IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx BAS 17.0091X**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2017-08-03		
Applicant:	**Pepperl + Fuchs GmbH** Lilienthalstrasse 200 68307 Mannheim **Germany**		
Equipment:	**Z-Series Shunt Zener Diode Safety Barriers**		
Optional accessory:			
Type of Protection:	**Increased safety 'ec'**		
Marking:	**Ex ec IIC T4 Gc** **-20°C ≤ Ta ≤ +60°C**		

Approved for issue on behalf of the IECEx Certification Body: **R. S. Sinclair**

Position: **Technical Manager**

Signature: (for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom

IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 17.0091X**

Date of issue: 2017-08-03 Issue No: 0

Manufacturer: **Pepperl + Fuchs GmbH**
Lilienthalstrasse 200
68307 Mannheim
Germany

Additional manufacturing locations:

PT. Pepperl + Fuchs
Bintan
SD 56, 57 Lobam, Bintan Industrial Estate
IND-Pulau Bintan
Riau
Indonesia

Pepperl + Fuchs Asia Pte. Ltd.
18 Ayer Rajah Crescent
Singapore 139942
Singapore

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

GB/BAS/ExTR17.0237/00

Quality Assessment Report:

DE/PTB/QAR06.0008/08

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The Z Series Shunt Zener Diode Safety Barriers are designed to restrict the transfer of energy, from unspecified safe area equipment to intrinsically safe circuits, through the limitation of voltage and current. The range consists of single, double, triple and quadruple channel barriers covering polarised – positive and negative, non-polarised, non-polarised-star connected barriers and diode return barriers.

The barriers consist of electronic components on a single printed circuit board encapsulated within a moulded plastic enclosure which incorporates two or four terminals with separate earth terminal at both the hazardous and non-hazardous area ends and an integral spring mounted foot, designed for a DIN rail.

The barriers are asymmetrical and have light blue hazardous area terminals.

See annex for series range and electrical parameters.

SPECIFIC CONDITIONS OF USE: YES as shown below:
1. The Z Series barrier 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 60079-7 and is in an area of not more than pollution degree 2, as defined in IEC 60664-1.

Annex:

IECEx BAS 17.0091X Annex.pdf

SGS Baseefa Limited
Rockhead Business Park
Staden lane, Buxton, Derbyshire
SK17 9RZ
United Kingdom

Input / Output Parameters

Supply circuit:
Terminals 5, 6, 7, 8

Barrier	Input (V)
Z705	4.8
Z710	8.9
Z710.CL	8.9
Z713	14.6
Z715	13.6
Z715.CL	13.6
Z715.1k	13.6
Z722	20.1
Z722.CL	20.1
Z728	28
Z728.CL	28
Z728.H	28
Z728.H-RSC	28
Z731	28
Z755	4.8
Z757	8.9
Z763	11
Z764	11
Z765	13.6
Z772	20.1
Z778	28
Z779	28
Z779.H	28
Z786	28
Z787	28
Z787.H	28
Z787.H-RSC	28
Z788	28
Z788.H	28
Z788.R	28
Z788.R.H	28
Z789	28
Z796	25.1
Z796.L	25.1

Barrier	Input (V)
Z805	4.7
Z810	8.9
Z810.CL	8.9
Z813	14.6
Z815	13.6
Z815.CL	13.6
Z815.1k	13.6
Z822	20.1
Z822.CL	20.1
Z828	28
Z828.CL	28
Z828.H	28
Z855	4.7
Z857	8.9
Z864	11
Z865	13.6
Z872	20.1
Z878	28
Z879	28
Z886	28
Z887	28
Z888	28
Z888.H	28
Z888.R	28
Z888.R.H	28
Z896	25.1
Z896.L	25.1

Barrier	Input (V)
Z905	4.7
Z910	9.3
Z915	14
Z915.1k	14
Z922	10.5
Z928	27.6
Z954	4.9
Z954-RSC	4.9
Z955	4.7
Z960	9.5
Z960-RSC	9.5
Z961	8.1
Z961.H	8.1
Z964	11.7
Z965	14.2
Z966	11.7
Z966.H	11.7
Z967	16.2
Z969	13.6
Z972	20.9
Z978	27.6

Barrier	Input (V)
Z040	5.6
Z041	8.2
Z042	5.6

Output circuit:
Terminals 1, 2, 3, 4

Rated input (see above) = output.
OR
Maximum values for the intrinsically safe circuits have to be taken from IECEx BAS 09.0142 (or BAS00ATEX7005)