

# 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 INE 16.0038X Issue No: 0 Certificate history:  
Issue No. 0 (2016-09-06)

Status: **Current** Page 1 of 3

Date of Issue: **2016-09-06**

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

Equipment: **Floodlight series FL\*\* / FL-LED\*\***  
*Optional accessory:*

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

Marking: Ex db IIB+H2 T(\*) Gb or Ex db e IIB+H2 T(\*) Gb  
Ex tb IIIC T(\*) Db IP66  
(\*) : Temperature class in accordance with the ambient temperature and the type of lamps. See table in annex for details

Approved for issue on behalf of the IECEx  
Certification Body:

Olivier COTTIN

Position:

Head of Equipment and Corporate Services Unit

Signature:  
(for printed version)



Date:

2016.09.06

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:

**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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The certification rules are available on the INERIS website [www.ineris.fr](http://www.ineris.fr).



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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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2014-06</b> Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
<b>IEC 60079-7 : 2006-07</b> 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:

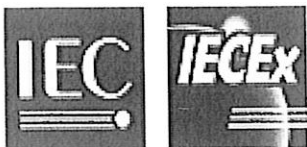
*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

##### Test Report:

FR/INE/ExTR16.0042/00

##### Quality Assessment Report:

FR/INE/QAR08.0002/07



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## Schedule

### EQUIPMENT:

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

The floodlight series FL\*\* and FL-LED\*\* is constituted by :

- A lamp compartment made in light alloy with a glass sealed on the cover (for all the versions). The enclosure is closed by screws with quality A2-70 or greater.
- Terminal box (only FL\*\* versions). This terminal box is intended to receive terminals for the connection to the external feeding network: WEIDMULLER terminals type type WDU... and WPE... covered by the certificate IECEX ULD 05.0008U with type of protection Ex e II according to IEC 60079-0 : 2004 and IEC 60079-7 : 2001;

The terminal box is separated from the lamp compartment by a sealed bushing or internal cable gland.

The floodlight type FL\*\* is intended to receive different types and power of lamps : See Annex for details

The floodlight type FL-LED\*\* is intended to receive only LED light sources : See Annex for details

This equipment gets the degrees of protection IP66 in accordance with IEC 60529 standard.

**CONDITIONS OF CERTIFICATION: YES as shown below:**

- The depth engagement of the threaded joints is greater to the value specified in the tables of IEC 60079-1.
- The widths of the flameproof joints are greater than those specified in tables of IEC 60079-1 standard.
- During the installation, the user will take into consideration that the equipment underwent only a shock corresponding to an energy of a low risk.

### Annex:

IECEX INE 16.0038X-00\_Annex.pdf



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Annexe: IECEX INE 16.0038X-00\_Annex.pdf

## PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage: 480Vac/370Vdc (or lower in accordance the manufacturer's instructions)

The type and maximum power of lamps allowed are specified in the table of the marking paragraph.

These enclosures can be use in the range of ambient temperatures from -20°C up to +60°C.

## MARKING

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

### 1- Marking for floodlight type FL\*\*

- TECHNOR ITALSMEA
- 20060 GESSATE - ITALY
- FL\*\*\*\* (1)
- IECEX INE 16.0038X
- (Serial number)
- Ex db e IIB+H2 T(2) Gb
- Ex tb IIIC T(2) Db IP66
- -20°C < Tamb < (2)
- CABLE GLAND - See instructions
- T. cable: (2)
- *Rated Current and Rated Voltage* (as defined in the manufacturer's documents)
- **WARNINGS:** DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT  
DO NOT OPEN WHEN ENERGIZED  
USE SCREWS WITH MINIMUM QUALITY : A2-70

- (1) The type is completed by a letter and numbers in accordance with the manufacturing variations.
- (2) Temperature class, maximum ambient temperature and temperature of the cable are specified in the table at the end

### 2- Marking for floodlight type FL-LED\*\*

- TECHNOR ITALSMEA
- 20060 GESSATE - ITALY
- FL-LED\*\*\*\* (1)
- IECEX INE 16.0038X
- (Serial number)
- Ex db IIB+H2 T(2) Gb
- Ex tb IIIC T(2) Db IP66
- -20°C < Tamb < (2)
- CABLE GLAND - See instructions
- T. cable: (2)
- **WARNINGS:** DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT  
USE SCREWS WITH MINIMUM QUALITY : A2-70

- (1) The type is completed by a letter and numbers in accordance with the manufacturing variations.
- (2) Temperature class, maximum ambient temperature and temperature of the cable are specified in the table at the end



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## ROUTINE EXAMINATIONS AND TESTS

### For floodlight type FL\*\*:

In accordance with clause 16.1 of the IEC 60079-1 standard, each apparatus has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under 11.9 bar.

