

### **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 23.0010X**  Page 1 of 4 Issue No: 1

Certificate history: Issue 0 (2023-06-30)

Status: Current

Date of Issue: 2024-06-21

Jukolux Oy, Yrittäjänkatu 15, 65380 Vaasa Applicant:

**EX LED Luminaire, type JUKO ALX and JUKO AFX** Equipment:

Optional accessory:

Type of Protection: increased safety "e", protection by encapsulation "m", optical radiation "op is", protection by enclosure "t"

Marking: Ex eb mb op is IIC T4 Gb

Ex tb op is T85°C IIIC 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)

(for printed version)

- This certificate and schedule may only be reproduced in full.
- This certificate is not transferable and remains the property of the issuing body.
   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

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Date of issue: 2024-06-21 Issue No: 1

Manufacturer: Jukolux Oy, Yrittäjänkatu 15, 65380 Vaasa

**Finland** 

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 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation

Edition:2

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 Reports:

**Quality Assessment Report:** 

CZ/FTZU/QAR19.0002/03



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The luminaire consists of an aluminum extrusion profile ended on each side by sealed aluminum covers. The light part is composed of an aluminum cooler on which are fixed from 1 to 4 Ex LED modules (certificate No. IECEx FTZU 22.0005U), a seal and a glass window with frame fixed to the profile with screws.

The driver mounting plate with driver (certificate No. IECEx FTZU 23.0007U), terminal block - all as Ex components is inbuilt inside of an aluminum profile.

The passage of the power supply cable to the driver mounting plate is ensured by Ex-threaded cable glands M20x1.5 or M25x1.5 through side covers in which Ex-breathing devices can be used.

The optical angle used on the reflector can be in the range of 60° to 120°.

Electrical parameters:

Rated Voltage Un: 230 V, 50/60 Hz Rated current In: 150 mA Power: 25 W; 50W and 100 W Degree of IP protection: IP 66

Type coding of luminaire ALX: See Annex to the CoC IECEx FTZU 23.0010X issue No.: 0

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Ambient temperature range:  $-40 \,^{\circ}\text{C} \le T_a \le +55 \,^{\circ}\text{C}$  for type ALX,  $-40 \,^{\circ}\text{C} \le T_a \le +50 \,^{\circ}\text{C}$  for type AFX.

- 2. The luminaire must be installed to avoid a risk from propagating brush discharges for application in explosive dust atmosphere.
- 3. The used cable glands are only suitable for fixed installation. Cables shall be effectively clamped to prevent pulling or twisting.



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#### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Issue No.01:

- Addition of type JUKO AFX.
- Verification according to standard IEC 60079-31:2022, 3<sup>rd</sup> edition.

A type JUKO AFX is assembled from two or three complete JUKO ALX-06 type luminaires mounted in a stainless steel supporting bracket with a bracket inserted into the luminaire profiles.

The electrical equipment of the luminaires is unchanged and they are connected to each other by power wires in a through wiring.

Variants of luminaire JUKO AFX:

a) AFX - 06 - 02:

-AFX-06-Mx-xxx-GL-C-P-A-25- xxx-x

-AFX-06-Mx-xxx-GL-C-P-A-25- xxx-x

b) AFX - 06 - 03:

-AFX-06-Mx-xxx-GL-C-P-A-25- xxx-x

-AFX-06-Mx-xxx-GL-C-P-A-25- xxx-x

-AFX-06-Mx-xxx-GL-C-P-A-25- xxx-x

Type coding of luminaire AFX: See Annex to the CoC IECEx FTZU 23.0010X issue No.: 1

#### Annex:

Annex\_to\_IECEx\_FTZU\_23\_0010X\_01.pdf



### Annex to Certificate of Conformity IECEx FTZU 23.0010X Issue No.: 01



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Applicant: Jukolux Oy

Address: Yrittäjänkatu 15; 65380 VAASA; Finland

Electrical Apparatus: Ex LED Luminaire type JUKO ALX and JUKO AFX

Type coding of luminaire:

#### JUKO AFX-xx-Mx-xxx-GL-C-P-x-xx-xxx-x

1 2 3 4 5678 9 10

1 Length of the luminaire	
06	640 mm
2 Amount of LED Modules	
M4	4 LED module (100W)
M6	6 LED modules (150W)
3 Optics	
060	60°
090	90°
120	120°
4 Cover	
GL	Glass
5 Cover type	
С	Clear
6 Material of cable glands	
Р	Plastic

7 Breather drain		
Α	M12	
8 Size of cable glands		
25	M25	
9 Coupling		
S1	1 phase	
S3	3 phase	
Т3	Through wiring, 3 phase	
ST1	Same end through wiring, 1 phase	
ST3	Same end through wiring, 3 phase	
10 Installation options		
1	Basic	
2	Heavy duty	
3	Pole adapter	
4	Adjustable handle	
5	22,5°	
6	45°	
7	Adjustable angle 15°- 30°	