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## TYPE EXAMINATION CERTIFICATE

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### Equipment Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Type Examination Certificate Number: **Baseefa13ATEX0103X**

4 Equipment: **Universal Temperature Converter Type KCD2-UT2-Ex1..**

5 Manufacturer: **Pepperl + Fuchs GmbH**

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

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Baseefa certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment of Category 3 intended for use in potentially explosive atmospheres given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential Report No. GB/BAS/ExTR13.0130/00

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

**EN 60079-0:2012 EN 60079-15:2010**

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 equipment is subject to special conditions for safe 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 equipment shall include the following :

**Ex II 3G Ex nA IIC T4 Gc**

Baseefa Customer Reference No. **0808**

Project File No. **12/1011**

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R S SINCLAIR  
GENERAL MANAGER

On behalf of SGS Baseefa Limited

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## Schedule

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Certificate Number Baseefa13ATEX0103X

### 15 Description of Equipment

The Universal Temperature Converter Type KCD2-UT2-Ex1.. is designed to transfer a signal from TC/mV, RTD (2, 3 or 4-wire) or Potentiometer in 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 a transformer and opto-couplers and the voltage and current appearing at the hazardous area connectors are limited to intrinsically safe levels.

The Universal Temperature Converter Type KCD2-UT2-Ex1.. comprises a number of electronic components including an isolating transformer, two opto-isolators, fuses, zener diodes and resistors all mounted on a single printed circuit board and housed in a plastic enclosure with removable terminals and PowerRail contacts. LEDs provide status indication.

#### Input / Output Parameters

##### Supply circuit:

(Pin 9[+] wrt 10[-] or Power Rail contacts)

$U_i = 19 - 30Vdc$

##### Output: (KCD2-UT2-Ex1)

(Pins 5: source [-], 6: source [+], 7: sink [-], 8: sink [+])

0 – 20mA or 4 – 20mA

##### Output: (KCD2-UT2-Ex1-1)

(Pins 6[+], 5[-])

0 – 5V or 1 – 5V

##### Input:

(Pins 1, 2, 3, 4)

RTD or thermocouple or the maximum values for the intrinsically safe circuits have to be taken from the EC-Type Examination certificate Baseefa13ATEX0102.

### 16 Report Number

GB/BAS/ExTR13.0130/00

### 17 Specific Conditions of Use

1. The Universal Temperature Converter Type KCD2-UT2-Ex1... must be installed in a suitably certified enclosure such that it is afforded a degree of protection of at least IP54 in accordance with IEC 60529 and IEC 60079-15.

### 18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

### 19 Drawings and Documents

Number	Sheet	Issue	Date	Description
16-966BS	1 of 1	-	2013-Apr-11	Summary
16-0966BS-00	1 – 12	-	2013-Apr-11	Description
16-0966BS-01	1 – 3	-	2013-Mar-01	Schematic
16-0966BS-02	1 of 1	-	2013-Apr-11	I.S. Relevant Components
16-0966BS-03	1 & 2	-	2013-Mar-01	Component Overlay
16-533-04	1 & 2	-	2005-Dec-05	Mechanical Parts (Housing)

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Number	Sheet	Issue	Date	Description
16-0966BS-05	1 – 4	-	2013-Mar-01	Layouts
16-0966BS-06	1 – 5	-	2012-Nov-12	Transformer
16-0966BS-10	1 – 3	-	2013-Apr-11	Type Label

These drawings are common to Baseefa13ATEX0102X and IECEx BAS 13.0057X and held with IECEx BAS 13.0057X.