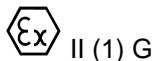


UK Type Examination Certificate CML 21UKEX2786 Issue 0**United Kingdom Conformity Assessment**

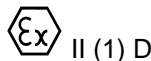
- 1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1
- 2 Equipment **Isolation switching Amplifier type KFD*-SR*-Ex*.W.***
- 3 Manufacturer **Pepperl+Fuchs SE**
- 4 Address **Lilienthalstrasse
200
68307 Mannheim
Germany**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

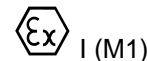
EN 60079-0:2018 EN 60079-11:2012
- 10 The equipment shall be marked with the following:



[Ex ia Ga] IIC



[Ex ia Da] IIIC



[Ex ia Ma] I



Certification Officer



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11 Description

The isolation switching amplifier of type KFD*-SR*-Ex*.W*. has been technically modified and may in future also be manufactured and operated according to the test documents of test report PTB Ex 20-29098.

The changes concern the company name, the applied standards as well as the internal structure of the isolation switching amplifier KFD2-SR2-Ex1.W*, KFD2-SR2-Ex1 .W.LB* and KFD2-SR2-Ex2.W*.

The type code of the isolation switching amplifier KFD* -SR* -Ex*. W*. thus includes the following types:

KFD2-SR2-EX2.W.SM*

KFD2-SR2-Ex1. W*

KFD2-SR2-Ex1 .W.LB*

KFD2-SR2-Ex2. W*

The permissible ambient temperature range for the isolation switching amplifier type KFD2-SR2-Ex2.W.SM * is unchanged from -20.° C to +60° C.

The permissible ambient temperature range for types KFD2-SR2-Ex1 .W *, KFD2-SR2-EX1.W.LB * and KFD2-SR2-Ex2.W * is -40 ° C to 70 ° C.

The "Electrical data" apply unchanged to all types of isolation switching amplifiers KFD *-SR* -Ex* .W. * and are shown below:

Electrical data

Supply circuit.....direct voltage:	19 ... 30 V DC
(terminals 14 and 15 resp. maximum voltage:	Um=253 V AC
powerrail contacts PR 1 and PR2) resp.	Um= 125 V DC

Collective error meassagingmaximum voltage:	Um=40 V DC
(powerrail contact PR 4)	



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Maximum values for individually occurring external reactances: (according to EN 60079-11, Annex A)

Type of protection	Ex ia bzw. ib			
	I	IIA	IIB/IIIC*	IIC*
Lo	500 mH	420 mH	210mH	52mH
Co	95 μ F	75 μ F	16.8 μ F	2.41 μ F

Maximum values for external reactances occurring together: (according to Ispark 5.2* resp. Ispark 6.2)

Type of protection	Ex ia bzw. ib			
	I	IIA	IIB/IIIC*	IIC*
Lo	20 mH	10mH	7mH	3mH
Co	5.1 μ F	4.4 μ F	2.1 μ F	590nF

The intrinsically safe input circuits are safely electrically isolated from all other circuits up to a peak value of the nominal voltage of 375 V.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	20 th April 2022	R14112AE/00	Prime Certificate issued.

Note: Drawings that describe the equipment are listed or referred to in the Annex.

13 Conditions of Manufacture

None.

14 Specific Conditions of Use

None.

Certificate Annex

Certificate Number CML 21UKEX2786
Equipment Isolation switching Amplifier type KFD*-SR*-Ex*.W.*
Manufacturer Pepperl+Fuchs SE



The following documents describe the equipment defined in this certificate:

Issue 0

For drawings describing the equipment, refer to attached certificate PTB 00 ATEX 2080. In addition to the drawings listed on PTB 00 ATEX 2080, the following drawings include the additional marking required for this UK Type Examination certification:

Drawing No	Sheets	Rev	Approved date	Title
16-1555CM-10	1 to 2	0	20 th April 2022	Additional Marking Requirements for UKCA