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
Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx CML 15.0051U**

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Certificate history:
Issue 2 (2019-08-23)
Issue 1 (2016-08-22)
Issue 0 (2015-08-27)

Status: **Current**

Issue No: 3

Date of Issue: 2023-08-17

Applicant: **Abtech Limited**
199 Newhall Road
Lower Don Valley
Sheffield
S9 2QJ
United Kingdom

Ex Component: MV and MVH Terminal

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased safety Ex "e"**

Marking: Ex eb IIC Gb

Approved for issue on behalf of the IECEx Certification Body: **L A Brisk**

Position: **Assistant Certification Manager**

Signature: 
(for printed version)

Date: 17 Aug 2023
(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:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom

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Manufacturer: **Abtech Limited**
199 Newhall Road
Lower Don Valley
Sheffield
S9 2QJ
United Kingdom

Manufacturing locations: **Abtech Limited**
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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 component 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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 component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/CML/ExTR15.0055/00 GB/CML/ExTR16.0117/00 GB/CML/ExTR23.0161/00

Quality Assessment Report:

GB/CML/QAR16.0021/08

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Ex Component(s) covered by this certificate is described below:

The MV/MVH Terminal is manufactured from a fibreglass reinforced polyester material. There are two connection studs per terminal that are connected via a copper current bar. Cable connection is via lugs that are held in place with a single nut and split locking washer.

See Annex for full description and Conditions of Manufacture.

SCHEDULE OF LIMITATIONS:

See Annex for Schedule of Limitations.

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

This issue introduced the following changes:

1. To update IEC 60079-7:2007 standard to the latest edition, IEC 60079-7:2015
2. To update the marking to reflect the latest edition of IEC 60079-7:2015
3. Standard reference in condition of manufacture updated to show IEC 60079-7:2015

Issue 2
This issue introduced the following change:

1. To update QAR reference

Issue 3
This issue introduced the following changes:

1. To amend the maximum voltage from 6.6 kV to 8.8 kV and maximum current from 250A to 600A for new model MVH type terminal assembly.
2. To update IEC 60079-0:2011 Ed 6.0 standard to the latest edition, IEC 60079-0:2017 Ed 7.0
3. To update IEC 60079-7:2015 Ed 5.0 standard to the latest edition, IEC 60079-7:2017 Ed 5.1
4. To remove IEC 60079-31 standard
5. To clarify the description and add a schedule of limitation regarding the permitted number of lugs per terminal block way.

Annex:

IECEx CML 15.0051U Iss. 3 Certificate Annex.pdf

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Annexe to:	IECEx CML 15.0051U, Issue 3
Applicant:	Abtech Limited
Apparatus:	MV and MVH Terminal

Description

The MV/MVH Terminal is manufactured from a fibreglass reinforced polyester material. There are two connection studs per terminal that are connected via a copper current bar. Cable connection is via lugs that are held in place with a single nut and split locking washer. Optionally; 2-hole lugs may be used. The nut(s) shall be tightened to a torque of 6 to 12 Nm (M8); 17.5 to 19.5 Nm (M10) and 30 to 34 Nm (M12)

The maximum voltage rating of the MV terminal is 6.6kV and current rating is 250A, the voltage rating and cable size vary depending on application. See instruction manual (ABTQ-206) for details.

The maximum voltage rating of the MVH terminal is 8.8kV and current rating is 300A or 600A, depending on the current bar thickness. The maximum cable CSA is 240mm², there are no other restrictions based on cable size or lug arrangement for the MVH terminal.

Conditions of Manufacture

i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.

ii. A routine electric strength test under minimum (1 000 + 2U) V r.m.s. where U is the working voltage shall be performed on each terminal in accordance with the specifications of the Clause 7.1 of the standard IEC 60079-7:2017 Ed 5.1.

iii. A copy of this certificate shall be supplied with each terminal assembly.

iv. A copy of Instruction manual ABTQ-206 shall be supplied with each terminal**.**

Schedule of limitations

The following conditions relate to safe installation and/or use of the equipment.

i. The terminal assembly shall be installed in a suitably approved enclosure with a minimum of IP54.

ii. When incorporated into equipment, the terminals shall be suitably installed so as to be protected from mechanical strain from the cables pulling.

iii. The service temperature range of the terminals is -40°C to +130°C

iv. No more than four (4) “single hole cable lug” and no more than two (2) “2 hole cable lugs” may be fitted per way

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