

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:

IECEx TUR 18.0011

Issue No: 0

Page 1 of 4

Certificate history:

Issue No. 0 (2018-08-21)

Status:

Current

Date of Issue:

2018-08-21

Applicant:

HIMA Paul Hildebrandt GmbH

Albert-Bassermann-Str. 28

68782 Brühl Germany

Equipment:

HIQuad Module F6221

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:

Signature:

(for printed version)

Date:

Deputy Head of Certification Body

- 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.

Certificate issued by:

TUV Rheinland Industrie Service GmbH Am Grauen Stein 51105 Cologne Germany





Certificate No:

IECEx TUR 18,0011

Issue No: 0

Date of Issue:

2018-08-21

Page 2 of 4

Manufacturer:

HIMA Paul Hildebrandt GmbH Albert-Bassermann-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/ExTR18.0011/00

Quality Assessment Report:

DE/PTB/QAR11.0008/03



Certificate No:

IECEx TUR 18.0011

Issue No: 0

Date of Issue:

2018-08-21

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The field of application of the F 6221 module is the operation with intrinsically safe Ex ia current transmitters (0/4 to 20mA) which can be supplied by intrinsically safe supplies [Ex ia], e.g. unit F 3325. The F 6221 module is an associated apparatus and contains the measuring device. It can be used to measure up to eight signal inputs (I1 to I8). For monitoring the transmitter supply voltages, another eight signal inputs (TC1 to TC8) are available.

Ambient temperature: T_a = 0°C ... + 60°C

Supply circuit UB1:

$$U_n = 24VDC (-15\%, +20\%), UB1_{max} = 30V$$

$$U_{\rm m} = 40V$$

(terminal X1 z2(L+), d2(L-))

Supply circuit UB2:

$$U_n = 4.5...5.5VDC$$
, $UB2_{max} = 6.0V$

$$U_{\rm m} = 40V$$

(terminal X1 z6, d6(V_{DD}), z30, d30(GND))

Intrinsically safe values for the measuring and monitoring channels,

type of protection

[Ex ia Ga] IIC/IIB

ОГ

[Ex ia Da] IIIC/IIIB

measuring

monitoring

+I 1-8:

TC 1-8:

U_o: 5.7 V

U_o: 5.7 V

l_o: 2 mA

l_o: 0.5 mA

P_o: 2.9 mW

P_o: 0.72 mW

(terminal z2, z4,....z16

z18, z20,.....z32)



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Page 4 of 4

Maximum allowed external capacitance or inductance:

Ex ia / Ex ib	single circuit		parallel ^{*1} circuit	
:	IIC	IIB/IIIC/IIIB	IIC	HB/HIC/IIIB
Lo	1H	1H	1H	1H
c _o	50 µF	1000 μF	50 µF	1000 μF

Maximum allowed external capacitance and inductance (mixed consideration):

Ex ia / Ex ib	single circuit		parallel*1 circuit	
	IIC	IIB/IIIC/IIIB	IIC	IIB/IIIC/IIIB
Lo	5 mH	5 mH	5 mH	5 mH
c _o	1.5 µF	7.5 µF	1.5 µF	7.5 µF

Note *1: parallel operation of two measuring and two monitoring channels

SPECIFIC CONDITIONS OF USE: NO