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 14.0035X**	Page 1 of 4	
Status:	**Current**	Issue No: 1	
Date of Issue:	2021-04-07		

Applicant:
HIMA Paul Hildebrandt GmbH
Albert-Bassermann-Str. 28
68782 Brühl
Deutschland
Germany

Equipment: **HIMax System**

Optional accessory:

Type of Protection: **Ex ec nC**

Marking: Ex ec IIC T4 Gc

Ex ec nC IIC T4 Gc

Approved for issue on behalf of the IECEx
Certification Body:

Christian Mehrhoff

Position:

Assigned certifier

Signature:
(for printed version)

Date: 2021-04-07

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:

TÜV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany

TÜVRheinland

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

Additional
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
Edition:7.0
Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-15:2017
Edition:5.0
Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

IEC 60079-7:2017
Edition:5.1
Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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/ExTR14.0031/01

Quality Assessment Report:

DE/PTB/QAR11.0008/03

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

HIMax System

SPECIFIC CONDITIONS OF USE: YES as shown below:
1. The system shall be supplied with a SELV or PELV supply only.

2. The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.

3. The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-0.

4. The information of the HIMax safety manual concerning the selection criteria for the enclosure (ability of heat dissipation) has to be considered.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Standard update to IEC 60079-0 Ed. 7, IEC 60079-7 Ed. 5.1 and IEC 60079-15 Ed. 5 and marking change of nA to ec.
- Addition of modules X-DI 32 01 A, X-DI 32 02 A, X-AI 32 01 A, X-DI 64 01 A, X-DO 24 01 A, X-DO 32 01 A.
- Hardware changes of modules X-FAN variants, X-AO-16 51.
- Additional installation instructions for connector boards X-CB 018 02, X-CB 018 06.

Annex:

DE-IECEx_TUR_14.0035X_01_Attachment.pdf

Attachment to to Certificate IECEx TUR 14.0035 X issue 01

Device: **HIMax**

Manufacturer: **HIMA Paul Hildebrandt GmbH**

Address: **Albert-Bassermann-Str. 28**
                         68782 Brühl
                         Germany

General product information:

HIMax is a safety-related control system and is intended for continuous operation. 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.

HIMax system modules:

Type	HW	Description
X-BASE PLATE	00	Base Plate
X-FAN nn 01/02	05 / 06	System Fan for Base Plate
X-FAN nn 03/04	03 / 04	System Fan for Base Plate
X-SB 01	01	System Bus Module (SIL3)
X-CPU 01	01	Processor Module for high performance requirements and critical control applications (4 x RJ-45, SIL 3)
X-CPU 31	00	Processor module for small and midsize safety applications (2x RJ-45, SIL 3)
X-COM 01	02	Communication Module (4 x RJ-45, 2 x 9-pole D-Sub, up to 6 different Protocols)
X-AI 16 51	00	Analog Input/ Temperature Module (16 Channels, galvanically isolated channels, TC, Pt100, 4...20 mA, +/-280 mV, SIL 1)
X-AI 32 01	13 / 14	Analog Input Module (32 Channels, 4...20 mA, Line Monitoring, SIL 3)
X-AI 32 02	12	Analog Input Module (32 Channels, 4...20 mA, SOE, Line Monitoring, SIL 3)
X-AI 32 51	00	Analog Input Module (32 Channels, 4...20 mA, Line Monitoring)
X-AO 16 01	10	Analog Output Module (16 Channels, 4...20 mA, pairwise galvanically isolated, SIL 3)
X-AO 16 51	00 / 01	Analog Output Module (16 Channels, 4...20 mA)
X-CI 24 01	11	Counter Module (24 Channels, 0...20 kHz, SIL 3)
X-CI 24 51	00	Counter Module (24 Channels, 0...20 kHz)
X-DI 16 01	00	Digital Input Module (16 Channels, 120 VAC, SIL 3)
X-DI 32 01	11 / 12	Digital Input Module (32 Channels, 24 VDC, SIL 3)
X-DI 32 02	12	Digital Input Module (32 Channels, 8.2 VDC, Proximity Switch, Line Monitoring, SIL 3)
X-DI 32 03	10	Digital Input Module (32 Channels, 48 VDC, SIL 3)
X-DI 32 04	10	Digital Input Module (32 Channels, 24 VDC, SOE, SIL 3)
X-DI 32 05	10	Digital Input Module (32 Channels, 8.2 VDC, Proximity Switch, Line Monitoring, SOE, SIL 3)
X-DI 32 51	00	Digital Input Module (32 Channels, 24 VDC)
X-DI 32 52	00	Digital Input Module (32 Channels, 8.2 VDC, Proximity Switch)
X-DI 64 01	10 / 11	Digital Input Module (64 Channels, 24 VDC, SIL 3)
X-DI 64 51	00	Digital Input Module (64 Channels, 24 VDC)
X-DO 12 01	03	Relay Output Module (12 Channels, 230 VAC/DC, Current Measurement, Cycle

		Counting, SIL 3)
X-DO 12 02	11	Digital Output Module (12 Channels, 24 VDC, 2 A, Short-Circuit Monitoring LS, Individual Channel Shut-Off, SIL 3)
X-DO 12 51	10	Relay Output Module (12 Channels, 230 VAC/DC)
X-DO 24 01	13 / 14	Digital Output Module (24 Channels, 24 VDC, 0.5 A, Line Monitoring LS/LB, SIL 3)
X-DO 24 02	11	Digital Output Module (24 Channels, 48 VDC, 0.5 A, Line Monitoring LS/LB, SIL 3)
X-DO 32 01	11 / 12	Digital Output Module (32 Channels, 24 VDC, 0.5 A, Short-Circuit Monitoring LS, Individual Channel Shut-Off, SIL 3)
X-DO 32 51	00	Digital Output Module (32 Channels, 24 VDC, 0.5 A, Protected Outputs, Group Shut-Off)
X-HART 32 01	10	HART Interface Module (32 Modems, SIL 3)
X-MIO 7/6 01	10	Over Speed Trip Module (3 Counter, 4 digital Input, 5 digital Output, 1 Relay Channels, SIL 3)
X-DI 32 01 A	30	Digital Input Module (32 Channels, 24 VDC, SIL 3)
X-DI 32 02 A	30	Digital Input Module (32 Channels, 8.2 VDC, Proximity Switch, Line Monitoring, SIL 3)
X-AI 32 01 A	30	Analog Input Module (32 Channels, 4...20 mA, Line Monitoring, SIL 3)
X-DI 64 01 A	30	Digital Input Module (64 Channels, 24 VDC, SIL 3)
X-DO 24 01 A	30	Digital Output Module (24 Channels, 24 VDC, 0.5 A, Line Monitoring LS/LB, SIL 3)
X-DO 32 01 A	30	Digital Output Module (32 Channels, 24 VDC, 0.5 A, Short-Circuit Monitoring LS, Individual Channel Shut-Off, SIL 3)

Accessories:
- communication modules CM-***
- connector boards X-CB-*** **
- field termination assemblies X-FTA *** ***