



1 **TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 10ATEX5345X** Issue: **0**

4 Equipment: **APC Photocell**

5 Applicant: **Abtech Limited**

6 Address: **5 Sanderson Street
Lower Don Valley
Sheffield
S9 2UA
United Kingdom**

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

8 Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

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 of this certificate, has been assessed by reference to:

EN 60079-0:2009 EN 60079-18:2009 EN 60079-15:2010 EN 60079-31:2009

10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

12 The marking of the equipment shall include the following:



II 3 G D
Ex nA mc IIC T6 Gc
Ex tc IIIC T80°C Dc
(Tamb -40°C to 55°C)
IP6X

Project Number 19449

C Ellaby
Certification Officer

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



SCHEDULE

TYPE-EXAMINATION CERTIFICATE

Sira 10ATEX5345X
Issue 0

13 DESCRIPTION OF EQUIPMENT

The APC Photocell comprises of five parts:

- i. Component approved enclosure Type BPG 6 (coloured version) or BPGC 6 (black – anti-static version) manufactured by Abtech Ltd and covered by Sira 99ATEX3172U, coded Ex e II, with an IP65 rating.
- ii. Window/light sensor housing manufactured by R.Stahl and approved by PTB 01ATEX1129U, coded Ex e II. IP65
- iii. Light sensor (Photocell) – Encapsulated.
- iv. Encapsulated circuit.
- v. Component approved terminal block Type BK, manufactured by Weidmuller and approved by Sira 01ATEX3247U, coded Ex e II.

The window/light sensor housing is located in the lid of the enclosure. The circuit is encapsulated into the base of the enclosure and the leads from the sensor and the circuit are terminated in the terminal block.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	20 December 2010	R19449A/00	The release of prime certificate.

15 SPECIAL CONDITIONS FOR SAFE USE

- 15.1 The maximum permitted load is 10A
- 15.2 The enclosure and photocell window/cover shall only be cleaned with a damp cloth.
- 15.3 The user/installer shall ensure that those, APC Photocells marked Ex mc, shall be additionally protected by a protective device with a minimum Prospective Short Circuit Current (PSSC) of 1500A.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed 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 Type Examination Certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.
- 17.3 The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may

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



SCHEDULE

TYPE-EXAMINATION CERTIFICATE

Sira 10ATEX5345X
Issue 0

impinge upon the explosion safety design of their products. They should also provide the end user with the appropriate certification documents.

- 17.4 The manufacturer shall carry out a visual inspection on each unit manufactured. No evidence of cracks in the compound, exposure of encapsulated parts, flaking, inadmissible shrinkage, swelling, decomposition, failure of adhesion or softening shall be present.
- 17.5 A dielectric strength test shall be carried out on each unit manufactured. The test shall be conducted in accordance with EN 60079-18:2009 clause 9.2 at the voltage defined in EN 60079-18 Clause 8.2.4 No breakdown shall occur.

Certificate Annexe

Certificate Number: Sira 10ATEX5345X

Equipment: APC Photocell

Applicant: Abtech Limited



Issue 0

Drawing	Sheets	Rev	Date	Title
ABT21718	1 of 1	A	22 Sep 10	General Arrangement
ABT21764	1 of 1	A	23 Sep 10	Label – Ex nA mc IIC T6
ABT21918	1 of 1	A	26 Nov 10	APC Circuit Diagram (Selc 8484)
ABT21951	1 of 1	A	23 Dec 10	APC Encapsulation Procedure
Selc 8484	1 of 2	-	26 Nov 10	APC Circuit – Parts List
Selc 8484	2 of 2	-	26 Nov 10	APC Circuit – Parts List

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