



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

Certificate No.: **IECEx CML 19.0102X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2020-01-22

Applicant: **Cortem S.p.A**
Via Aquileia 10
34070 Villesse
Gorizia
Italy

Equipment: **XLFE-MIB, XLFE-MIA & XLFE-LIB Signalling Luminaires**

Optional accessory:

Type of Protection: **Flameproof, Increased Safety, optical intrinsic safety, dustproof**

Marking: Ex db eb op is IIC T4 Gb
Ex tb op is IIIC T110°C Db
-40°C to +40°C
or
Ex db eb op is IIC T4 Gb
Ex tb op is IIIC T130°C Db
-40°C to +60°C

Approved for issue on behalf of the IECEx
Certification Body:

A C Smith

Position:

Technical Operations Director

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



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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Manufacturer: **Cortem S.p.A.**
Via Aquileia 10
34070 Villesse
Gorizia
Italy

Additional
manufacturing
locations:

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 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

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/ExTR19.0129/00](#)

Quality Assessment Report:

[IT/CES/QAR06.0002/13](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The XLFE-MIB, XLFE-MIA & XLFE-LIB 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.

(see certificate Annex for detailed description)

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Flameproof joints must not be repaired.
2. Use screws with property class \geq A2-70.
3. The device must be installed in order to avoid high mechanical risk of impact.

Annex:

[IECEx CML 19.0102X Annex_1.pdf](#)

Annexe to: IECEx CML 19.0102x Issue 0
Applicant: Cortem S.p.A.
Apparatus: XLFE-MIB, XLFE-MIA & XLFE-LIB
 Signalling Luminaires



Description

The XLFE-MIB, XLFE-MIA & XLFE-LIB 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
XLFE-LIB	6W	100~240VAC 9~32VDC	50/60 Hz
XLFE-MIA	60W	279.4~294.7 VDC	20 or 40 fpm
XLFE-MIB	30W	110~121.5 VDC	20 or 40 fpm

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

Ex Components

The equipment is fitted with the following Ex Components

Unit 1, Newport Business Park
 New Port Road
 Ellesmere Port
 CH65 4LZ

T +44 (0) 151 559 1160
 E info@cmllex.com

www.cmllex.com

Company Reg No. 8554022 VAT No. GB163023642



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

The equipment has been assessed against the requirements of IEC 60079-28:2015 and following the publication of IEC 60079-28:2015/ISH1:2019 it was determined that the light output to be convergent, so therefore falls within the scope of this standard. IEC 60079-28 is therefore listed in the assessment standards and the product is marked with related Ex markings (op is).

Conditions of Manufacture

- i. 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.
- 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:
 -) XLFE-MIB – 14.4 Bar
 -) XLFE-MIA – 16.3 Bar
 -) XLFE-LIB – 14.7 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. The Cabur TPL4 terminals shall not be used with the XLFE-MIA model luminaire.

Components covered by Ex Certificates issued to older editions of Standards

Certificate number	Standards (incl Ed)	Assessment result
IECEX CES 10.0003U	IEC 60079-0:2011 Ed 6	Technical differences evaluated and found satisfactory. For detail see ExTR
	IEC 60079-1:2014 Ed 7	Current standard
	IEC 60079-31:2013 Ed 2	Current standard
IECEX EPS 13.0045U	IEC 60079-0:2017 Ed 7	Current standard
	IEC 60079-1:2014 Ed 7	Current standard
IECEX CES 11.0008U	IEC 60079-0:2011 Ed 6	No applicable technical differences
	IEC 60079-7:2015 Ed	No applicable technical differences
IECEX TUR18.0019U	IEC 60079-0:2017 Ed 7	Current standard
	IEC 60079-7:2017 Ed 5.1	Current standard
IECEX ULD14.0005U	IEC 60079-0:2017 Ed 7	Current standard
	IEC 60079-7:2017 Ed 5.1	Current standard