EU Type Examination Certificate CML 19ATEX1333X Issue 1

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

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

3 Manufacturer **Cortem S.p.A.**

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 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 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 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	62°C	82°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

This variation introduces the following changes:

i. Introduction of XLFE-MIC Signalling Luminaires
ii. The removal of "op is" from the coding and removal of EN 60079-28 from the certificate, as the equipment no longer falls within its scope.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	22 Jan 2020	R12582A/00	Prime Issue
1	31 Mar 2023	R16261A/00	Issue of variation 1

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 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.

14 Specific Conditions of Use (Special Conditions)

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 19ATEX1333X**
Equipment	**XLFE-MIB, XLFE-MIA, XLFE-LIB & XLFE-MIC Signalling Luminaires**
Manufacturer	**Cortem S.p.A.**

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

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
A3-6716	1 of 4	0	22/01/2020	Obstruction Light Fixtures XLFE-MIB Assembly and External Dimensions
A3-6716	2 of 4	0	22/01/2020	Obstruction Light Fixtures XLFE-MI.. Flameproof features and Gasket Details
A3-6716	3 of 4	0	22/01/2020	Obstruction Light Fixtures XLFE-MIB Ex-op is / Ex-eb details
A3-6716	4 of 4	0	22/01/2020	Obstruction Light Fixtures XLFE-MIB Earth Connection / Circuit Diagrams
A3-7290	1 of 2	0	22/01/2020	Obstruction Light Fixtures XLFE-LIB Assembly and External Dimensions
A3-7290	2 of 2	0	22/01/2020	Obstruction Light Fixtures XLFE-LI.. Flameproof features and Gasket Details
A3-7291	1 of 4	0	22/01/2020	Obstruction Light Fixtures XLFE-MIA Flameproof features and Gasket Details
A3-7291	2 of 4	0	22/01/2020	Obstruction Light Fixtures XLFE-MIA Flameproof features and Gasket Details
A3-7291	3 of 4	0	22/01/2020	Obstruction Light Fixtures XLFE-MIA Ex-eb Details
A3-7291	4 of 4	0	22/01/2020	Obstruction Light Fixtures XLFE-MIA Op is details / Electrical details
A4-7456	1 to 7	0	22/01/2020	Technical Note

Issue 1

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