



1 EC TYPE-EXAMINATION CERTIFICATE

2 Component intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 99ATEX3172U Issue: 7

4 Component: BPG Range of Enclosures

5 Applicant: ABTECH Limited

6 Address: Sanderson Street

Lower Don Valley Sheffield S9 2UA

UK

- 7 This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of a component 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 60079-0:2012

EN 60079-7:2007

EN 60079-11:2012

FN 60079-26:2007

FN 60079-31:2009

This report may be issued against standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation. Sira's flexible scope is available on request.

- The sign 'U' is placed after the certificate number to indicate that the product assessed is a component and may be subject to further assessment when incorporated into equipment. Any special conditions for safe use are listed in the schedule to this certificate.
- This EC type-examination certificate relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.
- 12 The marking of the component shall include the following:

 $\langle \varepsilon_{\rm x} \rangle$

II 1 GD Ex ia IIC Ga Ex ta IIIC Da IP6X

Эr

 $\langle x_3 \rangle$

II 2 G D Ex e IIC Gb

Ex to IIIC Db IP6X

(2x)

II 2 G D Ex ib IIC Gb Ex tb IIIC Db IP6X

Project Number 30711

This certificate and its schedules may only be reproduced in its entirety and without change.

C Ellaby

Deputy Certification Manager

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England





EC TYPE-EXAMINATION CERTIFICATE

Sira 99ATEX3172U Issue 7

13 DESCRIPTION OF COMPONENT

The BPG range of enclosures are manufactured from polyester in the following sizes:

BPG Reference	Length (mm)	Width (mm)	Height (mm)
1	80	75	55
2	110	75	55
3	160	75	55
4	190	75	55
5	230	75	55
6	122	120	90
7	220	120	90
8	160	160	90
9	260	160	90
10	360	160	90
11	560	160	90
12	255	250	120
13	400	250	120
13.5	400	250	160
14	600	250	120
15	400	405	120

The enclosures may also be manufactured to sizes not specified in the table. This assumes that any given dimension is not larger than the respective dimension of the largest enclosure or smaller than the respective dimension of the smallest enclosure. The enclosure lids may be hinged or detachable and are retained captive screws. All boxes are fitted with closed cell silicone rubber gaskets. Entries may be provided either through the side walls or the rear of the box and external and internal earthing facilities are provided.

Variation 1 (dated 28 September 2001) - This variation introduced the following changes:

i. The recognition of a minor revision of the information marked on the label.

Variation 1 (dated 10 March 2008) - This variation introduced the following changes:

i. The BPG 13.5 enclosure was added to the range.

Variation 2 - This variation introduced the following changes:

- The option to fit slotted trunking inside the enclosures, this trunking may be sited as required.
 The instructions were modified to recognise additional restrictions associated with this change and a new Condition of Manufacture was introduced.
- ii. The recognition of minor drawing modifications including the introduction of a new company logo; these amendments are administrative or involve changes to the design that do not affect the aspects of the product that are relevant to explosion safety.
- iii. The materials used to construct these enclosures were clarified and are recorded below:
 - BPG is used for all colours except black
 - Anti-static BPGC is the black version

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England





EC TYPE-EXAMINATION CERTIFICATE

Sira 99ATEX3172U Issue 7

Variation 3 - This variation introduced the following changes:

- i. Following appropriate re-assessment to demonstrate compliance with the requirements of the EN 60079 series of standards, the documents previously listed in section 9, EN 50014:1997, EN 50019:1994 and EN 50281-1-1:1999, were replaced by those currently listed, the markings in section 12 were updated accordingly. In addition, the enclosure was allowed to be used for intrinsically safe applications and EN 60079-11:2012 was included in the list of supporting standards.
- ii. The Description of Component and Condition of Certification were amended to recognise that closed cell polychloroprene gaskets are no longer used.
- iii. The Conditions of Certification and Special Condition for Safe Use were rationalised to bring them into line with IECEx SIR 06.0086U which is also associated with this enclosure.

Variation 4 - This variation introduced the following changes:

- i. Using EN 60079-26, the enclosures were allowed to be marked with 'Ex ia' and 'Ex ta' concepts for EPL levels Ga and Da.
- ii. The introduction of one or more optional Earth Bars. Each earth bar is manufactured from copper or brass, which may optionally be plated, and are mounted and fixed to at least two welded pillars, welded studs, or internal earth mounting plate (if fitted). Each earth bar is connected to the main internal earth point of the enclosure in which it is fitted. Individual earth connection is made via a threaded entry using a screw and self locking nut, or screw and nut and anti-vibration washer, or locked via the use of thread sealant, and designed to accept a crimped conductor lug. This change necessitated the introduction of new Conditions of Certification.
- iii. It was recognised that, when not manufactured with anti-static carbon loading, the BPG range of empty enclosures are not suitable for portable use, therefore a Special Condition for Safe Use was introduced.
- iv. IEC 60079-0:20011 was replaced by EN 60079-0:2012 in the list of standards.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report/File no.	Comment
0	19 January 2000	R51X6055E	The release of prime certificate.
1	28 September 2001	53V7936	The introduction of Variation 1.
2	23 July 2002	R53A9009A	 The prime certificate was re-issued to permit the following: The incorporation of variation 1. The lower ambient temperature range was confirmed as -65°C. The introduction of the changes included in Sira report number R53A9009A.

