

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 25.0016X** Page 1 of 3 Certificate history:

Issue No: 0 Status: Current

2025-06-27 Date of Issue:

Applicant: doublepower!! s.r.o.

Bílkova 856/18 Praha 1 110 00 **Czech Republic**

Equipment: LED luminaire, type SEA EX 1/21 series

Optional accessory:

Flameproof enclosure "db", increased safety "eb", optical radiation "op is", protection by enclosure "tb" Type of Protection:

Dlpl. Ing. Lukáš Martinák

Marking: Ex db eb op is IIC T6...T5 Gb or

Ex db eb op is IIB+H2 T6...T5 Gb

Ex db eb op is IIB T6...T5 Gb

Ex tb op is IIIC T85°C Db

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Head of the Certification Body**

Signature:

(for printed version)

(for printed version)

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 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**





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Date of issue: 2025-06-27 Issue No: 0

Manufacturer: doublepower!! s.r.o.

Dubská 1011 Kladno 272 03 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 60079-1:2014

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation

IEC 60079-28:2015 Edition:2

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

Edition:3.0

EC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 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/ExTR25.0016/00

Quality Assessment Report:

CZ/FTZU/QAR25.0003/00



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Date of issue: 2025-06-27 Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

LED luminaire type SEA EX 1/21 consists of parts: luminaire body (transparent part) made of glass tube with internal aluminium profile with cemented side cover on one side and on the other side with cemented cover with connection space fitted with cover. The end sections are made of aluminium alloy and are fixed to each other by threaded rods passing through the aluminium support profile. The light transmitting part is designed in protection Ex db and the connecting part in protection Ex eb. The connection of the power supply driver is made via an Ex threaded line bushing in protection Ex db. Another threaded hole is optionally fitted with a breathing device in protection Ex db. or an Ex blanking element. The connection space is provided with threaded inlets for Ex cable glands or Ex blanking elements and Ex terminal block for wire connection. The cover is fitted with an Ex eb vent valve and sealed and secured with four fixing screws.

The electronic driver and LED modules are installed on the aluminium profile.

The luminaire is manufactured in a length of 1182 mm.

Electrical parameters:

Un = 230V AC 50/60Hz; In = 375 mA; Pn = 58 W or In = 275 mA; Pn = 44 W or In = 180 mA; Pn = 30 W

Verified degree of IP protection: IP66; IP 68

Type coding of luminaire – see Annex to the certificate No. IECEx FTZU 25.0016X, Issue 00.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Ambient temperature range: -20 °C \leq T_a \leq +40 °C; -20 °C \leq T_a \leq +50 °C

Type coding of luminaire – see Annex to the certificate No. IECEx FTZU 25.0016X, Issue No: 0.

- 2. The sight glass of the luminaire must only be cleaned with a damp cloth.
- Verified values of the maximum gaps and minimum constructional length of flameproof joints of this equipment differing from relevant minimum and maximum values mentioned in standard. To obtain information about joints dimension it is necessary to contact the manufacturer.
- 4. The luminaire shall be installed to avoid a risk from propagating brush discharges for application in explosive dust atmosphere.
- 5. The luminaire may be equipped with Ex equipment cable glands or Ex equipment blanking elements with type of Ex-protection Ex eb and Ex tb with minimum IP code IP 64.

Annex:

Annex_to_IECEx_FTZU_25_0016X_0.pdf



Annex to Certificate of Conformity IECEx FTZU 25.0016X Issue No: 0

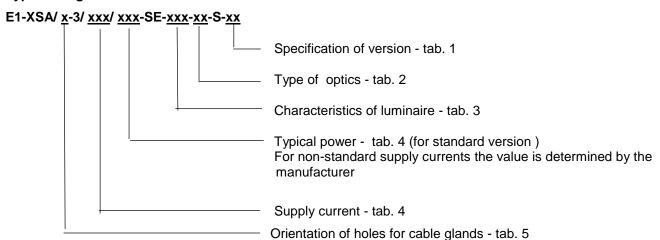


Applicant: doublepower!! s.r.o.

Address: Bílkova 18, 110 00 Praha 1, Czech republic

Electrical Apparatus: LED luminaire, type SEA EX 1/21 series

Type coding of luminaire:



	Group	Protection against condensation	Group II		Group III	
Specification of version			Temperature class		Surface temperature	
			Ta (°C) -20/+40	Ta (°C) -20/+50	Ta (°C) -20/+40	Ta (°C) -20/+50
01	IIC [1]	No		T6		
02	IIC ^[2]	Yes			05.00	25.00
03	IIB+H ₂ ^[3]	Yes	T6	T5	85 °C	85 °C
04	IIB ^[4]	Yes				

tab. 1

[1]	-	Used	Blanking element	EATON	CYA1200YXN
[2]	-	Used	Breathing device	nVent Hoffman	EXBDM20SS6
[3]	-	Used	Breathing device	EATON	BDU3004D0
		or	Breathing device	EATON	BDU1104D0
		or	Breathing device	EATON	BDU1204D0
[4]	-	Used	Breathing device	EATON	BDU1004D0



Annex to Certificate of Conformity IECEx FTZU 25.0016X Issue No: 0



Applicant: doublepower!! s.r.o.

Address: Bílkova 18, 110 00 Praha 1, Czech republic

Electrical Apparatus: LED luminaire, type SEA EX 1/21 series

Type lens	Description	
FR	Diffused lens	
40	Lens with emitting angle 40°	
60	Lens with emitting angle 60°	
90	Lens with emitting angle 90°	
120	Lens with emitting angle 120°	

tab. 2

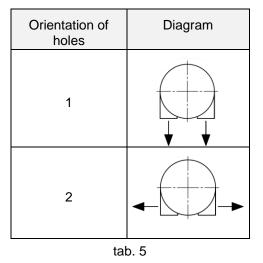
Characteristics of luminaire	Color rendering index Ra	Correlated colour temperature (K)
830		3000
840	80	4000
850		5000
865		6500
930		3000
940	90	4000
950		5000
965		6500

tab. 3

Supply current (mA) *	Typical power Consuption (W) **
375	55
275	41
180	28

^{*}Customizable from 375 mA to 100 mA (1mA step)

tab 4



^{**} For supply currents other than those listed, the manufacturer to determine the value