EU Type Examination Certificate   CML 21ATEX1737X   Issue   0

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

2 Equipment   **Epic CR100 RFID Reader**

3 Manufacturer   **Abtech Limited**

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

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

6 CML B.V., Chamber of Commerce No 6738671, 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 equipment 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 If an 'X' suffix appears after the certificate number, it indicates that the equipment 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 60079-1:2014   EN IEC 60079-7:2015+A1:2018

EN 6007931:2014

10 The equipment shall be marked with the following:

⟨Ex⟩ II 2 G D

Ex db eb IIC T5 Gb

Ex tb IIIC T85 °C Db

Ta=-50°C to +60°C

L. A. Brisk
Certification Officer

11 Description

The EPIC CR100 Dual Head Reader is housed in an Abtech SXCS enclosure with minimum dimensions of 300 x 400 x 145mm and holding certification under CML 16ATEX3150X & IECEx CML 16.0067X, containing 2 x Abtech VisEx housings mounted into the front of the main enclosure and holding certification under CML 18ATEX1298X & IECEx CML 18.0152X. The VisEx housings contain toughened glass windows with an RFID reader with graphic display, a changeover relay and diode. Electrical connections to the VisEx housings are made through suitably certified line bushings. The SXCS enclosure contains 2 signal lamps and an audible sounder. Field terminations are made via suitably certified terminals mounted on a DIN rail inside the SXCS enclosure. All external fasteners are stainless steel grade A4, and all gaskets are silicone rubber.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	27 Apr 2022	R14333A/00	Issue of prime certificate

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.   For the SXCS control station the manufacturer shall carry out a dielectric strength test in accordance with clause 6.1, EN IEC / IEC 60079-7:2015 on all pre-wired junction boxes, taking into account the rated voltage of each unit. When the Control Stations are fitted with Phoenix Type SSK 0525 Ker-Ex Terminals, a dielectric strength test at 1836 V is to be applied between each adjacent terminal and between each terminal and earth in accordance with EN IEC / IEC 60079-7:2015, clause 7.1

ii.   The terminals used in the Control stations shall be suitably approved ATEX terminals. All terminals shall be installed in accordance with their certificate conditions and relevant codes of practice/wiring regulations, paying particular attention to the following:

- The maximum service temperature range.

- The minimum creepage distances shall be maintained.

- Terminals rated for voltages above 690 VAC shall not be used at voltages above 690 VAC within the Control Stations.

- The rated voltages and currents may vary if cross-connection facilities are used.

- The reduction in rating of adjacent terminals shall be observed, where applicable.

The limiting temperature of the terminal insulation shall be in accordance with the limiting temperatures defined in the product description on this certificate

iii. 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

iv.   When a breather drain is fitted to the SXCS enclosure it must be suitably certified and rated for use in the equipment.

v.   Ambient temperature may be adjusted within the range shown to allow terminals with lower limiting temperatures to be fitted or for functional reasons.

14 Specific Conditions of Use

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

i.   The equipment includes flameproof joints that have dimensions that differ from the requirements of EN 60079-1:2014 & IEC 60079-1:2014 Ed. 7 Table 2. As such, the flameproof joints are not intended to be repaired by anyone other than the manufacturer

ii.   The end user shall provide additional clamping of the cable to ensure that pulling and twisting is not transmitted to the terminations.

This certificate shall only be copied
in its entirety and without change
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Version: 2.0 Approval: Approved

Certificate Annex

Certificate Number   **CML 21UKEX1737X**

Equipment   **Epic CR100 RFID Reader**

Manufacturer   **Abtech Limited**

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

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
ABT39011	1 of 1	A	27 Apr 2022	EPIC CR100 Enclosure
ABT39067	1 of 1	A	27 Apr 2022	EPIC Dual Head RFID Reader Certification Label
ABT39063	1 of 1	A	27 Apr 2022	Reader Housing Cover (EPIC)
ABT39064	1 of 1	A	27 Apr 2022	Reader Housing Base

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