



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 CES 11.0017X Issue No.: 1 Certificate history:
Issue No. 1 (2013-12-6)
Issue No. 0 (2011-6-23)

Status: Current

Date of Issue: 2013-12-06 Page 1 of 4

Applicant: **CORTEM S.p.A.**
Via Aquileia 10
I - 34070 Villesse (GO)
Italy

Electrical Apparatus: **Lighting fixtures series EWN-..**
Optional accessory:

Type of Protection: **Type of protection "nR"; Protection by enclosures "t"**

Marking: **Ex nR IIC T6, T5, T4, T3 Gc**
Ex tb IIIC T57°C+T187°C Db
IP66

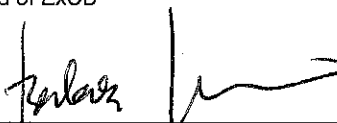
*Approved for issue on behalf of the IECEx
Certification Body:*

Mirko Balaz

Position:

Head of ExCB

*Signature:
(for printed version)*


6-12-2013

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.

Certificate issued by:

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

CESI
CESI S.p.A.
Testing & Certification Division
Business Area Certification
Responsabile
Forensic Division





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Issue No.: 1

Page 2 of 4

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:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-15 : 2010 Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

*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/ExTR11.0020/00

IT/CES/ExTR11.0020/01

Quality Assessment Report:

IT/CES/QAR06.0002/07



IECEx Certificate of Conformity

Certificate No.: IECEx CES 11.0017X

Date of Issue: 2013-12-06

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The lighting fixtures series EWN... sizes 60, 70, 80 and 100 are for the lamps from 20W up to 400W (mercury vapours, high pressure sodium, metal halide, blended and electronic lamps) or 500W incandescent. The luminaires are made with one single enclosure including lamp holder, lamp, terminal block and the other electrical apparatus.

Lighting fixtures series EWN are made in aluminium alloy, cover fixed by screws and hinged on body that containing the electrical equipment. On top are mounted the accessories for structure mounting. On bottom is screwed the aluminium ring with glass globe. Protection degree IP 66.

Incandescent lamps, blended lamps and compact electronic lamps are complete with terminals wired directly to lamp holder; mercury vapours lamps are complete with ballast and capacitor; high pressure sodium lamps and metal halide lamps are complete with ballast, igniter and capacitor.

See annex for further description.

CONDITIONS OF CERTIFICATION: YES as shown below:

- The luminaires series EWN have be installed in the way to avoid the high risk of mechanical danger.
- The safety instruction provided by Manufacturer shall be strictly respected.



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Certificate No.: IECEx CES 11.0017X

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Page 4 of 4

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

Variation 1

- 1.1. standards updating and EPL marking according to IEC 60079-0: 2011, IEC 60079-15:2010 and IEC 60079-31:2008;
- 1.2. added 70/100/150W metal halide lamps and 125W mercury vapours lamp on size EWN-60;
- 1.3. changed dust marking: Ex tb IIIC T57°C+T187°C Db.



IECEX Certificate of Conformity



Prot. B3033836

Annex to certificate: IECEX CES 11.0017X Issue No.:1 of 2013-12-06
Applicant: CORTEM S.p.A., Via Aquileia 10,
 I - 34070 Villesse (GO), Italy
Electrical Apparatus: Lighting fixtures series EWN- ..

Description of the equipment:

Lighting fixtures series EWN are made in aluminium alloy, cover fixed by screws and hinged on body that containing the electrical equipment. On top are mounted the accessories for structure mounting. On bottom is screwed the aluminium ring with glass globe. Protection degree IP 66.

Incandescent lamps, blended lamps and compact electronic lamps are complete with terminals wired directly to lamp holder; mercury vapours lamps are complete with ballast and capacitor; high pressure sodium lamps and metal halide lamps are complete with ballast, igniters and capacitor. All wired to terminals as per electrical diagrams indicated on safety instructions.

Identification of lighting fixtures

EWN -

			Code of the series
			Type of fixing accessories: T for pendant mounting GC for pendant mounting with eyebolt X for ceiling mounting IX for wall mounting P for pole mounting
			Size of lighting fixture: 60, 70, 80, 100
			Other suffix can be added on the code for particular configurations (not affecting the type of protection)

PAD B3033836 (1889321) - USO RISERVATO

Electrical characteristics:

Nominal power: from 20W to 500W
 Nominal voltage: Single voltage ballast: from 110 to 480Vac
 Multi-range ballast: 120/208/240/277/480Vac
 Frequency: 50Hz or 60Hz
 Lamp type and power: see Table 1

Degree of protection: IP 66 (IEC 60529)
 Ambient temperature: from -25 to +40 °C, to +50 °C or to +60°C,
 from -50 to +40 °C, to +50 °C or to +60°C.

