UK Type Examination Certificate CML23UKEX1132X Issue 0

United Kingdom Conformity Assessment

1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

2 Equipment **XLFE-MIB, XLFE-MIA, XLFE-LIB & XLFE-MIC Signalling Luminaires**

3 Manufacturer **Cortem Group**

4 Address **Via Aquileia 10,**
34070 Villesse,
Gorizia,
Italy

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

6 Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

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 specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.

8 This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.

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 60079-7:2015

EN 60079-31:2014

10 The equipment shall be marked with the following:

Ex II 2 G D

Ex db IIC T4 Gb

Ex tb IIIC T110°C Db

Ta=-40°C to +40°C or +60°C

See description for specific T-Class and temeperature range

Ex II 2 G D

Ex db eb IIC T4 Gb

11 Description

The XLFE-MIB, XLFE-MIA XLFE-LIB & XLFE-MIC Signalling Luminaires are designed for signalling of obstacles in high-risk areas for the presence of highly corrosive elements, combustible powders, flammable vapours and flammable gasses.

The equipment is cylindrical, with the body constructed from aluminium alloy and a cylindrical glass, sealed with resin. All models are composed from two parts: a terminal enclosure with types of protection increased safety (Ex e) and dust protection by enclosure (Ex t) and; light engine enclosure with types of protection flameproof ("Ex d) and dust protection by enclosure (Ex t). The separate enclosures are assembled with screws and the electrical connections between the two compartments are made through a certified bushing.

Ratings

The equipment has the following ratings:

Model	Power	Voltage	Frequency	N LED
XLFE-LIB	6W	100~240VAC 9~32VDC	50/60 Hz	4
XLFE-MIA	60W	279.4~294.7 VDC	20 or 40 fpm	96
XLFE-MIB	30W	110~121.5 VDC	20 or 40 fpm	48
XLFE-MIC	72W	179..197.4 VDC	STEADY	84

Temperature Class (EPL Gb) and Maximum Surface Temperature (EPL Db)

The equipment models have the following temperature class:

	Tamb			
	40°C	60°C	40°C	60°C
	T class	T class	Max Tsurface	Max Tsurface
XLFE-LIB	T6	T6	55°C	75°C
XLFE-MIB	T4	N/A	110°C	N/A
XLFE-MIB/1	T4	T4	110°C	130°C
XLFE-MIA	T6	T5	70°C	90°C
XLFE-MIC	T6	T5	61°C	81°C

Ex Components

The equipment is fitted with the following Ex Components

Component	Manufacturer	Certificate (ATEX)	Certificate (IECEx)
Bushing	ELFIT	CESI 01ATEX080U	N/A, where IECEx is needed, the Cortem brand is used.
Bushing	Cortem	N/A, where ATEX is needed, the ELFIT brand is used.	IECEx CES 10.0003U
Bushing	Bartec	EPS 13ATEX1619U	IECEx EPS 13.0045U
Terminal	Cabur (TPL4)	CESI 03ATEX164U	IECEx CES 11.0008U
		This terminal shall not be used with the XLFE-MIA Luminaire.	
Terminal	Weidmuller (BK3)	TUV18ATEX8209U	IECEx TUR18.0019U
Terminal	Weidmuller (WDU 2.5)	DEMKO14ATEX1338U	IECEx ULD14.0005U

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	31 Mar 2023	R16261A/00	Issue of the prime certificate.

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

13 Conditions of Manufacture

i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

ii. Each luminaire shall be subjected to the following routine overpressure test for at least 10 seconds, as required by EN 60079-1:2014 / IEC 60079-1:2014 Clause 16.1, at the following pressures:

i. XLFE-MIB – 14.4 Bar
ii. XLFE-MIA – 16.3 Bar
iii. XLFE-LIB – 14.7 Bar
iv. XLFE-MIC – 16.3 Bar

iii. An electric strength test shall be carried out on each luminaire. The test shall be carried out at a value as indicated below and applied between the supply conductors and the metal body of the luminaire in accordance with EN 60079-7:2015 / IEC 60079-7:2015 Ed 5.0 clause 7.1.

i. XLFE-MIB – 1,500 V
ii. XLFE-MIA – 1,590 V
iii. XLFE-LIB – 1,500 V
iv. XLFE-MIC – 1500 V

iv. The Cabur TPL4 terminals shall not be used with the XLFE-MIA model luminaire.

Any routine tests/verifications required by the ATEX certification shall be conducted.

14 Specific Conditions of Use

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

i. Flameproof joints must not be repaired
ii. Use screws with property class ≥A2-70
iii. The device must be installed in order to avoid high mechanical risk of impact.

Certificate Annex

Certificate Number	**CML 23UKEX1132X**
Equipment	**XLFE-MIB, XLFE-MIA, XLFE-LIB & XLFE-MIC Signalling Luminaires**
Manufacturer	**Cortem Group**

The following documents describe the equipment defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
A4-8226	1 to 3	0	31 Mar 2023	Technical Note
A3-8225	1 of 1	0	31 Mar 2023	Obstruction Light Fixtures XLFE-MIC Differences in respect to XLFE-MIA