



# 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](http://www.iecex.com)

Certificate No.: **IECEX CML 21.0087X** Page 1 of 3 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2022-04-27  
Applicant: **ABTECH Limited**  
199 Newhall Road  
Sheffield  
S9 2QJ  
United Kingdom  
Equipment: **Epic CR100 RFID Reader**  
Optional accessory:  
Type of Protection: **Flameproof "d" Increased Safety "e" Dust "tb"**  
Marking: Ex db eb IIC T5 Gb  
Ex tb IIIC T85°C Db  
-50°C to +60°C

Approved for issue on behalf of the IECEx  
Certification Body:

**L A Brisk**

Position:

**Certification Officer**

Signature:  
(for printed version)

Date:  
(for printed version)

2022-04-27

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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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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 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

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

Test Report:

[GB/CML/ExTR21.0131/00](#)

Quality Assessment Report:

[GB/CML/QAR16.0021/07](#)



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**EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

Epic CR100 RFID Reader

Refer to Certificate Annex for full description.

**SPECIFIC CONDITIONS OF USE: YES as shown below:**

Refer to certificate Annex

**Annex:**

[Certificate Annex IECEx CML 21.0087X\\_1.pdf](#)

**Annexe to:** IECEx CML 21.0087X Issue 0  
**Applicant:** Abtech Limited  
**Apparatus:** Epic CR100 RFID Reader

## 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.

## Conditions of Manufacture

- 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

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- 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

### **Specific Conditions of Use**

- 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.