



# 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 ITS 14.0061** Issue No: **1** Certificate history:  
Status: **Current** Page 1 of 4 Issue No. 1 (2015-11-30)  
Date of Issue: **2015-11-30** Issue No. 0 (2015-02-10)

Applicant: **Cortem S.p.A.**  
**Via Aquileia, 10**  
**34070 Villesse (Go)**  
**Italy**

Electrical Apparatus: **Explosion proof lighting fixtures EVL... series**  
Optional accessory:

Type of Protection: **Ex e, Ex d, Ex tb**

Marking: **Ex de IIC Tx Gb tamb -20°C to +60°C, or +40°C (model EVL-100 max tamb +55°C)**  
**Ex tb IIIC Tx Db IP66 tamb -20°C to +60°C, or +40°C (model EVL-100 max tamb +55°C)**

Approved for issue on behalf of the IECEX  
Certification Body:

V K Varma

Position:

Certification Officer

Signature:  
(for printed version)

*Vijay K. Varma*

Date:

*2015-11-30*

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](http://www.iecex.com).

Certificate issued by:

**Intertek Testing & Certification Limited**  
**ITS House, Cleeve Road,**  
**Leatherhead,**  
**Surrey, KT22 7SB**  
**United Kingdom**





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Manufacturer: Cortem S.p.A.  
Via Aquileia, 10  
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:

IEC 60079-0 : 2011 Edition 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2008-07 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/ITS/ExTR14.0060/00      GB/ITS/ExTR14.0060/01

#### Quality Assessment Report:

IT/CES/QAR06.0002/09



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## Schedule

### EQUIPMENT:

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

Lighting fixtures series EVL... are available in three sizes:

The luminaries each consist of a flameproof enclosure and an integrated increased safety terminal enclosure. The flame proof enclosure contains the LED board or a LED array and the power supply. The enclosure has a glass window and it is made from tempered glass which is sealed in place by means of silicone compound. The Ex-d enclosure and the terminal box are connected by a sealed bushing. The sealed bushing is already certified. (CESI 01 ATEX 080 U; IECEX CES 10.0003 U) type TP16..1.5B. In the Ex-e terminal box are the pre certified Ex-e terminals, models: BPL 4 TPL 4 (CABUR) voltage 320V (IECEX CES 11.0008U)

	EVL-60		EVL-70		EVL-80		EVL-100	
Model								
Amb. Temp	+40°C	+60°C	+40°C	+60°C	+40°C	+60°C	+40°C	+55°C
Temp. Class	T8	T5	T4	T4	T4	T4	T4	T4
Max surface temp for dusts	85°C	100°C	135°C	135°C	135°C	135°C	135°C	135°C

### Routine Tests:

1. Routine overpressure test of the Ex d enclosure at 12.42bar for a period of 10s minimum
2. The Routine dielectric test of the Ex de luminaires with applied voltage shall be performed at  $2U + 1000V$  a.c with a minimum value of 1500V a.c (where U-rated voltage of the lamp)

CONDITIONS OF CERTIFICATION: NO



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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

### Issue 1

A new model is added, the EVL-100.

Flame proof joints and gaps are the same of the EVL-80 model, there is only a change on the free volume but the difference between the EVL-100 and EVL-80 does not affect the previous test results.

Temperature tests and overpressure test confirmed that the tests made in the first certification for the EVL-80 are suitable for the EVL-100 too.

The EVL-100 has an ambient temperature of -20°C up to +40°C or +55°C depending on application, a T4 temperature class and a maximum surface temp for combustible dust of +135°C.

See details in the annex.

### Annex:

[Annex to CoC\\_Addendum 1.pdf](#)



**ANNEX TO IECEX CERTIFICATE OF CONFORMITY  
IECEX ITS 14.0061 issue No.:1**

1. Description of the equipment

Lighting fixtures series EVL... are suitable in three sizes:

EVL-60

EVL-70

EVL-80

EVL-100

The luminaries each consist of a flame enclosure and an integrated increase safety terminal box.

The flame proof enclosure contains the LED board or a LED array and the power supply.

The enclosure glass is made from tempered glass, it is sealed by means of silicone compound.

The Ex-d enclosure and the terminal box are connected by means of a sealed bushing.

The sealed bushing is already certified. (CESI 01 ATEX 080 U; IECEX CES 10.0003 U), the model is TP16..1.5B. In the Ex-e terminal box are inserted the Ex-e terminals. The models and the certificates are: BPL.4 TPL.4 (CABUR) voltage 320V (plastic screws shall be used for fixing) IECEX CES 11.0008U

	EVL-60		EVL-70		EVL-80		EVL-100	
<b>Ambient temp</b>	+40°C	+60°C	+40°C	+40°C	+40°C	+60°C	+40°C	+55°C
<b>Temperature class</b>	T6	T5	T4	T4	T4	T4	T4	T4
<b>Max surface temp for dusts</b>	85°C	100°C	135°C	135°C	135°C	135°C	135°C	135°C

Type and electrical feeder that is possible to use:

MODEL	Power supply	Frequency range	WT <sub>min</sub>
EVL-60	120/240/277 Vac	47-63 Hz	-30°C
EVL-60-1	90-277 Vac	47-63 Hz	-40°C
EVL-60B /10/10/40/60/80	120/240/277 Vac	47-63 Hz	-30°C
EVL-70	120/240/277 Vac	47-63 Hz	-30°C
EVL-70B /10/20/40	120/240/277 Vac	47-63 Hz	-30°C
EVL-80	220-240 Vac	50-60 Hz	-40°C
EVL-80-1	90-277 Vac	47-63 Hz	-40°C
EVL-100	100-240, 277 Vac	50-60 Hz	-40°C