IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx INE 15.0003X**

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Certificate history:
Issue 2 (2021-11-29)
Issue 1 (2015-07-31)
Issue 0 (2015-03-19)

Status: **Current**

Issue No: 3

Date of Issue: 2022-06-29

Applicant: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Equipment: **Floodlights type SFD** // SFDE** // SFDL-*** // SFDEL-*****

Optional accessory:

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

Marking: Ex db IIB+H2 T(*) Gb or Ex db eb 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: **Thierry HOUEIX**

Position: **Ex Certification Officer**

Signature: (for printed version)

Signé électroniquement
Digitally signed by
Thierry HOUEIX
Ex Certification Officer
Délégué Certification

Date: (for printed version) **2022-07-08**

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Certificate issued by:

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

controlling risks for sustainable development

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Certificate No.: **IECEx INE 15.0003X**

Date of issue: 2022-06-29

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Manufacturer: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Manufacturing locations: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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/ExTR15.0003/03

Quality Assessment Report:

IT/CES/QAR09.0003/14

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The floodlight type SFD** / SFDE** and SFDL-**/SFDEL-** is constituted by :

- A lamp compartment made in light alloys or stainless steel and with a glass sealed on the cover.
- An additional enclosure covered by a separated certificate (protected by “Ex db” or “Ex db eb” and “ Ex tb”). This additional enclosure is separated from lamp compartment by a sealing bushing and is intended only for SFD** with lamps 250W, 400W and 600W with external ballast and for all SFDL-**/SFDEL-**.
- Terminal box (only for SFDE** version). This terminal box is intended to receive certified terminals as specified in the descriptive documents. The terminal box is separated from the lamp compartment by a sealed bushing.

The lighting fixture SFD** / SFDE** is intended to receive different types and power of lamps: See Annex for details

The lighting fixture SFDL-***/SFDEL-*** 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.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The flameproof joints have different values from those specified in the tables of the IEC 60079-1 standard. For any repair, to contact the manufacturer

For floodlight type SFDL-*/SFDEL-***:**

- During the installation, the user will take into consideration that the equipment underwent only a shock corresponding to an energy of a low risk.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

For the Issue n°03:

- Application of the standards: IEC 60079-0:2017, IEC 60079-1:2014 and IEC 60079-7:2017
- Add the PCBs complete with 40 Led, 48 Led and 56 Led

For the Issue n°02:

- Change of the name and address of the applicant and manufacturer
- Update of the marking plates

For the Issue n°01:

- Introduction of new types, SFD**-LED/SFDE**-LED intended to receive only LEDs lighting source.

Annex:

IECEx INE 15.0003X-03_Annex.pdf

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Certificate No.: IECEx INE 15.0003X

Issue No.: 3

Annex: IECEx INE 15.0003X-03_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage: 277 V (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:

- BARTEC FN (1)
- I – 20090 Trezzano sul Naviglio (MI)
- SFD** // SFDE** // SFDL-*** // SFDEL-*** (2)
- IECEx INE 15.0003X
- (Serial number)
- Ex db IIB+H2 T(3) Gb or Ex db eb IIB+H2 T(3) Gb
- Ex tb IIIC T(3) Db IP66
- Tamb : (3)
- T. cable: (3)
- CABLE GLAND : (Type and size)
- **WARNINGS:** DO NOT OPEN WHEN ENERGIZED
  AFTER DE-ENERGIZING, DELAY 20 MINUTES BEFORE OPENING
  USE SCREWS WITH MINIMUM QUALITY : A2-70

(1) Optional Brands "BARTEC FEAM" or "BARTEC NASP" can be added in the marking with the sentence "manufactured by BARTEC FN"

(2) The type is completed by a letter and numbers in accordance with the manufacturing variations.
On the lamp compartment : the symbol "d"
On the terminal compartment : the symbol "e"

(3) Temperature class, maximum ambient temperature and temperature of the cable are specified in the table at the end

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards

ROUTINE EXAMINATIONS AND TESTS

For floodlight type SFD**/SFDE***:

In accordance with clause 16.1 of the IEC 60079-1 standard, each apparatus has to have successfully passed, before delivery, an overpressure test under 10.4 bar during at least 10 second.

For floodlight type SFDL-***/SFDEL-***:

In accordance with clause 16.1 of the IEC 60079-1 standard, each apparatus has to have successfully passed, before delivery, an overpressure test under 11.9 bar during at least 10 second.

For floodlight with a terminal box protected by increased safety:

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 applied during one minute.

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Annex: IECEx INE 15.0003X-03_Annex.pdf

Table of the temperature classes for the floodlight type SFD/SFDE****

Type of the lamps power	Maximum Ambient temperature	Temperature class		Cable temperature
		Gas	Dust	
150W HPNA	+40°C or +50°C or +60°C	T3	T200°C	NA
250W HPNA	+40°C or +50°C	T3	T200°C	NA
	+60°C	T2	T210°C	90°C
400W HPNA	+40°C	T3	T200°C	NA
	+50°C	T2	T210°C	80°C
	+60°C	T2	T220°C	90°C
150W MH	+40°C or +50°C or +60°C	T3	T200°C	NA
250W MH	+40°C or +50°C	T3	T200°C	NA
	+60°C	T3	T200°C	90°C
400W MH	+40°C	T3	T200°C	NA
	+50°C	T2	T210°C	80°C
	+60°C	T2	T220°C	90°C
175W HG	+40°C or +50°C	T3	T200°C	NA
	+60°C	T3	T200°C	90°C
250W HG	+40°C or +50°C	T3	T200°C	NA
	+60°C	T3	T200°C	90°C
400W HG	+40°C	T3	T200°C	NA
	+50°C	T2	T210°C	80°C
	+60°C	T2	T220°C	90°C
250W BL	+40°C or +50°C	T3	T200°C	NA
	+60°C	T3	T200°C	90°C
500W BL	+40°C	T2	T217°C	NA
	+50°C	T2	T230°C	100°C
	+60°C	T2	T240°C	110°C
300W IA	+40°C	T3	T200°C	NA
	+50°C	T2	T210°C	80°C
	+60°C	T2	T220°C	90°C
500W IA	+40°C	T2	T217°C	NA
	+50°C	T2	T230°C	100°C
	+60°C	T2	T240°C	110°C
250W HPNA	+40°C or +50°C or +60°C (without internal ballast)	T3	T200°C	100°C
400W MH		T3	T200°C	100°C
400W HG		T3	T200°C	100°C
400W HPNA		T3	T200°C	100°C
600W MH		T3	T200°C	100°C
600W HPNA		T3	T200°C	100°C
LED MAX 250W	+40°C or +50°C or +60°C	T4	T135°C	NA

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Table of the temperature classes for the floodlight type SFDL-*/SFDEL-****

Type of the lamps power	Maximum Ambient temperature	Temperature class		Cable temperature
		Gas	Dust	
20LED (160W)	+40°C	T6	T85°C	NA
	+50°C	T5	T100°C	NA
	+60°C	T4	T135°C	NA
28LED (240W)	+40°C	T6	T85°C	NA
	+50°C	T5	T100°C	NA
	+60°C	T4	T135°C	NA
40LED (168W)	+40°C	T6	T85°C	NA
	+48°C	T6	T85°C	NA
	+60°C	T5	T100°C	NA
48LED (202W)	+40°C	T5	T100°C	NA
	+50°C	T5	T100°C	NA
	+60°C	T4	T135°C	80°C
56LED (235W)	+40°C	T5	T100°C	NA
	+50°C	T5	T100°C	NA
	+60°C	T4	T135°C	80°C