IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx SIR 10.0171X**

Certificate history:
Issue 0 (2011-01-20)

Status: **Current**

Issue No: 1

Date of Issue: 2021-09-21

Applicant: **Abtech**
5 Sanderson Street
Lower Don Valley
Sheffield S9 2UA
United Kingdom

Equipment: **APC Photocell**

Optional accessory:

Type of Protection: **Encapsulation, increased safety, Type n, dust protection**

Marking:
Ex e mb IIC T6 Gb
Ex tb III C T80 °C Db IP6X
Tamb -40 °C to 55 °C
or
Ex nA mc IIC T6 Gc
Ex tc III C T80 °C Dc IP6X
Tamb -40 °C to 55 °C

Approved for issue on behalf of the IECEx Certification Body: **Neil Jones**

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom

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Manufacturer: **Abtech**
5 Sanderson Street
Lower Don Valley
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Additional manufacturing locations:

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 equipment 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 60079-0:2007-10 Explosive atmospheres - Part 0:Equipment - General requirements
Edition:5

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

IEC 60079-18:2009 Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
Edition:3

IEC 60079-31:2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
Edition:1

IEC 60079-7:2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:4

This Certificate **does not** indicate compliance with 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:

Test Report:

GB/SIR/ExTR10.0316/00

Quality Assessment Report:

GB/CML/QAR16.0021/06

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

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 IECEx SIR 06.0086U, coded Ex e II, with an IP66 rating.

ii. Window/light sensor housing manufactured by R.Stahl and approved by IECEx PTB 06.0014U, coded Ex e II, with an IP65 rating.

iii. Light sensor (Photocell) – Encapsulated

iv. Encapsulated circuit

v Component approved terminal block Type BK, manufactured by Weidmuller and approved by IECEx SIR 05.0035U, 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.

SPECIFIC CONDITIONS OF USE: YES as shown below:

i. The maximum permitted load is 10 A.

ii. The enclosure and photocell window/cover shall only be cleaned with a damp cloth.

iii 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 1500 A.

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Equipment (continued):

The Manufacturer shall comply with the following condition of manufacture:

1. 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 impinge upon the explosion safety design of their products. They should also provide the end user with the appropriate certification documents.
2. 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.
3. A dielectric strength test shall be carried out on each unit manufactured. The test shall be conducted in accordance with IEC 60079-18:2009 clause 9.2 at the voltage defined in IEC 60079-18 Clause 8.2.4 No breakdown shall occur.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, Issue 1, recognises the following change:

1. QAR Reference was updated.