



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 SIR 10.0131	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 6	Issue 5 (2022-10-03)
Date of Issue:	2024-01-12		Issue 4 (2022-08-04)
Applicant:	Positek a Division of Variohm Eurosensor Ltd Hermes House Andoversford Link Andoversford Cheltenham GL54 4LB United Kingdom		Issue 3 (2022-03-23)
Equipment:	X005 3-Port Galvanic Isolation Amplifier		Issue 2 (2021-10-19)
Optional accessory:			Issue 1 (2011-12-20)
Type of Protection:	Intrinsic Safety		Issue 0 (2010-11-29)
Marking:	[Ex ia Ga] IIC [Ex ia Da] IIIC [Ex ia Ma] I		

Approved for issue on behalf of the IECEx
Certification Body:

Michelle Halliwell

Position:

Director Operations, UK & Industrial Europe

Signature:
(for printed version)

Date:
(for printed version)

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:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom





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Date of issue: 2024-01-12

Issue No: 6

Manufacturer: **Positek a Division of Variohm Eurosensor Ltd**
Hermes House
Andoversford Link
Andoversford
Cheltenham GL54 4LB
United Kingdom

Manufacturing locations: **Positek a Division of Variohm Eurosensor Ltd**
Hermes House
Andoversford Link
Andoversford
Cheltenham GL54 4LB
United Kingdom

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 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with 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 Reports:

[GB/CSAE/ExTR22.0079/00](#)
[GB/SIR/ExTR22.0079/00](#)

[GB/SIR/ExTR10.0228/01](#)
[GB/SIR/ExTR22.0155/00](#)

[GB/SIR/ExTR21.0106/00](#)
[GB/SIR/ExTR24.0008/00](#)

Quality Assessment Report:

[GB/SIR/QAR10.0029/08](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

An X005 3-Port Galvanic Isolation Amplifier is designed to restrict the transfer of energy, from unspecified safe area equipment to intrinsically safe circuits, by the limitation of voltage and current. The unit comprises a single printed circuit board housed in a plastic enclosure which may be clipped to a DIN rail. Hazardous and safe area connections are made via two sets of two three-way terminal connectors on the top of the unit. The printed circuit board contains isolating transformers, fuses, zener diodes and current limiting resistors together with other electronic components.

The circuit connected to the safe area terminals V+ & 0V is designed to operate from a d.c. supply voltage of up to 35V. Outputs O/P+ and O/P- are designed to drive a nominal 0 to 10 Volts or 4 to 20mA load.

Refer to the Annexe for the Entity Parameters.

SPECIFIC CONDITIONS OF USE: NO



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Date of issue: 2024-01-12

Issue No: 6

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

This issue, Issue 6, recognises the following change; refer to the certificate annex to view a comprehensive history:

1. Change of Applicants additional manufacturing location name and address as follows:
From: Positek a Division of Variohm Eurosensor Ltd, L6 Andoversford link, Andoversford Industrial estate, Andoversford, Cheltenham, Gloucester, GL54 4LB
To: Positek a Division of Variohm Eurosensor Ltd, Hermes House, Andoversford Link, Andoversford, Cheltenham, GL54 4LB

Annex:

[IECEX SIR 10.0131 Issue 6 Annexe.pdf](#)

Annexe to: IECEx SIR 10.0131 Issue 6



Applicant: Positek a division of Variohm Eurosensor Ltd.

Apparatus: X005 3-Port Galvanic Isolation Amplifier

Terminal J3:1, J3:3, J4:1 and J4:3	Terminals J1:2, J1:3, J2:2, J2:1, J1:1
Um = 253 V	Uo = 10.66 V Io = 50.5 mA Po = 121 mW
	Group IIC IIB IIA
	Co = 2.23 15.6 69.0 μF
	Lo = 14 53 112 mH

Conditions of Manufacture

1. The non-mains transformer, TR01, is subject to routine tests at voltages of 1506V (1000V+2U with Um=253V): between the input winding and the intrinsically safe circuit output windings, between the safe side output winding and the intrinsically safe circuit output windings, in accordance with clause 11.2 of IEC 60079-11:2011 Ed. 6.
2. The non-mains signal transformer, TR02, is subject to routine tests at voltages of 1016V rms between I.S input windings and the output windings, in accordance with clause 11.2 of IEC 60079-11:2011 Ed. 6.

Full certificate change history

Issue 1 – this Issue introduced the following change:

1. Issued to allow GB/SIR/ExTR10.0228/01 to replace GB/SIR/ExTR10.0228/00

Issue 2 – this Issue introduced the following changes:

1. The certificate holder and manufacturer's name was changed:

From	To
Positek Limited	Positek a division of Variohm Eurosensor Ltd.

2. The body responsible for quality (ATEX only) was changed from 0518 to 2813 as shown on the label drawings.

Issue 3 – this Issue introduced the following changes:

1. Revise nameplate drawing X005-12 to add UKCA certificate information
2. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2004 Ed. 4 and IEC 60079-11:2006 Ed. 5 were replaced by IEC 60079-0:2017 Ed. 7 and IEC 60079-11:2011 Ed. 6, the markings were updated accordingly.

Issue 4 – this Issue introduced the following changes:

1. Updated Enclosure.

Issue 5 – this Issue introduced the following changes:

1. To permit a Zener diode to be a generic type.

Annexe to: IECEx SIR 10.0131 Issue 6



Applicant: Positek a division of Variohm Eurosensor Ltd.

Apparatus: X005 3-Port Galvanic Isolation Amplifier

Issue 6 – this Issue introduced the following change:

1. Change of Applicants additional manufacturing location name and address as follows:

From	To
Positek a Division of Variohm Eurosensor Ltd, L6 Andoversford link Andoversford Industrial estate Andoversford, Cheltenham Gloucester, GL54 4LB	Positek a Division of Variohm Eurosensor Ltd Hermes House Andoversford Link Andoversford Cheltenham, GL54 4LB