ANZEx

Australian/New Zealand Certification Scheme
for Explosion Protected Equipment

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 24.3000**	*Current Issue:* 0	*Date of Issue:* 2024-04-23

Applicant:

Pepperl+Fuchs (Australia) Pty Ltd

131-149 Link Drive

Melbourne VIC 3061
Australia

Equipment: Switch amplifier type: KFU8-SR-Ex*.W*

Type of Explosion Protection: Intrinsic Safety “ia”

Explosion Protection Marking: [Ex ia Ma] I (-40°C ≤ Ta ≤ +60°C / 70°C)
(See manual for conditions to extend the maximum ambient temperature to 70°C)

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 *Debbie Wouters, Acting Quality & Certification Manager*

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

Certificate issued by:

TestSafe Australia
919 Londonderry Road, Londonderry NSW 2753 Australia

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 24.3000**	*Current Issue:* 0	*Date of Issue:* 2024-04-23

Manufacturer : Pepper|+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 "j

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

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 24.3000**	*Current Issue:* 0	*Date of Issue:* 2024-04-23

Schedule

Equipment Description:

Equipment and systems covered by this Certificate are as follows:

The switch amplifier KFU-SR-Ex*.W* is designed as associated apparatus and can be installed in the non-hazardous area or in areas requiring EPL Ma equipment. The device is an associated apparatus for areas requiring EPL Ma equipment. The voltage and current at the input terminals are limited to intrinsically safe levels. The hazardous area circuit is galvanically isolated from the non-hazardous area circuit.

The outputs are designed as relay outputs.

The hazardous area circuits are galvanically isolated from all other circuits up to a peak value of the nominal voltage of 375 V.

Type designation: KFU8-SR-Ex1.W* KFU8-SR-Ex1.W.LB* KFU8-SR-Ex2.W*

Where "*" represents alphanumeric signs (e.g. -Y1) This *" is optional and is used to describe different versions of a module. These differences do not affect type of protection.

Electrical Ratings/Parameters

Non-Hazardous Area Terminals (Power Supply)

Terminals 14 & 15

Rated voltage 30V DC or 233 V AC

Maximum Voltage U_m = 253 V

Non-Hazardous Area Terminals (Outputs)

Terminals 7, 8, 9 & 10, 11, 12				
Um	≤ 250V AC	≤ 126.5 V AC	≤ 40 V DC	≤ 220 V DC
I	≤ 2A AC	≤ 4A AC	≤ 2A DC	≤ 200 mA DC
S	≤ 500 VA	≤ 500 VA	≤ 80 W	
Cos	≥ 0.75	≥ 0.75		
Max Voltage U_m =	253 V AC			

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 24.3000**	*Current Issue:* 0	*Date of Issue:* 2024-04-23

Hazardous Area Terminals

	Terminals 1, 2, 3	**Terminals 4, 5, 6**	**Terminals 1 to 6 Combined**
U_o =	10.5 V	10.5 V	10.5 V
I_o =	13 mA	13 mA	26 mA
P_o =	34 mW	34 mW	64 mW
C_o =	95 µF	95 µF	95 µF
L_o =	1000 mH	1000 mH	500 mH
C_i =	Negligible		
L_i =	Negligible		

The above parameters of capacitance and inductance apply when one of the two conditions below is met: - The total L_i of the external circuit (excluding the cable) is <1% of the L_o value or

- The total C_i of the external circuit (excluding the cable) is < 1% of the C_o value.

The above parameters for capacitance and inductance are reduced to 50 %when both of the two conditions below are met:

- the total L_i of the external circuit (excluding the cable) is ≥1% of the L_o value and - the total C_i of the external circuit (excluding the cable) is ≥ 1% of the C_o value.

The reduced capacitance of the external circuit (including cable) shall not be greater than 1µF.

Specific Conditions of Use:

1. None

Conditions of Certification:

1. None

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 24.3000**	*Current Issue:* 0	*Date of Issue:* 2024-04-23

Register of Issues and Variations
includes the current issue

Issue 0 dated 2024-04-23

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: HR/FIDI/ExTR22.0011/00 - Fiditas
QAR No. & Issuing CB: DE/PTB/QAR06.0008/20 - PTB
Quality Report associated with this issue of the certificate.
File Reference: 2024/002464

Manufacturer's Documents/Drawings associated with this issue:

Document/Drawing Number	Document/Drawing Title	Pages / Sheets	Revision	Date
16-1580FI-01	Schematic drawing KFU8-SR-Ex*.W*	2	-	2022-02-14
16-1580FI-02	Bill of materials for KFU8-SR-Ex*.W*	4	-	2022-06-30
16-1580FI-03	Assembly drawing KFU8-SR-Ex*.W*	2	-	2022-02-14
16-1580FI-04	Enclosure / Housing KFU8-SR-Ex*.W*	1	-	2022-02-14
16-1580FI-05	Component copper Top KFU8-SR-Ex*.W*	Sheet 1 of 4	--	2022-02-14
16-1580FI-05	Component copper inner 2 KFU8-SR-Ex*.W*	Sheet 2 of 4	-	2022-02-14
16-1580FI-05	Component copper inner 3 KFU8-SR-Ex*.W*	Sheet 3 of 4	-	2022-02-14
16-1580FI-05	Component copper Bottom KFU8-SR-Ex*.W*	Sheet 4of 4	-	2022-02-14
16-1580FI-06	Transformer KFU8-SR-Ex*.W*	2	-	2022-02-14
16-1580TE-07	Lacquering Top Side KFU8-SR-Ex*.W*	Sheet 1 of 2	-	2024-03-13
16-1580TE-07	Lacquering Bottom Side KFU8-SR-Ex*.W*	Sheet 2 of 2	-	2022-02-14
16-1580TE-10	Type Label KFU8-SR-Ex*.W*	2	-	2024-03-14
16-1580TE-09	Instructions KFU8-SR-Ex*.W*	2	-	2024-03-18