



# 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 14.0036X Issue No: 0 Certificate history:  
Status: Current Page 1 of 4 Issue No. 0 (2016-03-15)  
Date of Issue: 2016-03-15  
Applicant: HIMA Paul Hildebrandt GmbH  
Albert-Bassermann-Str. 28  
68782 Brühl  
Deutschland  
Germany  
Electrical Apparatus: HIQuad  
Optional accessory:  
Type of Protection: nA, nC  
Marking: Ex nA nC IIC T4 Gc

Approved for issue on behalf of the IECEx  
Certification Body:

Andreas Maschke

Position:

Deputy Head of Certification Office

Signature:  
(for printed version)

2016-03-15

Date:

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





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Certificate No: IECEX TUR 14.0036X Issue No: 0  
Date of Issue: 2016-03-15 Page 2 of 4  
Manufacturer: **HIMA Paul Hildebrandt GmbH**  
Albert-Bassemann-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/ExTR14.0032/00](#)

Quality Assessment Report:

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



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Certificate No: IECEX TUR 14.0036X

Issue No: 0

Date of Issue: 2016-03-15

Page 3 of 4

## Schedule

### EQUIPMENT:

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

HIQuad is a safety-related programmable control system and is intended for high availability. HIQuad is a modular system which consists of 19 inch subracks for central devices and modules for binary and analog input or output signals.

Depending on the required safety and availability, HIQuad can be supplied as one-channel or dual-channel (redundant) devices with the same modules in the central device, as well as in the input or output layer. Redundant modules increase the availability, as in case of an error in a safety-related module this module is automatically switched off, while the redundant module continues the operation.

#### Technical data:

Rated voltage: 20.4 ... 28.8 V DC

Ambient temperature:  $0^{\circ}\text{C} < T_a < 60^{\circ}\text{C}$

The HIQuad systems H41q and H51q are compact and modular automation systems, in which the HIQuad modules can be inserted into slots. The modules are:

#### Ex nA IIC T4 Gc:

F 8650X, F 8652X, F 8621A, F 8627X, F 8628X, F 3221, F 3224A, F 3236, F 3237, F 3238,

F 3240, F 3248, F 3322, F 3325, F 3330, F 3331, F 3333, F 3334, F 3335, F 3349, F 5220,

F 6215, F 6217, F 6220, F 6221, F 6705, F 6706, F 7126, F 7130A, F 7131, F 7553, H 7505,

H 7506

#### Ex nA nC IIC T4 Gc:

F 3422, F 3430, F 7133, B 4235, B 4237-1, B 4237-2, B 5231, B 5233-1, B 5233-2, B 9302,

B 9361

#### Accessories:

Cable plugs Z 7\*\*\*

**CONDITIONS OF CERTIFICATION: YES as shown below:**



# IECEX Certificate of Conformity

Certificate No: IECEX TUR 14.0036X

Issue No: 0

Date of Issue: 2016-03-15

Page 4 of 4

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 enclosure in use must be able to safely dissipate the generated heat.
5. Only voltages of the same potential are allowed to be connected to the I/O s of the module F 3422.
6. The I/O subrack must be provided with forced Ventilation.