



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 INE 15.0031X Issue No: 0 Certificate history:
Issue No. 0 (2016-01-29)

Status: **Current** Page 1 of 3

Date of Issue: **2016-01-29**

Applicant: **TECHNOR ITALSMEA**
Via Italia, 33
20060 GESSATE (MI)
Italy

Equipment: **Luminaire EV... Series**
Optional accessory:

Type of Protection: **Ex db e tb**

Marking:
Ex db IIC T6 or T5 or T4 or T3 Gb
or
Ex db e IIC T6 or T5 or T4 or T3 Gb
and/or
Ex tb IIIC T85°C or T100°C or T135°C or T200°C Db IP66

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

Thierry HOUEIX

Position:

Ex 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:

INERIS
Institut National de l'Environnement Industriel
et des Risques
BP n2
Parc Technologique ALATA
F-60550 Verneuil-En-Halatte
France



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Manufacturer: TECHNOR ITALSMEA
Via Italia, 33
20060 GESSATE (MI)
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 : 2014-06 Edition:7.0	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 : 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:

[FR/INE/ExTR15.0044/00](#)

Quality Assessment Report:

[FR/INE/QAR08.0002/06](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The luminaires EV... Series are composed by several Ex d enclosures designed to contain different lighting sources and their feeding apparatus (when specified) and the terminals (installed terminals or apparatus terminals or lampholder terminals) for the connection to the external feeding network.

Some variants (EVde...) include Ex e terminal box designed to contain the terminals for the connection to the external feeding network:

- WAGO terminals type 862-... certified IECEx PTB 05.0003U with type of protection Ex e IIC Gb according to IEC 60079-0 : 2011 and IEC 60079-7 : 2006-07;

or

- WEIDMULLER terminals type SAK 6/35 KRG certified IECEx KEM 06.0014U with type of protection Ex e II according to IEC 60079-0 : 2004 and IEC 60079-7 : 2001;

or

- WEIDMULLER terminals type SAKK4 and SAKK10 certified IECEx SIR 05.0032U with type of protection Ex e II according to IEC 60079-0 : 2004 and IEC 60079-7 : 2001;

or

- WEIDMULLER terminals type BK certified IECEx SIR 05.0035U with type of protection Ex e II according to IEC 60079-0 : 2004 and IEC 60079-7 : 2001;

All versions of these luminaires get the degrees of protection IP66 in accordance with IEC 60529.

CONDITIONS OF CERTIFICATION: YES as shown below:

- The lengths of the flameproof joints are greater than the values stated in the tables of the standard IEC 60079-1.
- During the installation, the user will take into consideration that the luminaires type EV*5** underwent only an impact test corresponding to an energy of low risk.

Annex:

[IECEX INE 15.0031X-00_Annex.pdf](#)



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PARAMETERS RELATING TO THE SAFETY

Maximum Current: up to 10 A according to versions

Rated Voltage: from 12 V to 305 V AC/DC according to versions

Frequency: 50 Hz / 60 Hz

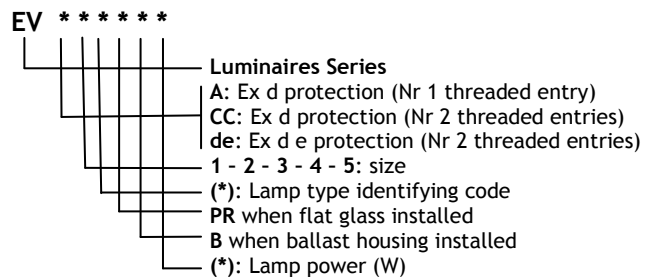
MARKING

Marking has to be readable and indelible; it has to include the following indications:

- TECHNOR ITALSMEA ⁽¹⁾
- 20060 GESSATE (MI) - ITALY
- EV...⁽²⁾
- IECEX INE 15.0031X
- (Serial number)
- Ex db IIC T⁽³⁾ Gb or Ex db e IIC T⁽³⁾ Gb
- and/or Ex tb IIIC T⁽⁴⁾ Db IP66
- Tamb. ⁽⁵⁾
- Tcable: ⁽⁶⁾
- *Rated Current and Rated Voltage* (as defined in the manufacturer's documents for EVde versions)
- **WARNINGS:**
DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
DO NOT OPEN WHEN ENERGIZED
CABLE ENTRIES - SEE INSTRUCTIONS

(1) Optional Brand COMBUSTION AND ENERGY - Luxsolar or TIDELAND can be added in the marking with the sentence "manufactured by TECHNOR ITALSMEA"

(2) The type is completed by letters and numbers in accordance with the manufacturing variations:





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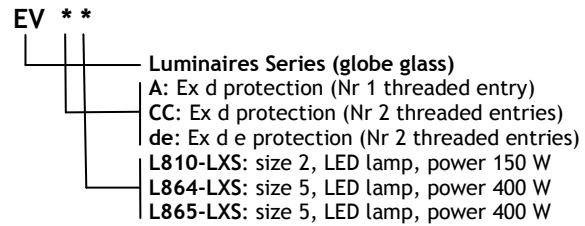
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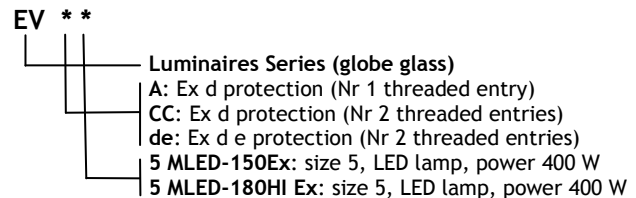
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Following types are used with the optional Brand COMBUSTION AND ENERGY - Luxsolar:



