

# Certificate of Conformity

## Ex EQUIPMENT

Certificate No.:	<b>ANZEx 22.3012</b>	Current Issue:	0	Date of Issue:	2023-01-31
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**Applicant:** **Pepperl+Fuchs SE**  
Lilienthalstrasse 200  
68307 Mannheim  
Germany

**Equipment:** Transducer type KFD2-WAC2-Ex1\*

**Type of Explosion Protection:** Intrinsic safety “[ia]”

**Explosion Protection Marking:** [Ex ia Ma] I

*This certificate is granted subject to the requirements as set out in  
Joint Accreditation System of Australia and New Zealand Publications  
ANZEx System Rules 2020 & ANZEx Certified Equipment Scheme Rules 2021*

Signed for and on behalf of issuing body



Name & Position

Ujen Singh – Manager, Quality & Certification

*This certificate is not transferable and remains the property of the issuing body.*

*The status of this certificate can be confirmed through the database located at [www.anzex.com.au](http://www.anzex.com.au)*

Certificate issued by:

TestSafe Australia  
919 Londonderry Road, Londonderry NSW 2753 Australia

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**Manufacturer:** **Pepperl+Fuchs SE**  
Lilienthalstrasse 200  
68307 Mannheim  
Germany

**Additional Manufacturing Location(s):** **Pepperl+Fuchs Asia PTE Ltd.**  
18 Ayer Rajah Crescent  
Singapore 139942  
Singapore

### STANDARDS:

*The equipment 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 60079-0:2017 Ed 7** Explosive atmospheres Part 0: Equipment—General requirements

**IEC 60079-11:2011 Ed 6** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*This Certificate does not indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.*

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### Schedule

#### Equipment Description:

The Transducer type KFD2-WAC2-Ex1\* is used for the transmission of signals from the hazardous explosive area into the non-hazardous area.

#### Electrical Ratings/Parameters

Technical data

The permissible temperature range is -20 °C to + 60 °C.

Supply circuit (terminals 23, 24 or via Power-Rail)	U = 20 V ... 35 V d.c. Um = 40 V	
Collective error message (via Power-Rail)	Um = 40 V	
Output circuits I and II (terminals 10, 11, 12 and 16, 17, 18)	alternating voltage U = 253 V a.c. I = 2 A P = 500 VA cos φ ≥ 0.7 Um = 253V	direct voltage U = 40 V I = 2 A P = 80 W U m = 253V
Output circuit III (terminals 7, 8, 9)	Um = 40 V	
Input circuits II and III (terminals 13, 14, 15)	Um = 40 V	
Programming socket (jacket)	Um = 40 V	
RS485 interface (terminals 19, 20 and 21 or via Power-Rail)	Um = 40 V	
Input circuit (terminals 1, 2, 3, 4, 5 and 6)	in type of protection "Intrinsic Safety" Ex ia I, only for connection of passive components/devices. Maximum values: Uo = 14 V Io = 238 mA Po = 833 mW Ri = 59 Ω Characteristic line: linear Lo = 5 mH, Co = 17 µF	

In the case of simultaneous appearance capacitance Co and inductance Lo in concentrated form the maximum permissible value pairs have to be taken from the above values.

The input circuit is safely galvanically separated from all other circuits up to the peak values of the nominal voltage of 375 V.

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**Specific Conditions of Use:**

None.

**Additional Information:**

None.

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### Register of Issues and Variations

includes the current issue

#### Issue 0 dated (current issue):

##### Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: DE/TUN/ExTR06.0013/00; TÜV NORD CERT GmbH  
DE/TUN/ExTR06.0014/00; TÜV NORD CERT GmbH  
DE/TUN/ExTR06.0014/01; TÜV NORD CERT GmbH  
DE/TUN/ExTR06.0014/02; TÜV NORD CERT GmbH  
DE/TUN/ExTR06.0014/03; TÜV NORD CERT GmbH

QAR No. & Issuing CB: DE/PTB/QAR06.0008/18; PTB

File Reference: 2022/006499

##### Manufacturer's Documents/Drawings associated with this issue:

Document/Drawing Number	Pages / Sheets	Document/Drawing Title	Revision	Date
16-484TV-02	1	Relevant Components KFD2-WAC2-Ex1*	Orig.	2004-05-25
16-484TV-03A	5	KFD2-WAC2-Ex1* (PCB Layout) (1 <sup>st</sup> Supplementary TUV 04 ATEX 2531)	-	2009-07-31
16-484TV-04	10	KFD2-WAC2-Ex1* Display	Orig.	2004-05-17
16-484TV-06	3	Transformer KFD2-WAC2-Ex1*	Orig.	2004-05-17
16-484FM-01	6	KFD2-WAC2-Ex1.D* WAC2 – Amplifier (Schematic)	-	2009-03-31
16-484FM-05	5	KFD2-WAC2-Ex1.D* (PCB Layout)	-	2009-03-31
16-484FM-07	3	KFD2-WAC2-Ex1.D* (Assembly)	-	2008-08-12
16-0484TE-10	1	Type Label KFD2-WAC2-Ex1.D*	-	2022-12-02