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 FTZU 26.0016X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2026-05-20

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

Equipment: **LED luminaire, type Line Ex1**

Optional accessory:

Type of Protection: **Increased safety "e", Encapsulation "m", Dust protection "t"**

Marking: Ex eb mb IIC T4 Gb
Ex tb IIIC T85°C Db

Approved for issue on behalf of the IECEx Certification Body: **Dlpl. Ing. Lukáš Martinák**

Position: **Head of the Certification Body**

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Fyzikalne technicky zkusebni ustav
(Physical -Technical Testing Institute)
Pikartska 7, 71607 Ostrava - Radvanice
Czech Republic

IECEx Certificate of Conformity

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 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

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:

CZ/FTZU/ExTR26.0016/00

Quality Assessment Report:

IT/CES/QAR09.0003/18

IECEx Certificate of Conformity

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

The luminaire consists of three main parts: the housing with a gasket, the optical opal cover, the reflector. Additionally, the luminaire is equipped with mounting elements. The housing and cover are made of polycarbonate. The cover is attached to the housing by metal clips. In the groove of the housing, there is a seal made of a silicone foam seal. The painted steel carrier for the components is inserted into the housing and secured with screws. On this carrier, the individual electrical components and other parts of the luminaire are attached. Electronic ballasts BAREL HFX LED BG2 / HFXE LED BG2, IECEx EXV 22.0018U – Ex eb mb IIC Gb, and the LED module BAREL BG5 (600 mm,1200 mm,1500 mm), IECEx EXV 19.0027U – Ex mb IIC Gb are used. Additionally, a Barel VSI LED diode, IECEx EXV 19.0027U – Ex mb IIC Gb, is mounted on the component carrier, which is used to indicate the status of the emergency unit. For luminaires with an emergency unit, battery pack type VBR-Ex, IECEx FTZÚ 24.0018U, Ex eb IIC Gb, is used.
The component carrier also holds a WAGO 862-15xx terminal block IECEx PTB 05.0003U - Ex eb IIC Gb, for connecting the supply cable with conductors up to 4 mm² cross-section.
Cable entries are ensured by plastic or metal Ex cable glands, which must meet the "eb" and "tb" requirements, minimum ingress protection rating IP66. Any remaining holes in the luminaire can be sealed with a sealing plug in Ex protection as the Ex cable gland.
The luminaire contains LEDs on the LED module that are considered as non-array divergent LEDs and these LEDs are to be excluded based on Clause 1 of IEC 60079-28:2015.

Electrical parameters:
Luminaire equipped by driver BAREL HFX BG2:
220 ÷ 240V, 50/60 Hz, 220 ÷ 240V DC
Luminaire equipped by driver HFXE BG2 LED:
220 ÷ 240V, 50/60 Hz, 220 ÷ 240V DC

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Ambient temperature range: - see Annex to the certificate IECEx FTZU 26.0016X , Issue No: 00.
2. The luminaire is intended for fixed installation and must be labelled “Warning - potential danger of electrostatic charging“ - see Operation Instructions.
3. The power supply cable shall be effectively fixed to prevent pulling or twisting.
4. Shall be used only Ex equipment cable glands and Ex equipment blanking elements with Ex protection Ex eb and Ex tb with IP 66 and with a minimum service temperature range -30 °C to +60 °C.
5. The Operation Instructions for mounting and maintainance must be complied.
6. The battery pack must not be replaced in hazardous areas (unless the area is shown to be free from a hazardous atmosphere).
7. The luminaire shall be installed to avoid a risk from propagating brush discharges for application in explosive dust atmosphere.

Annex:

Annex_to_IECEx_FTZU_26_0016X00.pdf

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

Electrical Apparatus: **LED luminaire, type Line Ex1**

Type code marking of luminaire:

LIXZ * * ** ** * * ** * ** FE**

Installation Zone
- 1: Zone 1/21

Lenght of luminaire
- 2: 670 mm
- 4: 1280 mm
- 5: 1580 mm

Type of driver
- N0: ON/OFF
- ND: DALI2
- E1: Emergency unit 1H Autotest
- A1: Emergency unit 1H Autotest + DALI2 driver
- D1: Emergency unit 1H DALI + DALI2 driver
- EA: Emergency unit 3H Autotest
- AD: Emergency unit 3H DALI Autotest + DALI2 driver
- ED: Emergency unit 3H DALI + DALI2 driver

Power *10
- 0123: 12.3 W
- 0158: 15.8 W
- 0241: 24.1 W
- 0265: 26.5 W
- 0335: 33.5 W
- 0444: 44.4 W
- 0504: 50.4 W
- 0625: 62.5 W
- 0759: 75.9 W
- 0944: 94.4 W

