



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

|  |   |             |   |
|--|---|-------------|---|
| Certificate No.:                         | IECEX CES 12.0020   | Issue No: 0 | <u>Certificate history:</u><br>Issue No. 0 (2012-12-10) |
| Status:                                  | Current   | Page 1 of 4 |   |
| Date of Issue:                           | 2012-12-10  |             |   |
| Applicant:                               | <b>CORTEM S.p.A.</b><br>Via Aquileia 10<br>I - 34070 Villesse (GO)<br>Italy   |             |   |
| Equipment:<br><i>Optional accessory:</i> | <b>Obstruction signalling lights series XLF.. and XLFE..</b>  |             |   |
| Type of Protection:                      | <b>Flameproof enclosures 'd'; increased safety 'e'; Dust ignition protection 't'</b>  |             |   |
| Marking:                                 | <b>XLF...</b><br><br><b>Ex d IIC T6 or T5 Gb</b><br><br><b>Ex tb IIIC T52°C or T87°C Db</b><br><br><b>IP66</b><br><br><b>XLFE...</b><br><br><b>Ex de IIC T6 or T5 Gb</b><br><br><b>Ex tb IIIC T52°C+T87°C Db</b><br><br><b>IP66</b> |             |   |

Approved for issue on behalf of the IECEx  
Certification Body:

Mirko Balaz

Position:

Head of IECEx CB

Signature:  
(for printed version)

Date:

\_\_\_\_\_  
\_\_\_\_\_

1. This certificate and schedule may only be reproduced in full.



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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 the [Official IECEx Website](#).

Certificate issued by:

**CESI**  
Centro Elettrotecnico  
Sperimentale Italiano S.p.A.  
Via Rubattino 54  
20134 Milano  
Italy

The logo for CESI, consisting of the letters 'CESI' in a bold, blue, sans-serif font.



# IECEX Certificate of Conformity

Certificate No: IECEx CES 12.0020 Issue No: 0  
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Manufacturer: **CORTEM S.p.A.**  
Via Aquileia 10  
I - 34070 Villesse (GO)  
**Italy**

Additional Manufacturing  
location(s):

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 electrical apparatus 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:

|   |  |
|---|--|
| <b>IEC 60079-0 : 2011</b><br>Edition:6.0  | Explosive atmospheres - Part 0: General requirements                                 |
| <b>IEC 60079-1 : 2007-04</b><br>Edition:6 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"    |
| <b>IEC 60079-31 : 2008</b><br>Edition:1   | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t" |
| <b>IEC 60079-7 : 2006-07</b><br>Edition:4 | Explosive atmospheres - Part 7: Equipment protection by increased safety "e"         |

*This Certificate **does not** indicate compliance with electrical 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:

[IT/CES/ExTR12.0023/00](#)

#### Quality Assessment Report:

[IT/CES/QAR06.0002/06](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The obstruction signalling lights series XLF..., XLFE...are designed for use in hazardous locations, with presence of gases or inflammable vapours belonging to group IIC and/or with presence of combustible conductive dust group IIIC.

The obstruction signalling lights are assembled in flameproof housing containing the Xenon lamp or the led lamp, complete with power supply equipment. The glass globe surrounding and protecting the lamp is mounted in an appropriate aluminium threaded ring, sealed by silicon resin and blocked by a threaded locking ring. The assembly globe-ring is screwed to the body.

The luminaries are assembled in two main executions:

#### - XLF...,

with "Ex d" protection mode, made by one single flameproof housing that contains the lamp holder with lamp and the electrical supply apparatus. XLF..., equipment can be supplied for ceiling mounting with four threaded hubs ¼ NPT or for suspended mounting with a constructive variant of cable inlet compartment having one threaded hub ¼ NPT on the bottom. In this last configuration (suspended mounting) the luminaries are marked **XLFS..**

#### - XLFE..,

with "Ex de" protection mode, made by two separate housings: one "Ex d" containing the lamp with supply equipment and the other "Ex e" housing contains terminal block. In this case the external connections are made via terminals located in the increased safety terminal enclosure. XLFE... equipment is supplied for ceiling mounting with two threaded hubs M25x1.5.

The cable bushing between the two housings is sealed by means of two component resin.

See annex for further description.

