

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 16 ATEX 7865 X

Issue: 01

(4) Equipment: **Planar 4, Module 13 110**

(5) Manufacturer: **HIMA Paul Hildebrandt GmbH**

(6) Address: **Albert-Bassermann-Str. 28
68782 Brühl, Germany**

(7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex7865.01/16

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0: 2018

EN 60079-11: 2012

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

(12) The marking of the equipment shall include the following:



II (1) G [Ex ia Ga] IIC

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2023-12-14

Dipl.-Ing. Christian Mehrhoff



This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax. +49 (0) 221 806 114

Annex

(14)

EU Type Examination Certificate

TÜV 16 ATEX 7865 X

Issue: 01

 (15) Description of equipment

15.1 Equipment and type:

Planar 4, Module 13 110

15.2 Description / Details of Change

General product information

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

Details of Change

Standard update to EN IEC 60079-0: 2018

Technical Data

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)
 $U_o = 9V$
 $I_o = 11mA$
 $P_o = 25mW$

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:

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

This EU Type Examination Certificate without signature and official stamp shall not be valid.
 This certificate may be circulated without alteration. Extracts or alterations are subject to approval by:
 Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH

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: $U \leq 30V$ (DC/AC), $I \leq 1A$; $P \leq 30W$, $U_m = 40V$

(16) Test-Report No. 557/Ex7865.01/16

(17) Special Conditions for safe use

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 TÜV 14 ATEX 7554 X 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 $-25^{\circ}C$ up to $+70^{\circ}C$.

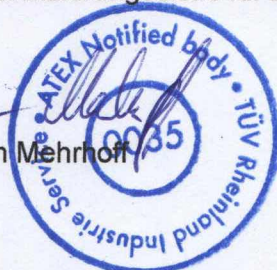
(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2023-12-14

Dipl.-Ing. Christian Mehrhoff



This EU Type Examination Certificate without signature and official stamp shall not be valid.
This certificate may be circulated without alteration. Extracts or alterations are subject to approval by:
Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH