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[1] TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres Directive 2014/34/EU**

[3] Certificate Number: **EPTI 20 ATEX 0389 X** **issue 0**

[4] Equipment: Lighting fixtures
Series: EVNL

[5] Manufacturer: **CORTEM S.P.A.**

[6] Address: Via Aquileia, 10 – 34070 Villesse (Go) - Italy

[7] This equipment and any acceptable variation thereto are specified in the annex to this Certificate and the documents reported in it.

[8] Eurofins Product Testing Italy S.r.l., certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive.
The examination and test results are recorded in the confidential Report N° EPT.20.REL.01/2013078

[9] Compliance with the essential health and safety requirements is assured through the verification of them and by compliance with the harmonized standards:

EN IEC 60079-0:2018; EN 60079-15:2010

[10] If the sign "X" is placed after the Certificate number the equipment is subjected to special conditions for safe use specified in the annex to this Certificate.

[11] This TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the equipment specified.
Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this equipment.
These requirements are not object of this Certificate.

[12] The equipment shall include the sign Ex and the following string:

II 3G Ex nR IIC T4...T6 Gc **-60/-40°C < Tamb< +40/50/60°C**

Place and date of issue:
Torino, 2020-11-30

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This Certificate has 6 pages and it is reproducible only in its entirely. Conditions of validity are reported below.

[13] [14] **ANNEX**
TYPE EXAMINATION CERTIFICATE N. EPTI 20 ATEX 0389 X issue 0

[15] **Equipment description**

The lighting fixtures series EVNL are composed of an enclosure in aluminum or stainless steel and a light transmitting part fixed on that enclosure by a bracket. The light transmitting part is made of glass or two different types of polycarbonate. The housing has fins for the dissipation of the heat and it is closed on the bottom by a cover fixed with screws. The glass is plate and temperate, and on it is mounted a gasket. The enclosures contain the LED board or a LED array, the driver and the terminals.

Type Code:

EVNL- ☐ ☐ ☐

- Code of the series
- **060,070,080** or **100** for the size of lighting fixture
- **020,030,040,050,060,070,080,090,100,110,120,130,140,150,160,170,180,190,200,210 or 220** for the power of lighting fixture
- A combination of 4 characters to distinguish the all possible EVNL versions in base on:
  - Type of power supply,
  - Glass or polycarbonate window,
  - If dimmable or not,
  - Type of light source,
  - Type of mounting,
  - Ambient temperature,
  - Other possible electrical / mechanical variants present in this certificate.

Equipment characteristics:

Maximum rated voltage: 277 Vac/Dc

Rated frequency: 50/60 Hz

Maximum rated power: 225 W

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2020-11-30

[13]
[14]

ANNEX
TYPE EXAMINATION CERTIFICATE N. EPTI 20 ATEX 0389 X issue 0

Electrical characteristics:

Model (with glass window)	Max power	Power supply	Frequency
EVNL-060020..	25W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-060030..	33W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-060040..	45W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-060050..	55W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-070030..	35W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-070040..	45W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-070050..	55W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-070060..	65W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-070070..	75W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-070080..	85W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-080080..	85W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-080090..	95W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-080100..	105W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-080110..	115W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-080120..	125W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100120..	125W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100130..	135W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100140..	145W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100150..	155W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100160..	165W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100170..	175W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100180..	185W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100190..	195W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100200..	205W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100210..	215W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100220..	225W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz

Dionisio Bucchieri
Directive Responsible

2020-11-30

[13]
[14]

ANNEX
TYPE EXAMINATION CERTIFICATE N. EPTI 20 ATEX 0389 X issue 0

MODEL (with polycarbonate window)	MAX POWER	POWER SUPPLY	FREQUENCY
EVNL-060..	30W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-070..	60W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-080..	90W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz
EVNL-100..	160W	12, 24, 42, 48, 100-277VAC/DC	0/50/60 Hz

Temperature classes:

Glass window

EVNL size	Power consumption	Max ambient temperature		
		+40°C	+50°C	+60°C
EVNL-060..	P ≤ 33W	T6	T6	T5
	33W < P ≤ 45W	T6	T5	T4
	45W < P ≤ 55W	T5	T4	T4
EVNL-070..	P ≤ 45W	T6	T5	T4
	45W < P ≤ 65W	T5	T5	T4
	65W < P ≤ 85W	T4	T4	T4
EVNL-080..	P ≤ 85W	T5	T4	T4
	85W < P ≤125W	T4	T4	T4
EVNL-100..	P ≤ 225W	T4	T4	T4

