

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 18 ATEX 8169

Issue: 00

- (4) Equipment: **HIQuad Module F 3238**
- (5) Manufacturer: **HIMA Paul Hildebrandt GmbH**
- (6) Address: **Albert-Bassermann-Str. 28
68782 Brühl, Germany**
- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.
- The examination and test results are recorded in the confidential report 557/Ex8169.00/18
- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:
- EN 60079-0: 2012+A11:2013 EN 60079-11: 2012**
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



**II (1) GD [Ex ia Ga] IIC
[Ex ia Da] IIIC**

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2018-09-03

Dipl.-Ing. Andreas Maschke



This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13) Annex

(14) **EU Type Examination Certificate**
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(15) Description of equipment

15.1 Equipment and type:

HIQuad Module F 3238

15.2 Description / Details of Change

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:

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

$U_m = 40\text{V}$

(connector X4, pins z2, d2)

Supply circuit UB2:

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

$U_m = 7\text{V}$

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

Intrinsically safe values for the control circuits,

type of protection [Ex ia Ga] IIC/IIB

or [Ex ia Da] IIIC/IIIB

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single circuit:		parallel circuit:	
U _o :	9.9 V	U _o :	9.9 V
I _o :	15 mA	I _o :	15 mA
P _o :	38 mW	P _o :	38 mW

Maximum allowed external capacitance **or** inductance:

Ex ia / Ex ib	single circuit		parallel circuit	
	IIC	IIB/IIIC/IIIB	IIC	IIB/IIIC/IIIB
L _o	155 mH	560 mH	155 mH	560 mH
C _o	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 _o	5 mH	5 mH	5 mH	5 mH
C _o	0.78 µF	4.1 µF	0.78 µF	4.1 µF

(16) Test-Report No. 557/Ex8169.00/18

(17) Special Conditions for safe use

None

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

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