1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 99ATEX3172U** Issue: **3**

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.

8 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 50 014:1997 (amendments A1 to A2) EN 50 019:1994 EN 50281-1-1:1998

10 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.

11 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:

II 2 G D
EEx e II (Ta = -65°C to +90°C)

Project Number 51A17881
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Certification Officer

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE **Sira 99ATEX3172U**
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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 gaskets of closed cell polychloroprene or closed cell silicone rubber.

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.

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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.
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.

15 SPECIAL CONDITIONS FOR SAFE USE

None

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 Suitably certified Ex e equipment such as breathing devices and blanks may be fitted to the enclosure providing the enclosure maintains compliance with BS EN 60529:1992 code IP64 or better.

17.4 When the enclosures are marked Ta –65°C to +90°C, the manufacturer shall fit silicone rubber gaskets.

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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	C	25 Jun 02	External Label (BPG)
ABT 10305	1 of 1	A	16 Nov 99	BPG Enclosures
ABT 10304	1 of 1	A	16 Nov 99	BPG Manufacturing Specification

Issue 3

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

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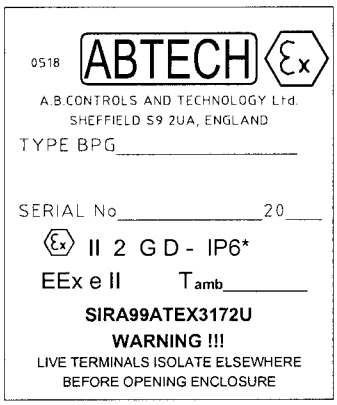
INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS FOR ABTECH 'BPG' Range Enclosures – SIRA99ATEX3172U



Marking

The marking shown is for a component certified enclosure. The user must submit the completed unit for type examination if it is to be used in a hazardous area.

The ambient temperature range for which this product is suitable is marked on the label and identified by Tamb___.

Installation

These instructions assume that the required cable entries have been pre-drilled. Cable entries may be threaded.

1) Using the mounting dimensions data provided, either in the product catalogue data sheets or on the drawings supplied, (as part of the project documentation), mark out the positions for the mounting holes on the surface where installation is required.
2) Drill the mounting holes for M4 fixing studs (for size BPG1 to BPG5) or for M6 fixing studs (for size BPG6 to BPG15) as applicable.
3) Tap thread into mounting holes if required.
4) Place a mounting screw through one mounting hole in the box so that the thread of the screw protrudes from the back of the box. Lift the enclosure into position using such assistance as may be necessary to avoid injury and:-
   a) If clearance mounting holes are used, insert the protruding thread through the appropriate clearance hole and secure with a nut on the other side of the mounting surface.

   Or

   b) If threaded holes are used, locate the end of the mounting screw over the thread hole and, using an appropriate screwdriver tighten the screw.
5) Rotate the box to line up the remaining mountings and repeat (4) above until all mounting screws have been fitted.
6) Secure the lid by closing the lid and tightening the lid fixing screws.

Earthing/Grounding

The enclosure may be provided with an external earth/ground connection. If such a connection is provided it must be connected to the appropriate earth bonding circuit before electrical power is connected to the contents of the enclosure

Operation

1. The lid must be secured using all of the lid screws provided in order to maintain the IP rating.

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2. No attempt must be made to remove the enclosure lid whilst electrical power is connected to the contents of the enclosure.
3. If the enclosure if fitted with an external earth/ground facility it must be connected to the earth bonding circuit at all times when power is connected to the enclosure contents.

Maintenance

Routine maintenance is a requirement of BS5345 : Part 1 : 1989 and is also likely to be a requirement of local Health and Safety legislation. The laws of the applicable country must be considered and maintenance checks carried out accordingly

Additional periodic checks that are advisable to ensure the efficiency of ABTECH range enclosures are:-

Activity		**Frequency**
1	Check that the lid seal is in place and not damaged	Each time the enclosure is opened
2	Check that all lid fixing screws are in place and secured	Each time the enclosure is closed
3	Check that the mounting bolts are tight and free of corrosion	Annually
4	Check the security of all cable glands	Annually
5	Check enclosure for damage	Annually

Chemical attack

The ABTECH BPG range of enclosures are manufactured using the following materials:-

glass reinforced polyester resin, (with or without carbon loading),

neoprene or silicone rubber,

316 stainless steel

Brass

Consideration should be given to the environment in which these enclosures are to be used to determine the suitability of these materials to withstand any corrosive agents that may be present.

Static hazard

Glass reinforced polyester resin has a surface resistance greater than 10E9 Ohms. They can present a hazard from static electricity and may not be cleaned except with a damp cloth.

Carbon loaded glass reinforced, identified by the suffix 'C', (e.g. BPGC9), have a surface resistance between 10E6 and 10E9 Ohms. They do not present a hazard from static electricity.

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