Temperature class and maximum surface temperature

The temperature class and the maximum surface temperature of the luminaries are function of the maximum power dissipated in the inside and of the maximum ambient temperature, as specified in the next table 1 and in the manufacturer documents.



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TEMPERATURE CLASS AND MAX. SURFACE TEMP. FOR LIGHTING FIXTURES IN AMBIENT TEMPERATURE UP TO +40°C; +50°C; +60°C

Table 1

MOD	LAMP.	Tamb. +40°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	Tamb. +50°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	Tamb. +60°C TEMP. CLASS / MAX SURFACE TEMP. (°C)
EWN-60 For rated voltage up to 480V	50W Hg	T6 / 82	T5 / 92	T4 / 102
	50W Na	T6 / 82	T5 / 92	T4 / 102
	70W Na	T6 / 82	T5 / 92	T4 / 102
	70W Ha	T6 / 80	T5 / 90	T5 / 100
	40/60W Inc	T6 / 82	T5 / 92	T4 / 102
	80W Hg	T5 / 98	T4 / 108	T4 / 118
	100W Ha	T4 / 102	T4 / 112	T4 / 122
	125W Hg	T4 / 122	T4 / 132	T3 / 142
	150W Ha	T4 / 110	T4 / 120	T4 / 130
	100/200W Inc	T5 / 98	T4 / 108	T4 / 118
20/23W EL	T6 / 57	T6 / 67	T6 / 77	
EWN-70 For rated voltage up to 480V	70W Ha	T6 / 82	T5 / 92	T4 / 102
	100W Na	T5 / 99	T4 / 109	T4 / 119
	100W Ha	T5 / 99	T4 / 109	T4 / 119
	125W Hg	T4 / 106	T4 / 116	T4 / 126
EWN-80 For rated voltage up to 480V	125W Hg	T5 / 98	T4 / 108	T4 / 118
	150W Na	T4 / 104	T4 / 114	T4 / 124
	150W Ha	T4 / 104	T4 / 114	T4 / 124
	160W Mix	T4 / 104	T4 / 114	T4 / 124
	250W Hg	T3 / 167	T3 / 177	T3 / 187
	250W Na	T3 / 167	T3 / 177	T3 / 187
	250W Ha	T3 / 167	T3 / 177	T3 / 187
	250W Mix	T3 / 167	T3 / 177	T3 / 187
300W Inc	T4 / 106	T4 / 116	T4 / 126	
EWN-100 For rated voltage up to 277V	250W Hg	T4 / 117	T4 / 127	T3 / 137
	250W Na	T4 / 117	T4 / 127	T3 / 137
	250W Ha	T4 / 117	T4 / 127	T3 / 137
	250W Mix	T4 / 117	T4 / 127	T3 / 137
	400W Hg	T4 / 131	T3 / 141	T3 / 151
	400W Na	T4 / 131	T3 / 141	T3 / 151
	400W Ha	T4 / 131	T3 / 141	T3 / 151
	300W Inc	T4 / 106	T4 / 116	T4 / 126
500W Inc	T4 / 131	T3 / 141	T3 / 151	
EWN-100 For rated voltage up to 480V	250/400W Hg	T3 / 151	T3 / 161	T3 / 171
	250/400W Na	T3 / 151	T3 / 161	T3 / 171
	250/400W Ha	T3 / 151	T3 / 161	T3 / 171
	250W Mix	T3 / 151	T3 / 161	T3 / 171

NOTES: the different types of lamps are indicated with the following codes:

- Hg: mercury vapour lamp
- Na: high pressure sodium lamp
- Ha: metal halide lamp
- Mix: blended lamp
- Inc: incandescent lamp
- EL: electronic lamp



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CESI

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Electrical Apparatus: Lighting fixtures series EWN- ..

Installation conditions:

The condition of the installation of the lighting fixtures is included within the safety instructions. It is standard to provide the Lighting fixtures series EWN with cable glands Cortem certificate IECEx TSA 10.0002 (with minimum ambient temperature -25°C). In any case, the cable entry devices used on the enclosure shall be suitably certified and guarantee a degree of protection IP 66 according to IEC 60529 Standard.

For version with ambient temperature -50°C shall be used suitable certified cable glands.

Warning label:

"Do not open when energized. Wait 20 minutes before opening"

"Use cables suitable for a minimum temperature of Tc °C".

Where Tc has the value of:

145°C for models with temperature class T3

105°C for models with temperature class T4

95°C for the models with temperature class T5

No warning for the lamps with temperature class T6.