



# 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 CML 15.0044	Issue No: 0	Certificate history: Issue No. 0 (2016-06-13)
Status:	Current	Page 1 of 4	
Date of Issue:	2016-06-13		
Applicant:	<b>CORTEM S.p.A.</b> Via Aquileia 10, 34070 Villesse, Gorizia, Italy		
Equipment:	<b>Exel Luminaire</b> <i>Optional accessory:</i>		
Type of Protection:	<b>Ex d, e, m, op</b>		
Marking:	Ex d e mb op is IIC T5 Gb Ex tb IIIC T64°C Db Ta=-40C to +55°C  Ex d e mb op is IIC T6 Gb Ex tb IIIC T49°C Db Ta=-40°C to +40°C  Ex d e mb op is IIC T5 Gb Ex tb IIIC T61°C Db -20°C to +50°C  Ex d e mb op is IIC T6 Gb Ex tb IIIC T55°C Db -20°C to +40°C		

Approved for issue on behalf of the IECEX  
Certification Body:

D R Stubbings MIET

Position:

Technical Director

Signature:  
(for printed version)

Date:

2016-06-13

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 the Official IECEX Website.

Certificate issued by:



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Certification Management 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  
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> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-18 : 2014</b> Edition:4.0	Explosive atmospheres - Part 18: Equipment protection by encapsulation "m"
<b>IEC 60079-28 : 2015</b> Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
<b>IEC 60079-7 : 2006-07</b> 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:

GB/CML/ExTR15.0048/00      GB/CML/ExTR16.0035/00

#### Quality Assessment Report:

GB/CML/QAR16.0013/00      IT/CES/QAR06.0002/09



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## Schedule

### EQUIPMENT:

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

Exel Luminaire

Refer to Annex for complete list

**CONDITIONS OF CERTIFICATION: NO**

### Annex:

Annex IECEX CML 15\_0044 issue 1.pdf

**Annexe to:** IECEx CML 15.0044 Issue 1  
**Applicant:** CORTEM S.p.A.  
**Apparatus:** Exel Luminaire



### Description

The Exel is a luminaire that is comprised of an increased safety enclosure, encapsulated LEDs and a flameproof driver assembly. The increased safety enclosure is comprised of two parts, a GRP base and transparent polycarbonate lid joined by a silicon gasket which provides an IP66 seal.

There are 4 models in the range:

Exel 215L  
Exel 215L/1  
Exel 230L  
Exel 230L/1

### Issue 1

An emergency version of the luminaire has been added to the range using the existing enclosure, LEDs and driver. The model numbers are as follows:

Exel-215LE..  
Exel-230LE..

Where .. refers to options regarding the battery capacity.

### Conditions of Manufacturer

The following are conditions of manufacture:

1. 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.
2. Each luminaire shall be subjected to a routine dielectric strength test of  $2 X U + 1000V$  rms and a minimum of 1500V for 60 seconds as per IEC 60079-7 clause 7.1. Alternatively the test may be carried out at 1.2 times the test voltage, but maintained for 100ms.  
A DC test voltage may be used but shall be 1.4 X the specified AC rms test voltage.  
The LED modules and driver may be disconnected for this test.
3. Each encapsulated LED assembly shall be subjected to a routine dielectric strength test of 500V for 1 second, as per IEC 60079-18 clause 9.2. Alternatively the test may be carried out at 1.2 times the test voltage, but maintained for 100ms.
4. The LED modules of each piece of "m" equipment shall be subjected to a visual inspection. No damage shall be evident, such as cracks in the compound, exposure of the parts, flaking, inadmissible shrinkage, swelling, decomposition, failure of adhesion, or softening.
5. The luminaires shall be marked according to document A4-6526 Revision 0

### Conditions of Certification

None

