



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 10ATEX2204** Issue: **2**

4 Equipment: **An X005 3-Port Galvanic Isolation Amplifier**

5 Applicant: **Positek Limited**

6 Address: L6 The Link
Andoversford Industrial Estate
Andoversford
Cheltenham GL54 4LB
UK

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

8 CSA Group Netherlands B.V., Notified Body Number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2006 EN 60079-11:2007
EN 60079-0:2009 and EN60079-26:2007 were used for guidance with marking

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



I (M1)
[Ex ia Ma] I
Ta = -20°C ≤ Ta ≤ +60°C



II (1)GD
[Ex ia Ga Da] IIC
Ta = -20°C ≤ Ta ≤ +60°C

Project Number 2423

Signed: 

Title: Director of Operations

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CSA Group Netherlands B.V.
Utrechtseweg 310,
6812 AR, Arnhem,
Netherlands



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 10ATEX2204
Issue 2

13 DESCRIPTION OF EQUIPMENT

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.

| | |
|--|---|
| Terminal J3:1, J3:3, J4:1 and J4:3 Um = 253 V | Terminals J1:2, J1:3, J2:2, J2:1, J1:1 Uo = 10.66 V Io = 50.5 mA Po = 121 mW Ci = 0 Li = 0 |
|--|---|

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

| Issue | Date | Report no. | Comment |
|-------|-------------------|------------|---|
| 0 | 21 September 2010 | R21492A/00 | The release of the prime certificate. |
| 1 | 20 December 2011 | R21492A/01 | Issued to allow Sira R21492A/01 to replace Sira R21492A/00 |
| 2 | 15th October 2019 | 2423 | <ul style="list-style-type: none"> Transfer of certificate Sira 10ATEX2204 from Sira Certification Service to CSA Group Netherlands B.V.. EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(In accordance with Article 41 of Directive 2014/34/EU, EC 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. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i> |

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

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Issue 2**

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

Certificate Annexe



Certificate Number: Sira 10ATEX2204

Equipment: An X005 3-Port Galvanic Isolation Amplifier

Applicant: Positek Limited

Issue 0

| Drawing | Sheets | Rev. | Date (Sira stamp) | Title |
|---------|--------|------|-------------------|---|
| EX05-59 | 1 of 2 | A | 16 Sep 10 | Galvanic Isolation Barrier – Input Power |
| EX05-59 | 2 of 2 | A | 16 Sep 10 | Galvanic Isolation Barrier – Input/Output Power |
| X005-20 | 1 to 6 | G | 16 Sep 10 | Galvanic Isolation Barrier – Parts List |
| TR01-10 | 1 & 2 | C | 16 Sep 10 | TR01 Specification |
| TR02-10 | 1 & 2 | C | 16 Sep 10 | TR02 Specification |
| X005-13 | 1 of 1 | A | 16 Sep 10 | Connector Coding |
| X005-12 | 1 of 1 | B | 16 Sep 10 | Case Artwork |

Issue 1

| Drawing | Sheets | Rev. | Date (Sira stamp) | Title |
|---------|--------|------|-------------------|--------------|
| X005-12 | 1 of 1 | C | 20 Dec 11 | Case Artwork |

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