**CONDITIONS OF CERTIFICATION: NO**

### Annex:

Cortem IECEx CES 12\_0020 ANNEX\_XLF-XLFE.pdf



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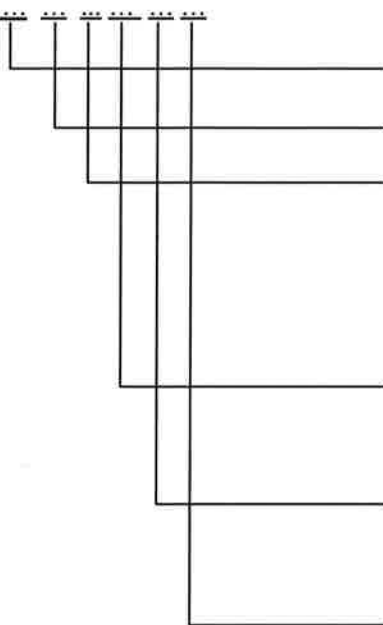


Prot: B2040019

**Annex to certificate:** IECEx CES 12.0020 Issue No.:0 of 2012-12-10  
**Applicant:** CORTEM S.p.A., Via Aquileia 10,  
 I - 34070 Villesse (GO), Italy  
**Electrical Apparatus:** Obstruction signalling lights series XLF.. and XLFE..

## Model Identification:

XLF (XLFS)  
 XLFE



### Code of series

**Model:** 1, 2, 3, 4

### Color of light (or color of Fresnel for XLF-1 and XLF-2)

**B** – blue

**G** – yellow

**R** – red

**V** – green

**Blank** w/o fresnel (XLF-1, XLF-2 only)

**Voltage :** 012 = 12 V

277 = 277 V.

### Operation (XLF-3, XLF-4 only)

**F** continuous light

**L** flashing light

### Single or double lamp

(for XLF-4 single or double circuit)

1 or 2

## Electrical characteristics

### Rating for different types of Obstruction signalling lights

| Equipment            | With Xenon lamp  |              | With LED          |                         |
|----------------------|--|--------------|-------------------|-------------------------|
|                      | XLF/XLFE - 1   | XLF/XLFE - 2 | XLF/XLFE - 3      | XLF/XLFE - 4            |
| Rated Voltage        | 230 Vac  |              | 260 Vac<br>12 Vdc | 120 - 277 Vac<br>24 Vdc |
| Rated Power          | 25 W   |              | 20 W              | 10 W                    |
| Rated frequency      | 50-60 Hz   |              |                   |                         |
| Flash energy         | 5 – 6 J  | 10 - 16 J    |                   |                         |
| Ambient Temperature  | - 20 ÷ +40 °C; - 20 ÷ +55 °C; - 50 ÷ +40 °C; - 5 0 ÷ +55 °C; |              |                   |                         |
| Degree of protection | IP 66  |              |                   |                         |



## IECEx Certificate of Conformity

# CESI

Prot: B2040019

**Annex to certificate:** IECEx CES 12.0020 Issue No.:0 of 2012-12-10  
**Applicant:** CORTEM S.p.A., Via Aquileia 10,  
I - 34070 Villesse (GO), Italy  
**Electrical Apparatus:** Obstruction signalling lights series XLF.. and XLFE..

Temperature class and maximum surface temperatures in function of the ambient temperature.

| Equipment  | Temperature class                 |                                   | Max. Surface Temperature.         |                                   |
|------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|            | Ta -20 ÷ + 40 C<br>(-50 ÷ + 40 C) | Ta -20 ÷ + 55 C<br>(-50 ÷ + 55 C) | Ta -20 ÷ + 40 C<br>(-50 ÷ + 40 C) | Ta -20 ÷ + 55 C<br>(-50 ÷ + 55 C) |
| XLF/XLFE-1 | T6                                | T5                                | 72                                | 87                                |
| XLF/XLFE-2 | T6                                | T5                                | 72                                | 87                                |
| XLF/XLFE-3 | T6                                | T6                                | 63                                | 78                                |
| XLF/XLFE-4 | T6                                | T6                                | 52                                | 67                                |

### Condition of installation

The conditions of the installation of the lighting fixtures are included within the safety instructions. In any case, the accessories used for cable entries into enclosures shall be subject of separate certification, suitable for type of protection Ex-d or Ex-e and Ex-tb and guarantee a minimum degree of protection IP 66 in compliance with the IEC 60529 Standard.

### Warning label

"Use cable suitable for Tc 100C"

"Do not open when energized. After de-energized delay 20 minutes before opening"