

(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 15 ATEX 7683 U

Issue: 02

- (4) **Equipment:** HIMax
- (5) **Manufacturer:** HIMA Paul Hildebrandt GmbH
- (6) **Address:** Albert-Bassermann-Straße 28
68782 Brühl

- (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/Ex7683.02/15

- (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 50271: 2018

EN 60079-29-1: 2016

- (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:



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TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2024-04-19

Dipl.-Ing. Christian Menrhoff



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Tel. +49 (0) 221 806-0 Fax. +49 (0) 221 806 114

(13)

Annex

(14)

EU Type Examination Certificate

TÜV 15 ATEX 7683 U

Issue: 02

(15)

Description of equipment

15.1 Equipment and type:

HIMax X-BASE PLATE
X-CPU 01, X-CPU 31
X-SB 01
X-AI 32 01, X-AI 32 01A
X-AI 32 02
X-DO 24 01, X-DO 24 01A
X-DO 32 01, X-DO 32 01A

15.2 Description / Details of Change

General product information

HIMax is a modular system. Functions such as processing, input and output, and communication are distributed on plug-in modules. These modules must be inserted in one or multiple base plates. A controller specific to the concrete application can be created by selecting appropriate modules. Ethernet cables are used to interconnect the base plates. The manufacturer of the respective gas detection system is responsible for programming and configuring the HIMax control unit for a safety-related application and for retesting the gas detection system in accordance with standards EN 60079-29-1 and EN 50271.

Technical Data

Supply voltage: 24 VDC
Ambient temperature: 0°C to +60°C

Details of change:

- Update of the standard EN 50271:2018, EN 50402:2017 and EN 60079-29-1:2016
- Adding of certain modules
- Update of the schedule of limitations
- Update of the software version

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(16) Test-Report No. 557/Ex7683.02/15

(17) Schedule of Limitations

1. The HIMax can be used as a SIL certified safety, controlling and regulating device for the safe functioning of Ex-products and gas measuring applications. This EU type examination certificate covers a component according to the European directive 2014/34/EU. An additional conformity assessment procedure has to be applied to achieve an EU type examination certificate as a safety control and regulating device.
2. The above listed standards were applied for this component, including the full scope of EN 50271. The additional conformity assessment procedure shall verify the gas measuring system as well as the safety function in its completeness. Thereto especially the following needs to be considered:
 - The gas detector (transmitter) related sections of the EN 50271 and EN 60079-29-1.
 - Programming of the final application software for the gas measuring system and/or safety function acc. to EN 50271 shall be done by using the software tool SILworX.
 - The verification and validation of the functionality need to be completed together with the EMC requirements according to EN 60079-29-1.
 - The Instructions and Safety Information for the final product / application acc. to European directive 2014/34/EU, Annex II, clause 1.0.6 need to be developed.
3. The instructions of use for the component according to European directive 2014/34/EU, article 6, clause 8 (Instructions and Safety Information) shall be observed.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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