ANZEx

Australian/New Zealand Certification Scheme
for Explosion Protected Equipment

Certificate of Conformity

Ex EQUIPMENT

Certificate No.:	**ANZEx 08.2009X**	*Current Issue:* 5	*Date of Issue:*	2026-06-08

Applicant: **Pepperl+Fuchs SE**
Lilienthalstrasse 200
68307 Mannheim
GERMANY

Equipment: Galvanically Isolated Barrier
Types KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**

Type of Explosion Protection: Intrinsic Safety 'i'

Explosion Protection Marking: [Ex ia Ma] I
-40 °C ≤ Ta ≤ +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 *Geoff Barnier*
Principal Engineer - 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

Certificate issued by:

Safety in Mines, Testing and Research Station
2 Robert Smith Street, REDBANK QLD 4301

JAS-ANZ
WWW.JAS-ANZ.ORG/REGISTER

This certificate and schedule may only be reproduced in full

Simtars

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 08.2009X**	*Current Issue:* 5	*Date of Issue:* 2026-06-08

Manufacturer :
Pepperl+Fuchs SE
Lilienthalstrasse 200
68307 Mannheim
GERMANY

Manufacturing Location(s):
Pepperl+Fuchs Asia Pte. Ltd.
18 Ayer Rajah Crescent
Singapore 139942
SINGAPORE

Pepperl+Fuchs (Vietnam) Co. Ltd.
Lot S.12-16a, Street no. 20
Tan Thuan Export Processing Zone
Tan Thuan Ward
Ho Chi Minh City
VIETNAM

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 7.0	Explosive atmospheres Part 0: Equipment—General requirements
IEC 60079-11: 2011 Ed 6.0	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.

This certificate and schedule may only be reproduced in full
Simtars

Certificate of Conformity
Ex EQUIPMENT

Certificate No.:	ANZEx 08.2009X	Current Issue: 5	Date of Issue: 2026-06-08

Schedule

Equipment Description:

The SMART Transmitter Power Supply KCD2-STC-Ex1-** and KCD2-STC-Ex1.SP-** and SMART Current Driver KCD2-SCD-Ex1-** and KCD2-SCD-Ex1.SP-** are galvanically isolated associated apparatus.

The SMART Transmitter Power Supply types KCD2-STC-Ex1-** and KCD2-STC-Ex1.SP-** supply 2-wire SMART transmitters in a hazardous area and can also be used with 2-wire SMART current sources. It transfers the analog input signal to the safe area as an isolated current value.

The SMART Current Driver type KCD2-SCD-Ex1-** and KCD2-SCD-Ex1.SP-** drives SMART I/P converters, electrical valves, and positioners in hazardous areas. Digital signals are superimposed on the analog values at the field or control side and are transferred bidirectionally.

Electrical Ratings/Parameters

Non-hazardous area terminals 5 to 10, Power rails connections PR1 & PR2

Um = 253 V rms

Hazardous area output parameters:

Models	Terminals	U_0 (V)	I_0 (mA)	P_0 (mW)	C_0 (µF)	L_0 (mH)	L_0/R_0 (µH/Ω)
KCD2-STC-Ex1(.SP)-** KCD2-SCD-Ex1(.SP)-**	1, 2	25.2	100	630	4.14	46	743
KCD2-STC-Ex1(.SP)-**	3, 4	7.2	100	25	1000	46	356

Ui = 30 V, Ii = 128 mA, Pi = 1 W for terminals 3, 4 only.

Ci = 5.7nF for all terminals.

The above parameters apply when one of the two conditions below is given:

- The total Li of the external circuit (excluding the cable) is < 1% of the Lo value or
- The total Ci of the external circuit (excluding the cable) is < 1% of the Co value.

The above parameters are reduced to 50% when both of the two conditions below are given:

- the total Li of the external circuit (excluding the cable) > 1% of the Lo value and
- the total Ci of the external circuit (excluding the cable) > 1% of the Co value .

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

This certificate and schedule may only be reproduced in full
Simtars

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 08.2009X**	*Current Issue:* 5	*Date of Issue:* 2026-06-08

Specific Conditions of Use:

1. The equipment must be installed and operated only in a controlled environment that ensures a pollution degree 2 (or better) according to IEC 60664-1.
2. The equipment must be installed and operated only in an environment of overvoltage category II (or better) according to IEC 60664-1.

