



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

Certificate No.: IECEx ITS 12.0048X

Issue No: 0

Certificate history:

Issue No. 0 (2013-09-11)

Status: **Current**

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Date of Issue: **2013-09-11**

Applicant: **Cortem SpA**
Via Aquileia 10,
34070 Villesse.
Italy

Equipment: **Lighting fixtures series RLFE**

Optional accessory:

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

Marking:

Ex d e IIC T#

Ex tb III C T##°C

and ##, see table in equipment description for temperature classification (Gas and Dust) in relation to ambient temperature range.

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*Approved for issue on behalf of the IECEx
Certification Body:*

K R Spence

Position:

Certification Officer

*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 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 SpA**
Via Aquileia 10,
34070 Villesse.
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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 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 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 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/ExTR12.0064/00](#)

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 series RLFE lighting fixtures are aluminium explosion proof housings that contain a single lamp holder with lamp and associated electrical parts. External connections for the lighting fixtures are made via a single increased safety terminal block that is mounted within the increased safety housing on the side of the main flameproof enclosure. Wiring (1.5mm² or 2.5mm²) between the main flameproof enclosure and the increased safety enclosure is protected by a threaded M16 x 1.5 certified sealed bushing.

The series RLFE lighting fixtures maybe fitted with vapours lamps (Hg, Na, Ha etc. as indicated on drawing A1-5573). The heat resistant borosilicate glass globe is mounted to the main body of the flameproof housing via an aluminium threaded ring that is sealed with a single silicon gasket and silicon resin.

An optional steel guard can be installed for further protection of the glass globe.

The following table indicates Temperature Classification in relation to ambient temperature:

MOD	Lamp	Tamb: -20°C to +40° C	Tamb: -20°C to +60° C
		T CLASS / MAX SURFACE TEMP	T CLASS / MAX SURFACE TEMP
RLFE-80	50/70W	T5 / T93°C	T4 / T113°C
	70W HA	T5 / T93°C	T4 / T113°C
	50/80W HG	T5 / T93°C	T4 / T113°C
	100W NA	T4 / T105°C	T4 / T125°C
	100W HA	T4 / T105°C	T4 / T125°C
	125W HG	T4 / T113°C	T3 / T133°C
	150W NA	T4 / T105°C	T4 / T125°C
	150W HA	T4 / T105°C	T4 / T125°C
RLFE-100	100W NA	T5 / T94°C	T4 / T114°C
	100W HA	T5 / T94°C	T4 / T114°C
	125W HG	T5 / T94°C	T4 / T114°C
	150W NA	T5 / T94°C	T4 / T114°C
	150W HA	T5 / T94°C	T4 / T114°C
	250W HG	T3 / T155°C	T3 / T175°C
	250W NA	T4 / T112°C	T3 / T132°C
	250W HA	T4 / T112°C	T3 / T132°C
RLFE-110	250W HG	T4 / T125°C	T3 / T145°C
	250W NA	T4 / T100°C	T4 / T120°C
	250W HA	T4 / T100°C	T4 / T120°C
	400W HG	T3 / T134°C	T3 / T154°C
	400W NA	T4 / T109°C	T4 / T129°C
	400W HA	T4 / T109°C	T4 / T129°C



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SPECIFIC CONDITIONS OF USE: YES as shown below:

- The manufacturers operating and maintenance instructions shall always be followed.
- Temperatures could exceed 70°C at the cable gland or 80°C at the branching point, suitably rated cable must be selected.
- No batteries or cells are to be fitted inside the enclosure
- Installed to ensure a low risk of mechanical danger.

Conditions For Use (Routine Tests)

- A routine dielectric strength test in accordance with clause 6.1 of IEC 60079-7:2006 (Ed. 4) shall be carried out between the case and enclosure terminals at a test voltage of $(1000V + 2U_n)$ V r.m.s, where U_n is the rated voltage, for a period of atleast 60 seconds.
- A routine overpressure test in accordance with IEC 60079-1:2006 (Ed. 6) shall be carried out on each enclosure (including the cemented glass dome assembly) at a pressure of 15.39bar and must be recorded. There shall be no leakage through the cement and no deformation or damage to the enclosure. The tests shall be recorded.

Annex:

[Annex to IECEx ITS 12.0048X issue 0.pdf](#)



Schedule of Drawings for Certificate: IECEX ITS 12.0048X Issue 0

Manufacturer:
Cortem SpA
Via Aquileia 10,
34070 Villesse,
ITALY

Number	Title	Issue	Date
A1-5573	Lighting fixtures RLFE Series Assembly Drawings	1	21.02.2012
A4-5572	Technical Note	1	21.02.2012

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