
Type ACT20X-SAI-HAO-S, Type ACT20X-SAI-HAO-P and
Type ACT20X-2SAI-2HAO-S, Type ACT20X-2SAI-2HAO-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/DEK/ExTR11.0083/03.

(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: 31 October 2022

DEKRA Certification B.V.

R. Schuller
Certification Manager

Page 1/3



© 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 DEKRA 11ATEX0164 X**

Issue No. 4

(15) **Description**

HART-Transparent Drivers, Type ACT20X-SAI-HAO-S, Type ACT20X-SAI-HAO-P and Type ACT20X-2SAI-2HAO-S, Type ACT20X-2SAI-2HAO-P for rail mounting, are 24 V powered isolating barriers that serve as current output isolators for 4 - 20 mA signals with HART communication.

The HART-Transparent Driver:

Type ACT20X-SAI-HAO-S and Type ACT20X-SAI-HAO-P are one channel versions.

Type ACT20X-2SAI-2HAO-S and Type ACT20X-2SAI-2HAO-P are two channel versions.

The driver provides a potential free contact for status indication.

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): $U = 19,2 \dots 31,2 \text{ Vdc}$.

Status-Relay output (terminals 53, 54):

$U \leq 32 \text{ Vac}$ or 32 Vdc , $I \leq 0,5 \text{ Aac}$ or $I \leq 1 \text{ Adc}$ respectively.

If the Driver is installed outside the hazardous area, the following data for the relay contacts apply:

$U \leq 110 \text{ Vdc}$ or 125 Vac , $I \leq 0,3 \text{ Adc}$ or $I \leq 0,5 \text{ Aac}$ respectively.

Inputs (terminals 41, 42 resp. 43, 44): $I = 4 \dots 20 \text{ mA}$.

For all circuits above: $U_m = 253 \text{ Vac}$ (max. frequency 400 Hz).

Loop supply outputs (terminals 11, 12 resp. terminals 21, 22):

in type of protection intrinsic safety Ex ia IIC/IIB/IIA/IIIC/I, with following maximum values:

$U_o = 28 \text{ V}$; $I_o = 93 \text{ mA}$; $P_o = 0,65 \text{ W}$;

$C_o = 0,08 \mu\text{F}$ (IIC) or $0,65 \mu\text{F}$ (IIB) or $2,15 \mu\text{F}$ (IIA)) or $3,76 \mu\text{F}$ (I);

$L_o = 4 \text{ mH}$ (IIC) or 16 mH (IIB) or 32 mH (IIA) or 46 mH (I).

For group IIIC, the parameters of group IIB apply.

Both channels (terminals 11...14 and terminals 21...24) are infallibly galvanically isolated from each other and from the non-intrinsically safe supply and output circuits.

Installation instructions

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

(16) **Report Number**

No. NL/DEK/ExTR11.0083/03.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 11ATEX0164 X**

Issue No. 4

(17) **Specific conditions of use**

The HART-Transparent Driver 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 HART-Transparent Driver 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/DEK/ExTR11.0083/03.

(20) **Certificate history**

Issue 1 -	214594300	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