Following types are used with the optional Brand TIDELAND:



- (3) T6 or T5 or T4 or T3 as defined in the manufacturer's documents according to lighting sources and maximum ambient temperature
- (4) T85°C or T100°C or T135°C or T200°C as defined in the manufacturer's documents according to lighting sources and maximum ambient temperature
- (5) Ambient temperature range specified according to versions (when different from -20°C to +40°C) and within the range -60°C to +60°C
- (6) Tcable as defined in the manufacturer's documents according to lighting sources and maximum ambient temperature



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ROUTINE EXAMINATIONS AND TESTS

Each piece of equipment defined above has to have successfully passed; before delivery:

- In accordance with clause 7.1 of the IEC 60079-7 standard, a dielectric strength test on each of the different circuits of the terminal box for EVde versions, performed according to the relevant standards, the supply voltage shall be applied during one minute.
- In accordance with clause 16.1 of the IEC 60079-1 standard, a static overpressure test (at 1,5 times the reference pressure) of a period comprised between 10 and 60 seconds under:

Types	Drawings	1,5 times the reference pressure (bar)	
		Minimum ambient temperature $\geq -20^{\circ}\text{C}$	Minimum ambient temperature $\geq -60^{\circ}\text{C}$
EVA 3, EVCC 3, EVde 3 Globe glass c/w Glass holder ring Lamp housing	AC1407 sheets 1, 3 and 5	12,9	17,7
EVA 4, EVCC 4, EVde 4 Globe glass c/w Glass holder ring Lamp housing			
EVA 5, EVCC 5, EV de 5 EVA L864-LXS, EVCC L864-LXS, EVA L865-LXS, EVCC L865-LXS, EVde L864-LXS, EVde L865-LXS Globe glass c/w Glass holder ring Lamp housing	AC1407 sheets 1 and 5	14,4	19,4
EVA PR 1, EVCC PR 1, EV de PR 1 Flat glass c/w Glass holder ring	AC1407 sheets 2, 4 and 6	11,4	17,7
EVA PR 2, EVCC PR 2, EV de PR 2 Flat Glass c/w Glass holder ring			
EVA PR 3, EVCC PR 3, EV de PR 3 Flat glass c/w Glass holder ring Lamp housing			
EVA PR 4, EVCC PR 4, EV de PR 4 Flat glass c/w Glass holder ring Lamp housing	AC1407 sheets 2, 4 and 6	12,9	17,7
EVA PR 5, EVCC PR 5, EV de PR 5 Flat glass c/w Glass holder ring Lamp housing	AC1407 sheets 2 and 6	12,9	17,7
Ballast housing size 2	AC1407 sheets 3, 4, 5 and 6	N/A	17,7
Ballast housing size 3	AC1407 sheets 3, 4, 5 and 6		
Ballast housing size 4	AC1407 sheets 3, 4, 5 and 6		
Ballast housing screw cap size 4	AC1407 sheets 5 and 6	14,4	19,4
Sealed bushing M20 as per drawing AS 1407 sheet 10 sketch A	AC1407 sheet 10	14,4	19,4



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In accordance with clause 16.2 of the IEC 60079-1 standard:

- The luminaires type EVA 1, EVCC 1, EVde 1 are exempted of routine test in owing to the fact that these luminaires have undergone a static type test at 4 times the reference pressure under 47.2 bar.
- The luminaires type EVA 2, EVCC 2, EVde 2, EVA L810-LXS, EVCC L810-LXS, EVde L810-LXS (with or without ballast housing) are exempted of routine test in owing to the fact that these luminaires have undergone a static type test at 4 times the reference pressure under 47.2 bar.
- The lamp housings of luminaires type EVA PR 1, EVCC PR 1, EVde PR 1 are exempted of routine test in owing to the fact that these housings have undergone a static type test at 4 times the reference pressure under 47.2 bar.
- The lamp housings of luminaires type EVA PR 2, EVCC PR 2, EVde PR 2 are exempted of routine test in owing to the fact that these housings have undergone a static type test at 4 times the reference pressure under 47.2 bar.
- The ballast housings sizes 2, 3 and 4 are exempted of routine test for minimum ambient temperature $\geq -20^{\circ}\text{C}$ in owing to the fact that these housings have undergone a static type test at 4 times the reference pressure under 33.6 bar.
- The terminal boxes EVA and EVCC are exempted of routine test in owing to the fact that these boxes have undergone a static type test at 4 times the reference pressure under 51.6 bar.
- The terminal box for EVde versions is exempted of routine test in owing to the fact that the bottom face of this box has undergone a static type test at 4 times the reference pressure under 51.6 bar.