IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx TUR 17.0022X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2017-04-21)
Date of Issue:	2023-12-14		
Applicant:	**HIMA Paul Hildebrandt GmbH** Albert-Bassermann-Str. 28 68782 Brühl **Germany**		
Equipment:	**Planar 4, Module 13 110**		
Optional accessory:			
Type of Protection:	**Ex ia**		
Marking:	[Ex ia Ga] IIC		

Approved for issue on behalf of the IECEx Certification Body: **Christian Mehrhoff**

Position: **Assigned certifier**

Signature: (for printed version)

Date: (for printed version) 2023-12-14

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany

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Certificate No.: **IECEx TUR 17.0022X**

Date of issue: 2023-12-14 Issue No: 1

Manufacturer: **HIMA Paul Hildebrandt GmbH**
Albert-Bassermann-Str. 28
68782 Brühl
Germany

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/TUR/ExTR17.0022/01

Quality Assessment Report:

DE/PTB/QAR11.0008/06

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The electronic module of type 13 110 is a 2-channel isolation amplifier for the transmission of control signals from the intrinsically safe circuit, type of protection “Ex ia”, to the non-intrinsically safe output circuits. The module was assessed to meet the requirements of an associated apparatus [Ex ia Ga].

The permissible range of ambient temperature is -25°C up to +70°C.

Accessories: Subrack 90 901 and 90 911

Power supply: 24V DC (-15%, +20%) U_m = 40V

(Terminals +: z30, d30; -: z32, b32, d32)

Control circuits: [Ex ia Ga] IIC

(Terminals d2 and d4, d8 and d10)

Uo = 9V

Io = 11mA

Po = 25mW

The maximum permissible values of the external capacitance and inductance of a single control circuit as well as of two circuits connected in parallel are shown in the following table:

	single circuit		parallel connection	
Ex	IIC	IIB	IIC	IIB
C_o	4.9 uF	40 uF	4.9 uF	40 uF
L_o	300 mH	1000 mH	80 mH	290 mH

Output circuits: 16….33V DC, 20mA per circuit U_m = 40V

(Terminals d18, d22, z18, d20, d24, z20, d28, all outputs refer to -)

Communication circuits:

Terminals z28, b28

U_m = 40V

Relay outputs:

Terminals b26, d26, z26: U ≤ 30V (DC/AC), I ≤ 1A; P ≤ 30W, Um = 40V

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The module 13110 is an associated apparatus and shall be mounted into an enclosure with ingress protection of at least IP 20 according to EN 60529.
2. Each of the two circuits of one or two electronic modules s may be connected in parallel:

   One module: terminal d4 connected to d10

   terminal d2 connected to d8

   Two modules: terminal d4 connected to d4

   terminal d2 connected to d2
3. If the Planar 4 system is intended to be placed in a hazardous area of zone 2, the certificate IECEx TUR 14.0033X and its special conditions shall be considered.
4. The installation instructions of the manual shall be considered.
5. The permissible range of ambient temperature is -25°C up to +70°C.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Standard update to IEC 60079-0 Ed. 7