



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 25.0019X	Page 1 of 3	<u>Certificate history:</u>
Status:	Current	Issue No: 0	
Date of Issue:	2025-10-30		
Applicant:	VYRTYCH a.s. Židněves 116 Březno 294 06 Czech Republic		
Equipment:	LED Luminaire, type EXTRA-EX1/21		
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:

Dipl. Ing. Lukáš Martinák

Position:

Head of the Certification Body

Signature:
(for printed version)

J. Martinák
2025-10-30

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:

**Fyzikálně technický zkušební ústav
(Physical -Technical Testing Institute)
Pikartska 7, 71607 Ostrava - Radvanice
Czech Republic**





IECEX Certificate of Conformity

Certificate No.: **IECEX FTZU 25.0019X**

Page 2 of 3

Date of issue: 2025-10-30

Issue No: 0

Manufacturer: **VYRTYCH a.s.**
Židněves 116
Březno 294 06
Czech Republic

Manufacturing
locations:

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/ExTR25.0019/00

Quality Assessment Report:

CZ/FTZU/QAR22.0001/03





IECEX Certificate of Conformity

Certificate No.: **IECEX FTZU 25.0019X**

Page 3 of 3

Date of issue: 2025-10-30

Issue No: 0

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 FTZU 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, 50/60Hz, 220-240V DC

Luminaire equipped by driver HFXE BG2 LED:

220-240V, 50/60Hz, 220-240V DC

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Ambient temperature range: - see Annex to the certificate IECEX FTZU 25.0019X, issue No. 0.
2. The luminaire is intended for fixed installation and must be labelled "Warning - potential danger of electrostatic charging" - see Technical conditions.
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 Technical conditions for mounting 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_25_0019X_00_1.pdf](#)





Annex to Certificate of Conformity
IECEX FTZU 25.0019X, Issue No: 0



Applicant: **VYRTYCH a.s.**
Address: **Židněves 116, 294 06 Březno, Czech Republic**
Electrical Apparatus: **LED Luminaire type EXTRA-EX1/21**

Type coding:

EXTRA-EX1/21-J-Lββ-γγγ-δδδ00-εεεε-PD

- **EXTRA** – name of the luminaire
- **EX1/21** – luminaire certified for zone 1/21
- **J** – type of the luminaire enclosure
- **Lββ** – length of the luminaire
- **γγγ** – CRI/CCT
- **δδδ00** – designation of the luminous flux of the LED source
- **εεεε** – type of the connection
- **ζζ** – internal designation
- **PD** – polycarbonate opal cover

Lββ – Length of the luminaire	γγγ – CRI/CCT	εεεε – Type of the connection	ζζ – Internal designation
L06 – 670mm	830 – CRI80/ 3000K	0ND – ON/OFF driver	00–99
L12 – 1280mm	840 – CRI80/ 4000K	0D2 – DALI2 driver	
L15 – 1580mm	850 – CRI80/ 5000K	NM1A – Emergency unit 1H Autotest + ON/OFF driver	
	857 – CRI80/ 5700K	NM3A – Emergency unit 3H Autotest + ON/OFF driver	
	865 – CRI80/ 6500K	NA1D2 – Emergency unit 1H Autotest + DALI2 driver	
	930 – CRI90/ 3000K	NA3D2 – Emergency unit 3H Autotest + DALI2 driver	
	940 – CRI90/ 4000K	ND1D2 – Emergency unit 1H DALI + DALI2 driver	
	950 – CRI90/ 5000K	ND3D2 – Emergency unit 3H DALI + DALI2 driver	
	957 – CRI90/ 5700K		
	965 – CRI90/ 6500K		





Annex to Certificate of Conformity
IECEx FTZU 25.0019X, Issue No: 0



Applicant: VYRTYCH a.s.
Address: Židněves 116, 294 06 Březno, Czech Republic
Electrical Apparatus: LED Luminaire type EXTRA-EX1/21

Ambient temperature range:

Standard versions:

EXTRA-EX1/21-J-L06-yyy-2200-0ND-PD	-30°C – +55°C
EXTRA-EX1/21-J-L06-yyy-2750-0ND/0D2-PD	-30°C – +55°C
EXTRA-EX1/21-J-L06-yyy-4000-0ND/0D2-PD	-30°C – +50°C
EXTRA-EX1/21-J-L12-yyy-4500-0ND-PD	-30°C – +55°C
EXTRA-EX1/21-J-L12-yyy-5500-0ND/0D2-PD	-30°C – +55°C
EXTRA-EX1/21-J-L12-yyy-8000-0ND/0D2-PD	-30°C – +50°C
EXTRA-EX1/21-J-L12-yyy-11600-0ND/0D2-PD	-30°C – +40°C
EXTRA-EX1/21-J-L15-yyy-5400-0ND-PD	-30°C – +50°C
EXTRA-EX1/21-J-L15-yyy-6800-0ND/0D2-PD	-30°C – +50°C
EXTRA-EX1/21-J-L15-yyy-9800-0ND/0D2-PD	-30°C – +45°C
EXTRA-EX1/21-J-L15-yyy-14100-0ND/0D2-PD	-30°C – +30°C

Maintained emergency versions:

EXTRA-EX1/21-J-L06-yyy-2200-NM1A-08-PD	0°C – +30°C
EXTRA-EX1/21-J-L06-yyy-2750-NM1A/ NA1D2/ ND1D2-08-PD	0°C – +30°C
EXTRA-EX1/21-J-L06-yyy-4000-NM1A/ NA1D2/ ND1D2-08-PD	0°C – +25°C
EXTRA-EX1/21-J-L12-yyy-4500-NM3A-08-PD	0°C – +45°C
EXTRA-EX1/21-J-L12-yyy-5500-NM3A/ NA3D2/ ND3D2-08-PD	0°C – +45°C
EXTRA-EX1/21-J-L12-yyy-8000-NM3A/ NA3D2/ ND3D2-08-PD	0°C – +40°C
EXTRA-EX1/21-J-L15-yyy-5400-NM3A-08-PD	0°C – +45°C
EXTRA-EX1/21-J-L15-yyy-6800-NM3A/ NA3D2/ ND3D2-08-PD	0°C – +45°C
EXTRA-EX1/21-J-L15-yyy-9800-NM3A/ NA3D2/ ND3D2-08-PD	0°C – +40°C