### For floodlight type FL-LED\*\*:

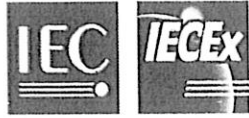
In accordance with clause 16.1 of the IEC 60079-1 standard, each apparatus has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under 10.8 bar.

### On the terminal box protected by increased safety of floodlight type FL\*\*:

In accordance with clause 7.1 of the IEC 60079-7 standard, a dielectric strength test on each of the different circuits of the connection units, performed according to the relevant standards, the supply voltage shall be applied during one minute.

**Table of the temperature classes for the floodlight type FL\*\*:**

FLOODLIGHT TYPE	-LAMP TYPE- -MAX.POWER (W)- -RATINGS-	TEMPERATURE CLASS (GAS/DUST) -(°C)				T cable (°C)			
		40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C
FL-15SA	H.P. SODIUM - 150W 230V 50Hz	T3/200°C	T3/200°C	T3/200°C	T3/200°C	N/A	N/A	75°C	80°C
FL-25SA	H.P. SODIUM - 250W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	80°C	90°C	95°C	100°C
FL-40SA	H.P. SODIUM - 400W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	80°C	90°C	95°C	100°C
FL-40SA	H.P. SODIUM - 400W 480V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	80°C	90°C	95°C	100°C
FL-15IM	METAL HALIDE - 150W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	75°C	85°C	90°C	95°C
FL-25IM	METAL HALIDE - 250W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	75°C	85°C	90°C	95°C
FL-40IM	METAL HALIDE - 400W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	75°C	85°C	90°C	95°C
FL-40IM	METAL HALIDE - 400W 480V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	75°C	85°C	90°C	95°C
FL-12HG	MERCURY VAPOUR 120W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	80°C	90°C	95°C	100°C
FL-17HG	MERCURY VAPOUR - 175W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	80°C	90°C	95°C	100°C
FL-25HG	MERCURY VAPOUR - 250W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	80°C	90°C	95°C	100°C
FL-40HG	MERCURY VAPOUR - 400W 230V 50Hz	T3/200°C	T3/200°C	T2/205°C	T2/210°C	80°C	90°C	95°C	100°C
FL-14HA	HALOGEN - 2x70W Max. 24V AC/DC	T4/135°C	T4/135°C	T4/135°C	T4/135°C	N/A	N/A	N/A	75°C
FL-10HA	HALOGEN - 100W 230V 50/60Hz	T4/135°C	T4/135°C	T4/135°C	T4/135°C	N/A	N/A	N/A	75°C
FL-15HA	HALOGEN - 150W 230V 50/60Hz	T2/220°C	T2/230°C	T2/235°C	T2/240°C	80°C	90°C	95°C	100°C
FL-25HA	HALOGEN - 250W 230V 50/60Hz	T2/220°C	T2/230°C	T2/235°C	T2/240°C	80°C	90°C	95°C	100°C
FL-50HA	HALOGEN - 500W 230V 50/60Hz	T2/220°C	T2/230°C	T2/235°C	T2/240°C	80°C	90°C	95°C	100°C



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## Table of the temperature classes for the floodlight type FL-LED\*\*:

FLOODLIGHT TYPE	-LAMP TYPE- -MAX.POWER (W)- -RATINGS-	TEMPERATURE CLASS (GAS/DUST) -(°C)				T cable (°C)			
		40°C	50°C	55°C	60°C	40°C	50°C	55°C	60°C
FL-LED60	LEDs SOURCES – 60W 90÷264VAC-127÷370VDC	T6/85°C	T6/85°C	T6/85°C	T5/100°C	N/A	N/A	75°C	80°C
FL-LED90	LEDs SOURCES – 90W 90÷264VAC-127÷370VDC	T6/85°C	T5/100°C	T5/100°C	T5/100°C	N/A	80°C	85°C	90°C
FL-LED130	LEDs SOURCES - 130W 90÷264VAC-127÷370VDC	T6/85°C	T5/100°C	T4/135°C	T4/135°C	N/A	80°C	85°C	90°C