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England





EC TYPE-EXAMINATION CERTIFICATE

Sira 99ATEX3172U Issue 7

Issue	Date	Report/File no.	Comment
3	10 March 2008	R51A17881A	 This Issue covers the following changes: All previously issued certification was rationalised into a single certificate, Issue 3, Issues 0 to 2 referenced above are only intended to reflect the history of the previous certification and have not been issued as documents in this format.
			 The change of the Applicant's name, first recognised 31 January 2007, was re-confirmed. The introduction of Variation 1.
4	03 April 2012	R26585A/00	The introduction of Variation 2.
5	11 June 2012	R26585A/01	Report R26585A/01 replaced report R26585A/00.
6	9 October 2012	R25164A/00	The introduction of Variation 3.
7	7 April 2014	R30711A/00	The introduction of Variation 4.

15 SPECIAL CONDITIONS FOR SAFE USE

- 15.1 The Enclosures shall not be used outside the temperature range -65°C to +90°C.
- 15.2 BPG enclosures that are not manufactured with anti-static carbon loading and marked with an anti static warning, shall only be used for fixed installation.
- 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

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.

- 17 CONDITIONS OF CERTIFICATION
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.
- 17.3 If the Enclosures are supplied with blanking plugs, reducers, adapters and breather drains, then the manufacturer shall ensure that:
 - The device does not adversely affect the minimum IP rating of the enclosure.
 - There are no special conditions of for safe use (conditions of certification) associated with the device that will impinge upon the use and installation of the Enclosure, e.g. "These components shall not be used for applications where there is a 'high' risk of mechanical damage".
 - The coding reflects the "worst case" item fitted.
- 17.4 The manufacturer shall take all reasonable steps to ensure that the following items used in the construction of the Enclosure are used within the minimum and maximum service temperature stated in the condition for safe use, in addition, the manufacturer shall provide the user/installer with a copy of the certificate associated with any blanking plugs, reducers, adapters and breather drains:

Item: Solid silicone rubber gasket

Blanking plugs, reducers, adapters and breather drains

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England





EC TYPE-EXAMINATION CERTIFICATE

Sira 99ATEX3172U Issue 7

- 17.6 When trunking is fitted, it may be sited as required and the minimum creepage and clearance distances shall still be met.
- 17.7 When the optional earth bar is fitted it shall allow for a size of conductor connection in accordance with Clause 15.3 of EN 60079-0.
- 17.8 When an individual earth connection to the earth bar is secured via thread sealant alone it shall be ensured that the thread sealant used has a suitable temperature range to account for the lowest ambient temperature and at least the T-class applied.
- 17.9 The earth bar connection screws, nuts and washers shall not be constructed of light metals.

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification ServiceRake Lane, Eccleston, Chester, CH4 9JN, England

Certificate Annexe

Certificate Number: Sira 99ATEX3172U

Component: BPG Range of Enclosures

Applicant: ABTECH Limited



Issue 0 and 1: The drawings associated with these Issues were rationalised by those listed in Issue 2.

Issue 2

Number	Sheet	Rev.	Date	Description
ABT 10259	1 of 1	С	25 Jun 02	External Label (BPG)
ABT 10305	1 of 1	Α	16 Nov 99	BPG Enclosures
ABT 10304	1 of 1	Α	16 Nov 99	BPG Manufacturing Specification

Issue 3

Number	Sheet	Rev.	Date (Sira stamp)	Description
ABT 10305	1 of 1	В	07 Mar 08	BPG Enclosures

Issue 4

Number	Sheets	Rev.	Date (Sira Stamp)	Description
ABT 10259	1 of 1	D	30 Mar 12	BPG Nameplate – Empty Enclosures
ABT 10304	1 of 1	В	30 Mar 12	BPG Manufacturing specification

Issue 5 (No new drawings were introduced.)

Issue 6

Number	Sheets	Rev.	Date (Sira Stamp)	Description
ABT 10259	1 of 1	E	30 Sept 12	BPG Nameplate – Empty Enclosures
ABT 10304	1 of 1	С	30 Sept 12	BPG Manufacturing specification
ABT 10305	1 of 1	С	30 Sept 12	BPG Range of Enclosures

Issue 7

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
ABT25912	1 of 1	Α	07 Oct 13	External Label (BPG/BPGC)
ABT10305	1 of 1	D	11 Oct 13	BPG Range of Enclosures

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification ServiceRake Lane, Eccleston, Chester, CH4 9JN, England