



## EU Type Examination Certificate CML 18ATEX1298X Issue 0

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

2 Equipment VisEx Series Camera Housing

3 Manufacturer Abtech Ltd.

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, Hoogoorddreef 15, Amsterdam, 1101 BA, 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.

- 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.
- 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 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014

10 The equipment shall be marked with the following:

€x⟩<sub>II 2 G D</sub>

 $\langle \mathcal{E}_{x} \rangle_{\text{II 2 G D}}$ 

Ex db IIC T\* Gb

Ex tb IIIC T\*\*°C Db

\*Refer to description

Ta= -60°C≤Ta≤+65°C

Mac

R C Marshall Certification Officer





## 11 Description

The VisEx Camera Housings is a range of flameproof and dust protected enclosures which consist of a housing that accommodates a camera or readers together with associated equipment rated up to 60 V DC or 230 V AC.

The VisEx camera housing comprises a cylindrical threaded main body and a cylindrical threaded front body forming an M110 x 1.5 threaded joint, both manufactured from stainless steel. The front body is fitted with a glass window which is secured by a threaded, M110 x 1.5, stainless steel retaining ring. The base of the main body is provided with two, metric threaded, cable entries each for the accommodation of a suitably certified cable entry device. The overall dimensions of the Camera Housing are 260 mm long with a diameter of 135 mm.

A mounting bracket is fitted internally to accommodate the camera and its associated equipment, threaded external holes are provided for the fitting of mounting brackets. The main body and front body are screwed together and secured with a locking arrangement incorporating a stainless steel M3 grub screw provided on the periphery of the front body to prevent unauthorised removal. An O-ring is provided between the main and front body and in the window arrangement to provide degree of ingress protection IP6X.

The VisEX POB Reader enclosure is of identical construction to the VisEx Camera Housing except it has three M20 x 1.5 threaded entries. The overall dimensions are 235 mm long with a diameter of 135 mm.

The VisEx Mini Reader enclosure is of identical construction to the VisEx camera housing except it has two M20 x 1.5 cable entries. The overall dimensions are 153 mm long, maximum outer diameter of 135 mm and internal diameter of 70 mm.

The following table details the power ratings of the equipment together with the essential temperature limitations that apply to these ratings:

Max. ambient temperature	Max. power rating	Temperature classification	Max. external surface temperature for dust	Cable entry temperature warning applied to label
VisEx Camera	Housing			
40°C	8 W	T6	T55°C	Not required
55°C	8 W	T6	T70°C	Not required
65°C	8 W	T6	T80°C	Cable entry temperature may reach 80°C, cabling to be suitable
40°C	47 W	T4	T105°C	Cable entry temperature may reach 105°C, cabling to be suitable
55°C	47 W	T4	T120°C	Cable entry temperature may reach 120°C, cabling to be suitable
65°C	47 W	T4	T130°C	Cable entry temperature may reach 130°C, cabling to be suitable





VisEx POB Reader				
65°C	0.77 W	T6	T80°C	Not required
VisEx Mini Reader				
65°C	0.36 W	T6	T80°C	Not required

### Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	22 Nov 2018	R11991A/00	Issue of Prime Certificate

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

#### **Conditions of Manufacture** 12

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

- The equipment is not provided with an internal earth facility and therefore shall only be fitted with internal components which do not require to be connected to an earth facility.
- ii. The manufacturer shall only install internal components that do not exceed the maximum power ratings listed in the description.

#### 13 **Specific Conditions of Use (Special Conditions)**

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

- The equipment shall be installed such that is protected from high risk of mechanical danger.
- ii. The equipment incorporates a flameproof spigot joint formed between the glass window and the front body which has dimensions which are other than the relevant maximum or minimum in Table 2 in IEC 60079-1 as shown below:

Part of spigot joint	Minimum width (mm)	Maximum gap (mm)
Plain part	7.325	0.1
Cylindrical part	8.9	0.15

The user shall take these dimensions into account where necessary during maintenance of the equipment.

- When the equipment is not provided with an external earth facility it shall only be connected to iii. wiring systems that do not require an external earth connection.
- Only the connection facilities provided with the internal components shall be used for the İ٧. connection of the equipment.



# **Certificate Annex**

Certificate Number CML 18ATEX1298X
Equipment VisEx Camera Housing

Manufacturer Abtech Ltd.

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

## Issue 0

Drawing No	Sheets	Rev	Approved date	Title
ABT22400	1 of 1	Α	22 Nov 2018	VisEx Camera Glass
ABT22401	1 of 1	Α	22 Nov 2018	VisEx Camera Retaining Ring
ABT22402	1 of 1	D	22 Nov 2018	VisEx Main Body Housing
ABT22404	1 of 1	Α	22 Nov 2018	O-ring
ABT22895	1 of 1	В	22 Nov 2018	VisEx Front Body Housing
ABT22896	1 of 1	Α	22 Nov 2018	VisEx Camera Housing GA
ABT23915	1 of 1	В	22 Nov 2018	VisEx Camera Body Housing
ABT34297	1 of 1	Α	22 Nov 2018	S3 VisEx Camera Cover
ABT34303	1 of 1	Α	22 Nov 2018	POB CARD READER COVER
ABT34612	1 of 1	Α	22 Nov 2018	MINI READER GA DRAWING
ABT34613	1 of 1	Α	22 Nov 2018	MINI READER BODY GA
ABT34614	1 of 1	Α	22 Nov 2018	GENERAL ASSEMBLY POB READER
ABT34615	1 of 1	Α	22 Nov 2018	MINI READER BODY GA
ABT34679	1 of 1	Α	22 Nov 2018	VisEx Camera Housing Certification Label