Conditions of Certification:

None

Manufacturer's Documents/Drawings associated with this issue:

Document/Drawing Title	Document/Drawing Number	Pages / Sheets	Revision	Date
IT/CES/ExTR06.0001/01				
Summary KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028CE	1	-	2006-Feb-20
Description KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-00	15	-	2006-Feb-20
Schematic KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-01	2	-	2006-Feb-20
Description KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-02	1	-	2006-Feb-20
Assembly drawing wired TOP KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-03 (Sheets 1 and 2 of 3)	2	-	2006-Feb-20
Assembly drawing smd TOP KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-03 (Sheet 3 of 3)	1	-	2006-Feb-20
Housing KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-04	4	-	2006-Feb-20
PCB layout TOP KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-05 (Sheet 1 of 2)	1	-	2006-Feb-20
PCB layout BOTTOM KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-05 (Sheet 2 of 2)	1	-	2006-Feb-20
transformer KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-06	4	-	2006-Feb-20
Lacquering TOP KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-07	1	-	2006-Feb-20
Instructions KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028SI-09	6	-	2006-Feb-20

This certificate and schedule may only be reproduced in full

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 08.2009X**	*Current Issue:* 5	*Date of Issue:* 2026-06-08

Document/Drawing Title	Document/Drawing Number	Pages / Sheets	Revision	Date
Test Report KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-028-13	2	-	2006-Feb-20
IT/CES/ExTR06.0001/02				
Description KCD2-STC-Ex1 / KCD2-SCD-Ex1	366-0028CE-00B	6	-	2011-Oct-03
Component List KCD2-STC-Ex1 & KCD2-SCD-Ex1	366-0028CE-02B	7	-	2011-Oct-03
Assembly drawing KCD2-STC-Ex1 & KCD2-SCD-Ex1	366-0028CE-03B	4	-	2011-Oct-03
Instructions for KCD2-STC-Ex1 & KCD2-SCD-Ex1	366-0028CE-09B	2	-	2011-Oct-03
IT/CES/ExTR06.0001/03				
Description KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-00C	32	-	2018-Nov-20
Schematic KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-01C	2	-	2018-Nov-20
Bill of material KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-02C	11	-	2018-Nov-20
Component setup KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-03C	4	-	2018-Nov-20
Layout Top KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-05C (Sheets 1 and 3 of 4)	2	-	2018-Nov-20
Layout Bottom KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-05C (Sheets 2 and 4 of 4)	2	-	2018-Nov-20
Transformer KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-06C	3	-	2018-Nov-20
Instructions KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-09C	3	-	2018-Nov-20
IT/CES/ExTR06.0001/04				
Description KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-00D	35	-	2022-Aug-01
Schematic KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-01D	2	-	2022-Aug-01
Bill of material KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-02D	14	-	2022-Aug-01
Component setup KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-03D	4	-	2022-Aug-01

This certificate and schedule may only be reproduced in full

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 08.2009X**	*Current Issue:* 5	*Date of Issue:* 2026-06-08

Document/Drawing Title	Document/Drawing Number	Pages / Sheets	Revision	Date
Layout Top KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-05D	2	-	2022-Aug-01
Instructions KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-09D	3	-	2022-Aug-01
Type Label KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-10D	3	-	2022-Aug-01
Test Report KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-13D	21	-	2022-Aug-01
Manufacturers Certificate	MDEC-2230A	1	-	16.12.2020
IEC-Declaration of conformity	DOC-xxxx	1	-	202x-xx-xx
IT/CES/ExTR06.0001/05				
Description KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-00E	1	-	2023-Dec-05
Component setup KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028CE-03E	4	-	2023-Nov-15
Labels				
Type Label KCD2-STC-Ex1(.SP)-** / KCD2-SCD-Ex1(.SP)-**	366-0028SI-10A	1	-	2022-Apr-13

Note: An * is included before the title of documents that are new or revised.