Through wiring
- 0: without through wiring
- 1: single phase connection, through wiring
- 3: three phase connection, through wiring

Colour Temperature
- 3: 3000 K, CRI80
- 4: 4000 K, CRI80
- 5: 5000 K, CRI80
- 7: 5700 K, CRI80
- 6: 6500 K, CRI80
- A: 3000 K, CRI90
- B: 4000 K, CRI90
- C:5000 K, CRI90
- D: 5700 K, CRI90
- E: 6500 K, CRI90

Cable gland
- P1: M20 polyamide cable gland 7-13 mm
- P2: M25 polyamide cable gland 10-17 mm
- U1: M20 Nickel Plated Brass cable gland for unarmoured cable
- U2: M25 Nickel Plated Brass cable gland for unarmoured cable
- X1: M20 stainless steel cable gland for unarmoured cable 6-13 mm
- X2: M25 stainless steel cable gland for unarmoured cable 9-17 mm
- A1: M20 Nickel Plated Brass cable gland for armoured cable
- A2: M25 Nickel Plated Brass cable gland for armoured cable
- Y1: M20 stainless steel cable gland for armoured cable 6-13 mm
- Y2: M25 stainless steel cable gland for armoured cable 9-17 mm

Enclosure Gasket
- S: Silicone

Mounting kit type

FE – Internal marking

FTZÚ, s.p., Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic,
tel.: +420 595 223 111, +420 604 203 525, ftzu@ftzu.cz, www.ftzu.cz

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

Electrical Apparatus: **LED luminaire, type Line Ex1**

Table of temperature ranges :

Admissible Temperature Ranges			
Type of driver	Length of luminaire	Power	Ambient Temperature Range
N0; ON/OFF; ND; DALI2	2: 670 mm	0123: 12.3 W 0158: 15.8 W	-30 ÷ +55 °C
N0; ON/OFF; ND; DALI2	2: 670 mm	0241: 24.1 W	-30 ÷ +50 °C
N0; ON/OFF; ND; DALI2	4: 1280 mm	0265: 26.5 W 0335: 33.5 W	-30 ÷ +55 °C
N0; ON/OFF; ND; DALI2	4: 1280 mm	0504: 50.4 W	-30 ÷ +50 °C
N0; ON/OFF; ND; DALI2	4: 1280 mm	0759: 75.9 W	-30 ÷ +40 °C
N0; ON/OFF; ND; DALI2	5: 1580 mm	0325: 32.5 W 0413: 41.3 W	-30 ÷ +50 °C
N0; ON/OFF; ND; DALI2:	5: 1580 mm	0625: 62.5 W	-30 ÷ +45 °C
N0; ON/OFF; ND; DALI2:	5: 1580 mm	0944: 94.4 W	-30 ÷ +30 °C
E1: Emergency unit 1H Autotest + ON/OFF driver A1: Emergency unit 1H Autotest + DALI2 D1: Emergency unit DALI 1H + DALI2	2: 670 mm	0123: 12.3 W 0158: 15.8 W	0 ÷ +30 °C
E1: Emergency unit 1H Autotest + ON/OFF driver A1: Emergency unit 1H Autotest + DALI2 D1: Emergency unit DALI 1H + DALI2	2: 670 mm	0241: 24.1 W	0 ÷ +25 °C
E1: Emergency unit 1H Autotest + ON/OFF driver A1: Emergency unit 1H Autotest + DALI2 D1: Emergency unit DALI 1H + DALI2	4: 1280 mm	0265: 26.5 W 0335: 33.5 W	0 ÷ +45 °C
E1: Emergency unit 1H Autotest + ON/OFF driver A1: Emergency unit 1H Autotest + DALI2 D1: Emergency unit DALI 1H + DALI2	4: 1280 mm	0504: 50.4 W	0 ÷ +40 °C
E1: Emergency unit 1H Autotest + ON/OFF driver A1: Emergency unit 1H Autotest + DALI2 D1: Emergency unit DALI 1H + DALI2	5: 1580 mm	0325: 32,5 W 0413: 41.3 W	0 ÷ +45 °C
E1: Emergency unit 1H Autotest + ON/OFF driver A1: Emergency unit 1H Autotest + DALI2 D1: Emergency unit DALI 1H + DALI2	5: 1580 mm	0625: 62.5 W	0 ÷ +40 °C

FTZÚ, s.p., Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic,
tel.: +420 595 223 111, +420 604 203 525, ftzu@ftzu.cz, www.ftzu.cz