



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx BAS 18.0085X

Issue No: 2

Certificate history:

Status: **Current**

Issue No. 2 (2019-09-24)

Issue No. 1 (2019-06-26)

Issue No. 0 (2019-01-24)

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Date of Issue: **2019-09-24**

Applicant: **Weidmuller Interface GmbH & Co. KRG**
Klingenbergstrasse 16
32758 Detmold
Germany

Equipment: **VCG 24V EX 2/4 Series Surge protection Devices**
Optional accessory:

Type of Protection: **Intrinsic Safety (Gas & Dust)**

Marking:
Ex ia IIC T6 Ga
Ex ia IIIC T85 °C Da
(-30°C ≤ Ta ≤ 50°C)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

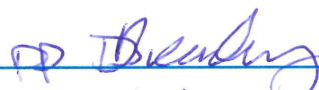
D BREARLEY
Certification
Manager

Position:

Technical Manager

Signature:
(for printed version)

Date:


24/9/19

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

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





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Manufacturer: Weidmuller Interface GmbH & Co. KRG
Klingenbergstrasse 16
32758 Detmold
Germany

Additional Manufacturing location(s):

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

*This Certificate **does not** indicate compliance with electrical 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/ExTR18.0276/00](#)

[GB/BAS/ExTR19.0146/00](#)

[GB/BAS/ExTR19.0242/00](#)

Quality Assessment Report:

[NL/DEK/QAR12.0052/06](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Range of VCG 24V EX 2/4 Series Surge Protection Devices are designed to provide protection for sensitive electronic equipment, and are intended to be mounted within a Hazardous Area. All units have the same safety input parameters for intrinsic safety purposes and all connections for both the single and dual channel electrical circuits must form part of the same intrinsically safe circuit.

The Range of VCG 24V EX 2/4 Series Surge Protection Devices comprise various combinations of electrical components which include three-terminal gas discharge tubes, two-terminal gas discharge tubes, inductors, silicon avalanche diodes, bi-directional zener diode, and resistors mounted on a printed circuit board. Each of these assemblies is encapsulated within a solid drawn hexagon metal bar drilled along its axis to accept a printed circuit board and closed at one end. The open end is provided with a threaded stub intended for screwing into the wall of an enclosure. The connection wires emerge from the encapsulation and are intended to be terminated within the enclosure.

The Range of VCG 24V EX 2/4 Series Surge Protection Devices comprises five different electrical configurations encapsulated within a hexagonal tubular metal stub, all of which are available with a 1/2" NPT, M20x1.5 or G1/2" (BSP 1/2") thread form for insertion into a gland entry of an enclosure. The electrical circuit connections form part of an intrinsically safe circuit and the hexagonal metal stub may be inserted into a gland entry of an enclosure. All connections for both the single and dual channel electrical circuits must form part of the same intrinsically safe circuit.

VCG 24V EX 2 designed to protect a 24V nominal, single channel electrical circuit.

VCG 24V EX 4 designed to protect a 24V nominal, dual channel electrical circuit each having separate returns.

Input Parameters:

$U_i = 50V$
 $I_i = 800mA$
 $P_i = 2W$
 $C_i = 0$
 $L_i = 60\mu H$

Owing to the construction of the equipment the subject devices have been assessed to provide ingress protection equivalent to IP67 by assessment.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. All connections for both the single and dual channel electrical circuits must form part of the same intrinsically safe circuit.
2. The apparatus must be installed such that the flying leads are afforded a degree of protection of at least IP54 and segregated by at least 50mm from any non-intrinsically safe circuits in accordance with IEC 60079-11.
3. Although all versions of the Range of VCG 24V EX 2/4 Series Surge Protection Devices will meet the 500V r.m.s. test to the metal case, the electrical circuits within the Surge Protection Devices are not capable of withstanding the 500V r.m.s. test to the Green/Yellow wire for one minute without breakdown. This must be taken into consideration in any installation.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 3.1 Minor enclosure assessment not affecting previous certification.

ExTR: GB/BAS/ExTR19.0242/00

File Reference: 19/0433