

# (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 8172**

Issue: 00

- (4) Equipment: **HIQuad Module F 3335**
- (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 26<sup>th</sup> 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/Ex8172.00/18
- (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 (2) GD [Ex ib Gb] IIC  
[Ex ib Db] 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**  
**TÜV 18 ATEX 8172** Issue: 00

(15) Description of equipment

15.1 Equipment and type:

HIQuad Module F 3335

15.2 Description / Details of Change

General product information

The module F 3335 is an associated apparatus and can be used to control Ex valves and Ex measuring transmitters (0/4 to 20 mA). These valves or transmitters can be installed in potentially explosive atmospheres from Zone 1 on.

Technical Data

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

Supply circuit UB1:

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

$U_m = 40\text{V}$

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

Supply circuit UB2:

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

$U_m = 40\text{V}$

(terminal X1 z6/d6(+), z30/d30(-))

Intrinsically safe values for the control circuits,

type of protection [Ex ib Gb] IIC/IIB

or [Ex ib Db] IIIC/IIIB

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single circuit:	parallel circuit:
U <sub>o</sub> : 25.0 V	U <sub>o</sub> : 25.0 V
I <sub>o</sub> : 70 mA	I <sub>o</sub> : 140mA
P <sub>o</sub> : 581 mW	P <sub>o</sub> : 1162 mW
Trapezoidal (R = 474.3Ω)	

Maximum allowed external capacitance *or* inductance:

Ex ib	single circuit		parallel circuit	
	IIC	IIB/IIIC/IIIB	IIC	IIB/IIIC/IIIB
L <sub>o</sub>	7 mH	25 mH	-	7 mH
C <sub>o</sub>	110 nF	840 nF	-	840 nF

(16) Test-Report No. 557/Ex8172.00/18

(17) Special Conditions for safe use

None

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

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