Additional Information:

None

This certificate and schedule may only be reproduced in full

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 08.2009X**	*Current Issue:* 5	*Date of Issue:* 2026-06-08

Register of Issues and Variations
includes the current issue

Issue 0 dated 2008-12-02

Standards relevant for this issue:

IEC 60079-0: 2004 Ed 4.0 Explosive atmospheres Part 0: Equipment—General requirements
IEC 60079-11: 1999 Ed 4.0 Explosive atmospheres Part 11: Equipment protection by intrinsic safety "i"

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: IT/CES/ExTR08.0002/00; CESI
QAR No. & Issuing CB: DE/PTB/QAR06.0007/01, DE/PTB/QAR06.0008/01; PTB
File Reference: 08/0156

Issue 1 dated 2019-01-03

Standards relevant for this issue:

IEC 60079-0: 2004 Ed 4.0 Explosive atmospheres Part 0: Equipment—General requirements
IEC 60079-11: 1999 Ed 4.0 Explosive atmospheres Part 11: Equipment protection by intrinsic safety "i"

Variations Permitted by this Issue

- Amended referenced QARs.

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: IT/CES/ExTR08.0002/00; CESI
QAR No. & Issuing CB: DE/PTB/QAR06.0008/09; PTB
File Reference: 06/0041

Issue 2 dated 2022-09-15

Standards relevant for this issue:

IEC 60079-0: 2017 Ed 7.0 Explosive atmospheres Part 0: Equipment—General requirements
IEC 60079-11: 2011 Ed 6.0 Explosive atmospheres Part 11: Equipment protection by intrinsic safety "i"

Variations Permitted by this Issue

- Change to the referenced ExTR number.
- Update editions of the standards.
- Extend ambient temperature range.
- Minor circuit modifications.
- Update entity parameters.

This certificate and schedule may only be reproduced in full

Certificate of Conformity
Ex EQUIPMENT

Certificate No.:	ANZEx 08.2009X	Current Issue: 5	Date of Issue:	2026-06-08

- Added barrier models KCD2-STC-Ex1.SP and KCD2-SCD-Ex1.SP (spring terminal blocks) to the range.
- Modification of Applicant and Manufacturer names to show current legal form.

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs:	IT/CES/ExTR06.0001/01, IT/CES/ExTR06.0001/02, IT/CES/ExTR06.0001/03, IT/CES/ExTR21.0005/00; CESI
QAR No. & Issuing CB:	DE/PTB/QAR06.0008/16; PTB
File Reference:	060041Audit

Issue 3 dated 2024-01-17

Standards relevant for this issue:

IEC 60079-0: 2017 Ed 7.0	Explosive atmospheres Part 0: Equipment—General requirements
IEC 60079-11: 2011 Ed 6.0	Explosive atmospheres Part 11: Equipment protection by intrinsic safety “i”

Variations Permitted by this Issue

- Changes to the electrical schematics and PCB.
- New maximum input power for terminals 3(+) and 4(-).
- Updated Equipment Description.

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs:	IT/CES/ExTR06.0001/04, IT/CES/ExTR06.0001/05; CESI
QAR No. & Issuing CB:	DE/PTB/QAR06.0008/19; PTB
File Reference:	060041Audit

Issue 4 dated 2025-03-10

Standards relevant for this issue:

IEC 60079-0: 2017 Ed 7.0	Explosive atmospheres Part 0: Equipment—General requirements
IEC 60079-11: 2011 Ed 6.0	Explosive atmospheres Part 11: Equipment protection by intrinsic safety “i”

Variations Permitted by this Issue

- Addition of Vietnam as a manufacturing location

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs:	IT/CES/ExTR06.0001/04, IT/CES/ExTR06.0001/05; CESI
QAR No. & Issuing CB:	DE/PTB/QAR06.0008/21; PTB
File Reference:	060041Audit

This certificate and schedule may only be reproduced in full
Simtars

Certificate of Conformity
Ex EQUIPMENT

Certificate No.: **ANZEx 08.2009X**	*Current Issue:* 5	*Date of Issue:* 2026-06-08

Issue 5 dated 2026-06-08

Standards relevant for this issue:

IEC 60079-0: 2017 Ed 7.0 Explosive atmospheres Part 0: Equipment—General requirements

IEC 60079-11: 2011 Ed 6.0 Explosive atmospheres Part 11: Equipment protection by intrinsic safety "i"

Variations Permitted by this Issue

- Update address for manufacturing location Vietnam
- Change auditing CB and linked QAR

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs:	IT/CES/ExTR06.0001/04, IT/CES/ExTR06.0001/05; CESI
QAR No. & Issuing CB:	HR/FIDI/QAR24.0001/03; Fiditas
File Reference:	060041Audit

This certificate and schedule may only be reproduced in full