



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 SIR 05.0047X Issue No: 2 Certificate history:
Status: **Current** Page 1 of 4 Issue No. 2 (2014-05-08)
Date of Issue: **2014-05-08** Issue No. 1 (2012-10-25)
Applicant: **ABTECH Limited** Issue No. 0 (2006-10-25)
A B Control and Technology
Sanderson Street
Sheffield
South Yorkshire S9 2UA
United Kingdom

Electrical Apparatus: **SX Range of Junction Boxes**
Optional accessory:

Type of Protection: **Increased Safety, Dust, Intrinsic Safety and Optical Radiation**

Marking: Refer to Certificate Annexe

Approved for issue on behalf of the IECEx
Certification Body:

C Ellaby

Position:

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

Certificate issued by:

SIRA Certification Service
Rake Lane
Ecclestone
Chester
CH4 9JN
United Kingdom

sira
CERTIFICATION





IECEX Certificate of Conformity

Certificate No: IECEx SIR 05.0047X Issue No: 2
Date of Issue: 2014-05-08 Page 2 of 4
Manufacturer: **ABTECH Limited**
A B Control and Technology
Sanderson Street
Sheffield
South Yorkshire S9 2UA
United Kingdom

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 electrical 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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-28 : 2006-08 Edition:1	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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

IECEX ATR: GB/SIR/ExTR06.0099/00, GB/SIR/ExTR12.0245/00 GB/SIR/QAR06.0046/00, /01, /02, /03, /04, /05 GB/SIR/ExTR13.0336/00, GB/SIR/ExTR13.0296/00	File Reference: 51L12177, 51L25164 GB/SIR/ExTR13.0316/00, GB/SIR/ExTR14.0107/00
---	---



IECEx Certificate of Conformity

Certificate No: IECEx SIR 05.0047X

Issue No: 2

Date of Issue: 2014-05-08

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The SX Junction Boxes comprise an SX Enclosure, component certified as IECEx SIR 05.0046U, that is fitted with terminals. Refer to the Certificate Annexe for a full product description.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The fibre optic source supplying this equipment shall be suitably certified as compliant with IEC 60079?28 and provide an inherently safe optical source (op is), EPL Gb, subsequently the parameters in Table 2 apply.
2. Over-power fault protection shall be provided, as detailed below:
 - * For EPL Ga, after two countable faults are applied to the current and/or voltage limiter.
 - * For EPL Gb, after one countable fault is applied to the current and/or voltage limiter.



IECEX Certificate of Conformity

Certificate No: IECEx SIR 05.0047X

Issue No: 2

Date of Issue: 2014-05-08

Page 4 of 4

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

Issue 1 – this Issue introduced the following changes:

1. The Description was aligned with certificate no. Sira 99ATEX3171 associated with this Junction Box, this included recognising the following changes assessed as part of that certificate.
 - * The introduction of alternative marking that allows component certified, intrinsically safe terminals to be fitted, additional marking being applicable,
 - * A suitably certified and dimensioned heater was approved to be fitted, this heater is defined as "Any suitably certified and dimensioned heater that is fitted with a thermostat set to a maximum of 25°C".
 - * The option to fit slotted trunking inside the enclosures, this trunking may be sited as required.
 - * When fitted with silicone gaskets only, the Junction Boxes are permitted to be used up to an an increased maximum ambient of 80°C with a Temperature Class of T3, This results in an ambient temperature range of -50°C to +80°C for T3 versions only (Note: with this option windows are not permitted).
2. Following appropriate re-assessment to demonstrate compliance with the requirements of the latest standards, the documents previously used for assessment were replaced by those currently listed, the markings were updated accordingly. In addition, the enclosure was allowed to be used for intrinsically safe applications and IEC 60079-11:2012 Edition 6 was included in the list of supporting standards.
3. The Conditions of Manufacture were rationalised to bring them into line with Sira 99ATEX3171.
4. It was recognised that a new procedure for selecting terminals has been adopted by the manufacturer; this allows the terminals to be chosen from an Approved Component Document, Sira 12AC087, that is issued and controlled by Sira.

Issue 2 – The changes associated with this Issue are listed in the Certificate Annexe.

Annex:

[IECEX SIR 05-0047X Issue 2 Annexe.pdf](#)