



# 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 14.0034X Issue No: 0 Certificate history:  
Issue No. 0 (2015-11-18)

Status: **Current** Page 1 of 3

Date of Issue: **2015-11-18**

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

Electrical Apparatus: **HIMatrix**  
*Optional accessory:*

Type of Protection: **Ex nA nC IIC Gc /Ex nA IIC Gc**

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

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

Dipl.-Ing. Klauspeter Graffi

*Position:*

Head of Certification Body

*Signature:  
(for printed version)*

*Date:*

  
2015-11-18

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:

**TUV Rheinland Industrie Service GmbH**  
Am Grauen Stein  
51105 Cologne  
Germany





# IECEX Certificate of Conformity

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Date of Issue: 2015-11-18 Page 2 of 3  
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/ExTR14.0030/00](#)

Quality Assessment Report:

[DE/PTB/QAR11.0008/02](#)



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Certificate No: IECEX TUR 14.0034X

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Date of Issue: 2015-11-18

Page 3 of 3

## Schedule

### EQUIPMENT:

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

#### HIMatrix systems and components:

##### Compact systems:

F35 03, F30 03, F3 DIO 20/8 02, F3 DIO 16/8 01, F3 DIO 8/8 01, F3 AIO 8/4 01, F2 DO 16 01, F2 DO 16 02, F2 DO 8 01, F2 DO 4 01, F1 DI 16 01

##### Modular systems (mounted into subracks):

##### F60 and its modules:

F60 GEH 01, F60 PS 01, F60 CPU 03, F60 AI8 01, F60 AO8 01, F60 CIO 2/4 01, F60 DI24 01, F60 DI32 01, F60 DIO 24/16 01, F60 MI24 01

##### Accessories:

H 7032, H 7033 (filter and protection for the connection of transmitters) Z73\*\* (Shunt adaptors for input modules) CM-\*\*\* (plug on modules for communication)

Additional information see annex

#### CONDITIONS OF CERTIFICATION: YES as shown below.

The system shall be supplied with a SELV or PELV supply only.

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

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.

The information of the HIMatrix safety manual concerning the selection criteria for the enclosure (cabinet) and the special installation instructions have to be considered.

The maximum ambient temperature has to be considered for each module.

The pins of the contact loop for the fault signal (available on F60 PS 01) shall solely be supplied with the 24V supply voltage of the system.

Only voltages of up to 60VDC/30VAC of the same potential are allowed to be connected to the I/O s of the module F2 DO 16 02. If they are connected to different sources, only voltages of up to 40VDC/30VAC are allowed.

The switching current of remote modules F2 DO 8 01 and F2 DO 16 02 has to be limited to max. 2A

#### Annex:

[DE-IECEX\\_TUR\\_14.0034X\\_00\\_Attachment\\_2015-11-23.pdf](#)



Attachment to Certificate  
IECEX TUR 14.0034 X  
Revision 0

Attachment to to Certificate IECEX TUR 14.0034 X

**Device:** HIMatrix

**Manufacturer:** HIMA Paul Hildebrandt GmbH

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

**General product information:**

The safety-related HIMatrix controllers can be used in process controllers, protective systems, burner controllers, and machine controllers. Dependent on the application several systems in different configurations are available. All of them were assessed separately and in connection to each other.

The related certificate no. is: IECEX TUR 14.0034X

**HIMatrix systems and components:**

**Compact systems:**

F35 03, F30 03, F3 DIO 20/8 02, F3 DIO 16/8 01, F3 DIO 8/8 01, F3 AIO 8/4 01, F2 DO 16 01, F2 DO 16 02, F2 DO 8 01, F2 DO 4 01, F1 DI 16 01

**Modular systems (mounted into subracks):**

**F60 and its modules**

F60 GEH 01, F60 PS 01, F60 CPU 03, F60 AI8 01, F60 AO8 01, F60 CIO 2/4 01, F60 DI24 01, F60 DI32 01, F60 DIO 24/16 01, F60 MI24 01

**Accessories:**

H 7032, H 7033 (filter and protection for the connection of transmitters)

Z73\*\* (Shunt adaptors for input modules)

CM-\*\*\* (plug on modules for communication)



Attachment to Certificate  
IECEX TUR 14.0034 X  
Revision 0

**Technical Data:**

Rated voltage 20.4 ... 28.8 V

Ambient temperature:

Type / order ID	0°C ≤ Ta ≤ 50°C	0°C ≤ Ta ≤ 60°C	-25°C ≤ Ta ≤ 70°C
F35 03		98 22XY497	98 22XY006
F30 03		98 22XY496	98 22XY005
F3 DIO 20/8 02		98 2200484	98 2400401 98 2200512
F3 DIO 16/8 01		98 2200486	98 2400007
F3 DIO 8/8 01		98 2200487	98 2400400
F3 AIO 8/4 01		98 2200483 98 2200493	98 2200514
F2 DO 16 01		98 2200480	98 2200516
F2 DO 16 02	98 2200485		
F2 DO 8 01	98 2200481 98 2400011		
F2 DO 4 01		98 2200482	
F1 DI 16 01		98 2200479	98 2400010
F60 GEH 01		98 2200103	98 2400000
F60 PS 01		98 2200096	98 2400001
F60 CPU 03		98 22XY139	98 22XY004
F60 AI8 01		98 2200214	98 2400002
F60 AO8 01		98 2200215	
F60 CIO 2/4 01		98 2200099	98 2400003
F60 DI24 01		98 2200113	98 2400008
F60 DI32 01		98 2200114	98 2400004
F60 DIO 24/16 01		98 2200100	98 2400005
F60 MI24 01		98 2200115	98 2400006
H 7032			99 4703202
H 7033			99 4703302
Z 7301			98 2220059
Z 7302			98 2220067
Z 7303			98 2220077
Z 7306			98 2220115
Z 7307			98 2220127
Z 7308			98 2220137
Z 7309			98 2220177
Z 7310			98 2200518

The 98\*\* numbers indicate the order id. If a module has an option for two ambient temperatures, they differ in the coating and/or temperature class for integral components. The function is always identical. XY stands for optional plugged communication interfaces on listed devices

The plug on modules for the communication interfaces can be plugged onto some of the listed base modules.