

1 **TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

3 Type Examination Certificate Number: **Baseefa10ATEX0062X – Issue 3**

3.1 In accordance with Article 41 of Directive 2014/34/EU, Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **Resistance Repeater Type KCD2-RR(2)-Ex1(.SP)**

5 Manufacturer: **Pepperl + Fuchs GmbH**

6 Address: **Lilienthalstrasse 200, 68307 Mannheim, Germany**

7 This re-issued certificate extends Type Examination Certificate No. Baseefa10ATEX0062X to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products of Category 3 intended for use in potentially explosive atmospheres given in Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:


EN IEC 60079-0:2018 EN 60079-7:2015+A1:2018

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured.

12 The marking of the product shall include the following:

 **II 3G Ex ec IIC T4 Gc (-20°C / -40°C ≤ Ta ≤ +60°C / +70°C)**

SGS Fimko Oy Customer Reference No. **0808**

Project File No. **19/0107**

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Certification
Manager

R S SINCLAIR
Authorised Signatory for SGS Fimko Oy

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Schedule

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Certificate Number Baseefa10ATEX0062X – Issue 3

15 Description of Product

The Resistance Repeater Type KCD2-RR(2)-Ex1(.SP) is designed to transfer a resistance value from a hazardous area to unspecified apparatus located in a non-hazardous area. The hazardous area circuit is galvanically isolated from the non-hazardous area circuit using transformers and the voltage and current appearing at the hazardous area connectors are limited to intrinsically safe levels.

The Resistance Repeater Type KCD2-RR(2)-Ex1(.SP) comprises a number of electronic components including three isolating transformers, fuses, zener diodes and resistors all mounted on a single printed circuit board and housed in a plastic enclosure with removable terminals (units fitted with the spring terminal plugs in place of screw terminal plugs will have the addition of “.SP” to the type name i.e. KCD2-RR(2)-Ex1(.SP). An LED provides power status indication.

This certificate covers the installation of the Resistance Repeater Type KCD2-RR(2)-Ex1(.SP) (Baseefa10ATEX0061X) in a Category 3 / Zone 2 location.

Electrical data

KCD2-RR-Ex1(.SP)

Supply circuit: 19 – 30Vdc
(Terminals 9[+], 10[-] or
Power Rail contacts)

Output:
(Terminals 6[+], 5[-]) 0 – 10mA
(Terminals 8[+], 7[-]) 0 – 4.2V

Input:
(Terminals 4[+], 2[-]) 0 – 10mA
(Terminals 3[+], 1[-]) 0 – 9V
or
The maximum values for the intrinsically safe circuits have to be taken from the EU-Type Examination certificate Baseefa10ATEX0061X

KCD2-RR2-Ex1(.SP)

Supply circuit: 19 – 30Vdc
(Terminals 9[+], 10[-] or
Power Rail contacts)

Output:
(Terminals 6[+], 5[-]) 0 – 10mA
(Terminals 8[+], 7[-]) 0 – 4.2V

Input:
(Terminals 4[+], 2[-]) 0 – 10mA
(Terminals 3[+], 1[-]) 0 – 7V
or
The maximum values for the intrinsically safe circuits have to be taken from the EU-Type Examination certificate Baseefa10ATEX0061X

16 Report Number

See Certificate History

17 Specific Conditions of Use

- The Resistance Repeater Type KCD2-RR(2)-Ex1(.SP) must be installed in a suitably certified enclosure such that it is afforded a degree of protection of at least IP54 in accordance with EN 60079-0, EN 60079-7 & EN 60529 and is in an area of at least pollution degree 2, as defined in IEC 60664-1.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject	Compliance
1.2.7	LVD type requirements	Manufacturer responsibility
1.2.8	Overloading of equipment (protection relays, etc.)	User/Installer responsibility
1.4.1	External effects	User/Installer responsibility
1.4.2	Aggressive substances, etc.	User/Installer responsibility

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
16-0665BS-D	1 of 1	D	2019-Aug-23	Summary
16-0665BS-00C	1 – 10	C	2019-Aug-22	Description
16-0665BS-01A	1 & 2	A	2019-Apr-29	Schematic
16-0665UL-02B	1 – 16	B	2019-Jul-08	Relevant Components for Div 2 / Zone 2
16-0665BS-03A	1 of 1	A	2019-Apr-29	Component Layout
16-0665BS-05A	1 – 4	A	2019-Apr-29	PCB Layout
16-0665BS-06A	1 – 7	A	2019-Apr-29	Transformers
16-0665BS-10C	1 – 4	C	2019-Aug-23	Type Label

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
16-533-04	1 & 2	-	05-12-05	Housing KCD2

These drawings are common to, and held with, IECEx BAS 10.0025X

20 Certificate History

Certificate No.	Date	Comments
Baseefa10ATEX0062X	12 March 2010	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2006 & EN 60079-15:2005 is documented in Test Report No. GB/BAS/ExTR10.0050/00. Project File No. 08/0143.

Certificate No.	Date	Comments
Baseefa10ATEX0062X/1	1 March 2012	<p>To permit the use of Phoenix spring terminal plugs as an alternative to the screw terminal plug. Units fitted with the spring terminal plugs will have the addition of “.SP” to the type name i.e. KCD2-RR-Ex1.SP. Additionally, the current design meets the requirements of EN 60079-0: 2009 & EN 60079-15:2010 including the revision of the marking in accordance with these standards. The equipment is now marked: Ex nA II T4 Gc Test Report No. GB/BAS/ExTR12.0043/00. Project File No. 11/0857.</p>
Baseefa10ATEX0062X Issue 2	20 June 2018	<p>This issue incorporates previously issued primary and supplementary certificates into one certificate, permits minor documentation changes and confirms that the current design meets the requirements of EN 60079-0: 2012+A11:2013 and EN 60079-7:2015+A1:2018 including the revision of the marking in accordance with these standards. The equipment is now marked: Ex ec IIC T4 Gc (-20°C ≤ Ta ≤ +60°C) Test Report No. GB/BAS/ExTR18.0156/00. Project File No. 18/0359</p>
Baseefa10ATEX0062X Issue 3	8 October 2019	<p>This issue permits minor electrical and mechanical changes, removal of conformal coating, a change to the ambient range from -20°C ≤ Ta ≤ +60°C to -20°C / -40°C ≤ Ta ≤ +60°C / +70°C and additionally confirms that the current design meets the requirements of EN IEC 60079-0:2018. Test Report No. GB/BAS/ExTR19.0174/00. Project File No. 19/0107.</p>
<p>For drawings applicable to each issue, see original of that issue.</p>		