EU Type Examination Certificate CML 15ATEX3096U Issue 3

1 Components intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Component **MV and MVH Terminal**

3 Manufacturer **Abtech Limited**

4 Address **199 Newhall Road,**
Lower Don Valley, Sheffield,
S9 2QJ, UK

5 The component is specified in the description of this certificate and the documents to which it refers.

6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment 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 12.

7 The 'U' suffix after the certificate number indicates that the component is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.

8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-7:2015+A1:2018

10 The equipment shall be marked with the following:

II 2 G

Ex eb IIC Gb

Ts=-40°C to +130°C

11 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.

Variation 1

This variation introduces the following changes:

i. To update the certificate to refer to the 2014/34/EU Directive.
ii. To update EN 60079-7:2007 standard to the latest edition, EN 60079-7:2015
iii. To update the marking to reflect the latest edition of EN 60079-7:2015
iv. Standard reference in a Condition of manufacture updated to show EN 60079-7:2015

Variation 2

This variation introduces the following changes:

i. To transfer the CML UK ATEX Certificate to CML BV
ii. Correction of typographical errors.

Variation 3

This variation introduces the following changes:

i. 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.
ii. To update EN 60079-0:2012+A11:2013 standard to the latest edition EN IEC 60079-0:2018
iii. To update EN 60079-7:2015 standard to the latest edition EN 60079-7:2015+A1:2018
iv. To remove Dust atmosphere protection.
v. To clarify the description and add a schedule of limitation regarding the permitted number of lugs per terminal block way.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	27 Aug 2015	R568A/00	Issue of Prime Certificate
1	22 Aug 2016	R976B/00	Introduction of Variation 1
2	13 Sep 2019	R12424A/00	Introduction of Variation 2
3	17 Aug 2023	R16635A/00	Introduction of Variation 3

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

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 (1000 + 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 / EN 60079-7:2015+A1:2018.

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.

14 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.

Certificate Annex

Certificate Number	**CML 15ATEX3096U**
Equipment	**MV and MVH Terminal**
Manufacturer	**Abtech Limited**

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
ABT29441	1 of 1	A	27 Aug 2015	MV Terminal Assembly
ABT29448	1 of 1	A	27 Aug 2015	MV Terminal Stacked Lugs Voltage ratings
ABT29513	1 of 1	A	27 Aug 2015	MV Terminal Standard Voltage Ratings

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
ABT29441	1 of 1	B	19 Aug 2016	MV Terminal Assembly

Issue 2

None.

Issue 3

Drawing No	Sheets	Rev	Approved date	Title
ABT41420	1 of 1	A	17 Aug 2023	MVH Terminal - Certification detail 8kV version
ABT29441	1 of 1	C	17 Aug 2023	MV Terminal Assembly