



# 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 18.0006

Issue No: 0

Certificate history:

Issue No. 0 (2018-09-03)

Status: Current

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Date of Issue: 2018-09-03

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

Equipment: HiQuad module F3238

Optional accessory:

Type of Protection: [Ex ia]

Marking:

[Ex ia Ga] IIC

[Ex ia Da] IIIC

Approved for issue on behalf of the IECEX  
Certification Body:

Andreas Maschke

Position:

Deputy Head of Certification Office

Signature:

(for printed version)

Date:

2018-09-03

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

Certificate No: IECEx TUR 18.0006 Issue No: 0  
Date of Issue: 2018-09-03 Page 2 of 3  
Manufacturer: HIMA Paul Hildebrandt GmbH  
Albert-Bassemann-Str. 28  
68782 Brühl  
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 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 60079-11 : 2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

*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/ExTR18.0006/00](#)

Quality Assessment Report:

[DE/PTB/QAR11.0008/03](#)



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Certificate No: IECEx TUR 18.0006

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## Schedule

### EQUIPMENT:

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

### General product information:

The module F 3238 is a 8 channel input module and is used to evaluate proximity switches (according to NAMUR) or contacts with resistor network, in intrinsically safe circuits (Ex)i.

The proximity switches or contacts can be installed in hazardous areas from Zone 0 on, if certified.

**SPECIFIC CONDITIONS OF USE: NO**

### Annex:

[IECEX TUR 18.0006\\_attachment.pdf](#)



Attachment to Certificate  
IECEx TUR 18.0006  
Revision 0



**Device:** HIQuad Module  
**Type:** F 3238

**Manufacturer:** HIMA Paul Hildebrandt GmbH

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

Subject and type

HIQuad Module F 3238

**General product information**

The module F 3238 is a 8 channel input module and is used to evaluate proximity switches (according to NAMUR) or contacts with resistor network, in intrinsically safe circuits (Ex)i. The proximity switches or contacts can be installed in hazardous areas from Zone 0 on, if certified.

Technical data

**Ambient temperature:**  $T_a = 0^{\circ}\text{C} \dots + 60^{\circ}\text{C}$

**Supply circuit UB1:**

$U_n = 24\text{VDC}$  (-15%, +20%), max.  $\leq 30\text{V}$

$U_m = 40\text{V}$

(connector X4, pins z2, d2)

**Supply circuit UB2:**

$U_n = 5\text{VDC}$  ( $\pm 10\%$ ), max.  $\leq 6\text{V}$

$U_m = 7\text{V}$

(connector X2, pins z6/d6 and z30/d30)

**Intrinsically safe values for the control circuits,**

**type of protection**

**[Ex ia Ga] IIC/IIIB**

**or**

**[Ex ia Da] IIIC/IIIB**

**single circuit:**

$U_o: 9.9\text{V}$

$I_o: 15\text{mA}$

$P_o: 38\text{mW}$

**parallel circuit:**

$U_o: 9.9\text{V}$

$I_o: 15\text{mA}$

$P_o: 38\text{mW}$



Maximum allowed external capacitance *or* inductance:

Ex ia / Ex ib	single circuit		parallel circuit	
	IIC	IIB/IIIC/IIIB	IIC	IIB/IIIC/IIIB
L <sub>o</sub>	155 mH	560 mH	155 mH	560 mH
C <sub>o</sub>	3.2 µF	22 µF	3.2 µF	22 µF

Maximum allowed external capacitance *and* inductance (mixed consideration):

Ex ia / Ex ib	single circuit		parallel circuit	
	IIC	IIB/IIIC/IIIB	IIC	IIB/IIIC/IIIB
L <sub>o</sub>	5 mH	5 mH	5 mH	5 mH
C <sub>o</sub>	0.78 µF	4.1 µF	0.78 µF	4.1 µF