Polycarbonate window (for type 1 polycarbonate minimum Ta -40°C)

EVNL size	Power consumption	Max ambient temperature		
		+40°C	+50°C (Only with type 1 polycarbonate)	+60°C (Only with type 1 polycarbonate)
EVNL-060..	P ≤ 30W	T6	T6	T5
EVNL-070..	P ≤ 60W	T4	T4	
EVNL-080..	P ≤ 90W	T4	T4	
EVNL-100..	P ≤ 160W	T4	T4	

Dionisio Bucchieri
Directive Responsible

2020-11-30

[13] [14] **ANNEX**
TYPE EXAMINATION CERTIFICATE N. EPTI 20 ATEX 0389 X issue 0

Cable entries

The entries into the enclosures are provided by two threaded holes in the walls of the terminals enclosure. The terminals enclosure can have one or two cable entries. When one entry is not used, it is left closed by a plug covered by a separate certificate (IMQ 16 ATEX 005 X). The cable gland is covered by a separate certificate with types of protection Ex nR and Ex tb.

Warning label

"Do not open when an explosive atmosphere is present".

"Do not open when energized".

"Use cable suitable for a temperature of 85°C".

"Potential electrostatic charging hazard see instructions".

Only for EVNL-.. transportable versions: "Warning – Do not transport when energized"

Only for EVNL-.. pole mounting versions - "Warning – Use a sealing fitting to preserve the IP protection degree".

Routine tests

The equipment shall be subjected to a routine pressure test in accordance with EN 60079-15 clause 23.2.3.2.1.2. Each unit shall be subjected to an internal pressure of at least 0.3 kPa below atmospheric. The unit should hold at least half of the initial value for at least 90 seconds. The pressure test is to be conducted through a cable entry point.

Each unit manufactured shall be subjected to an electric strength test in accordance with EN 60079-15 clause 23.2.1 or 23.2.2. It shall be carried out either at 1000 V + 2U for 60 seconds or at 1.2 times this test voltage for at least 100 ms.

[16] **Assessment Report n° EPT.20.REL.01/2013078**

This EU-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this certificate performed by Eurofins Product Testing Italy S.r.l., and reported in the Assessment Report above cited.

[17] **Specific condition of use**

When the polycarbonate lens is used, due to the risk of static hazards, the equipment shall only be cleaned with a damp cloth.

The equipment shall be used only with cable gland / plug with separate certificate IMQ ATEX 16 005 X, IMQ 17 ATEX 016 X or other cable glands Ex nR and Ex tb certified.

The equipment shall be subjected to a pressure test in accordance with EN 60079-15 clause 23.2.3.2.1.2. In compliance with the requirements of the instructions manual the unit shall be subjected to an internal pressure of at least 0.3 kPa below atmospheric. The unit should hold at least half of the initial value for at least 90 seconds. The pressure test is to be conducted through a cable entry point. Refer to instructions for methodology.

[18] **Essential Health and Safety Requirements**

Assured by compliance with harmonized standards.

Dionisio Bucchieri
Directive Responsible

2020-11-30

[13] [14] **ANNEX**
TYPE EXAMINATION CERTIFICATE N. EPTI 20 ATEX 0389 X issue 0

[19] **Descriptive documents**

The equipment objects of this Certificate are described by the following documents.
Relevant documents are reported below:

Title	Drawing No.	Rev.	Date
	Scheduled		
Technical note	"TECHNICAL NOTE A4-7544"	01	2020-11-18
Safety instructions	"F-469 ISTR. EVNL: Safety, maintenance and mounting instruction for EVNL series lighting fixture"	01	2020-11-18
Dimensional drawing	Dimensional drawing "A3-7543 EVNL"	01	2020-11-18

[20] **Terms and conditions**

The product liability rests with the Manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/CE.

The following conditions may render this Certificate invalid:

- changes in the design or construction of the product;
- changes or amendments to the Directive 2014/34/EU;
- changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 2014/34/EU Directive.

[21] **Certificate History**

This Certificate is at its first issue.

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End of Certificate

2020-11-30