



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx TUR 14.0035X

Issue No: 0

Certificate history:

Issue No. 0 (2016-02-01)

Status: Current

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Date of Issue: 2016-02-01

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

Electrical Apparatus: HIMax  
Optional accessory:

Type of Protection: Ex nA nC IIC T4 Gc

Marking:  
Ex nA IIC T4 Gc  
Ex nA nC IIC T4 Gc

Approved for issue on behalf of the IECEx  
Certification Body:

Andreas Maschke

Position:

Deputy head of Certification Body

Signature:  
(for printed version)

Date:

  
2016-02-01

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

TÜV Rheinland Industrie Service GmbH  
Am Grauen Stein  
51105 Cologne  
Germany





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

Additional Manufacturing  
location(s):

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 electrical apparatus 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 : 2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

**IEC 60079-15 : 2010** Explosive atmospheres - Part 15: Equipment protection by type of protection "n"  
Edition:4

*This Certificate **does not** indicate compliance with electrical 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/ExTR14.0031/00](#)

Quality Assessment Report:

[DE/PTB/QAR10.0008/02](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

HIMax System

**CONDITIONS OF CERTIFICATION: 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 60079-15.
4. The information of the HIMax safety manual concerning the selection criteria for the enclosure (ability of heat dissipation) has to be considered.

### Annex:

[DE-IECEx\\_TUR\\_14.0035X\\_00\\_Attachmen.pdf](#)



Attachment to Certificate  
IECEX TUR 14.0035 X  
Revision 0

Attachment to to Certificate IECEX TUR 14.0035 X

**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	System Fan for higher thermal requirement
X-FAN nn 03/04	03	System Fan
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	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)



Attachment to Certificate  
IECEX TUR 14.0035 X  
Revision 0

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, Individual Channel Shut-Off, SIL 3)
X-DO 24 02	11	Digital Output Module (24 Channels, 48 VDC, 0.5 A, Line Monitoring LS/LB, Individual Channel Shut-Off, 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)

Accessories:

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