

(1) **EU-Type-Examination Certificate**

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**



- (3) **Certificate Number** TÜV CY 22 ATEX 0206749 X
- (4) for the equipment: Floodlight  
Type: ExFL-IIB-xxxW-yyy and ExFL-IIC-xxxW-yyy
- (5) of the manufacturer: **DATA LINK d.o.o.**
- (6) Address: Blajburških žrtava 16, 43000 Bjelovar, Croatia
- Order number: 0206749
- Date of issue: 2023-02-21

- (7) The design of this equipment or protective system and any acceptable variation thereto are specified in the schedule to this EU-Type-Examination Certificate and the documents therein referred to.
- (8) TÜV CYPRUS Ltd, notified body No. 2261 in accordance with Article 17 of the Council Directive of 2014/34/EU of February 26, 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 22 0206749.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN IEC 60079-0:2018      EN 60079-1:2014      EN 60079-28:2015**  
**EN 60079-31:2014**
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type-Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment which are not covered by this certificate.
- (12) The marking of the equipment or protective system must include the following:



**II 2G Ex db op is IIB T5...T6 Gb or II 2G Ex db op is IIC T5...T6 Gb and/or**  
**II 2D Ex op is tb IIC T85 °C...T80°C Db**

Accredited by CYS-CYSAB  
Certificate No. C 004-2

TÜV CYPRUS Ltd (TUV NORD Group),  
The head of the notified body,



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### (13) SCHEDULE

(14) EU-Type-Examination Certificate No. TÜV CY 22 ATEX 0206749 X

(15) Description of equipment

Floodlight is an explosion-proof LED luminaire designed in type of protection flameproof enclosures "db" and in protection by enclosure 'tb'.

There are two types of Ex Floodlight luminaires: the first type ExFL-IIB-xxxW-yyy is group IIB, while the second type ExFL-IIC-xxxW-yyy is group IIC gases. Both types of luminaires satisfy requirements for dust group IIIC.

The luminaire housing is designed and optimized for LED light sources, with the purpose of efficient heat dissipation from the LED module and the power supply, but also to meet all the strict requirements prescribed by the norm for Ex luminaire. The housing of the luminaire is made of aluminum due to good heat dissipation and relatively low mass. Two types of luminaires have been developed for different groups of gases ExFL-IIB and ExFL-IIC, which differ in the construction of the upper cover and additional filling in the ExFL-IIC luminaire in order to reduce the volume of individual chambers. The basic parts of the ExFL-IIB luminaire are three aluminum pressure castings, while the basic parts of the ExFL-IIC luminaire are two aluminum pressure castings and an extruded and CNC machined aluminum profile.

The construction of the luminaire is made in such a way that the inside of the luminaire consists of two separate chambers. The first chamber contains the power supply and serves as a connection box for connecting the luminaire to the power source. The LED module is located in the second separate chamber. On the back cover of the luminaire housing, there are two threaded holes M25x1.5 for the ExFL-IIB luminaire, or M20x1.5 for the ExFL-IIC luminaire. The back cover of the case is attached with 12 M5 screws. The front frame, which holds the tempered glass, is attached to the luminaire body with 36 M5 screw. The screws must correspond to the minimum quality for stainless materials A2-70 (304).

Permissible range of ambient temperature:

-40 °C to +40 °C / +50 °C (Type ExFL-IIB-xxxW-yyy)

-20 °C to +40 °C / +50 °C (Type ExFL-IIC-xxxW-yyy)

Identification code:

<b>ExFL -</b> Basic mark	<b>IIB-</b> Equipment group IIB	<b>xxxW -</b> Nominal power in W (Can be 40 W to 150 W)	<b>yyy</b> Nominal voltage 24VAC, 42VAC, or 110VAC - 230VAC (Can be add additional mark that does not affect to the Ex protection)
<b>ExFL -</b> Basic mark	<b>IIC-</b> Equipment group IIC	<b>xxxW -</b> Nominal power in W (Can be 40 W to 150 W)	<b>yyy</b> Nominal voltage 24VAC, 42VAC, or 110VAC - 230VAC (Can be add additional mark that does not affect to the Ex protection)



The temperature class, maximum surface temperature and permitted ambient temperature depend on the light source power:

Ta [°C]	P [W]	Temperature class / Maximum surface temperature	Version
-40 to +50	up to 150	T5 / T85°C	IIB
-40 to +40	up to 150	T6 / T80°C	IIB
-40 to +50	up to 100	T6 / T80°C	IIB
-20 to +50	up to 150	T5 / T85°C	IIC
-20 to +40	up to 150	T6 / T80°C	IIC
-20 to +50	up to 100	T6 / T80°C	IIC

#### Ratings:

Product reference	ExFL-IIB 40W 110-230V ExFL-IIC 40W 110-230V	ExFL-IIB 60W 110-230V ExFL-IIC 60W 110-230V	ExFL-IIB 100W 110-230V ExFL-IIC 100W 110-230V	ExFL-IIB 140W 110-230V ExFL-IIC 140W 110-230V	ExFL-IIB 150W 110-230V ExFL-IIC 150W 110-230V
Input voltage range	110 – 230 VAC / 50-60 Hz				
Input power	40W	60W	100W	140W	150W
Power factor	>0,8	>0,87	>0,92	>0,96	>0,96
IP protection	IP66				
Ex category	II 2G; II 2D				
Ex marking ExFL-IIB	Ex db op is IIB T6 Gb; Ex op is tb IIIC T80 Db			Ex db op is IIB T5, T6* Gb; Ex op is tb IIIC T85, T80* Db	
Ambient temperature ExFL-IIB	T6, T80 Ta: -40°C to +50°C			T5, T85 Ta: -40°C to +40°C *T6, T80 Ta: -40°C to +50°C	
Ex marking ExFL-IIC	Ex db op is IIC T6 Gb; Ex op is tb IIIC T80 Db			Ex db op is IIC T5, T6* Gb; Ex op is tb IIIC T85, T80* Db	
Ambient temperature ExFL-IIC	T6, T80 Ta: -20°C to +50°C			T5, T85 Ta: -20°C to +40°C *T6, T80 Ta: -20°C to +50°C	
Light angle	60°, 90°, 120°, T2M, T3M		60°, 90°, 120°		
Housing	Die-cast aluminum, powder coated, tempered glass 10mm				
Weight ExFL-IIB	9,15kg (without bracket)				

Weight ExFL-IIC	10,2kg (without bracket)
Inlet type	ExFL-IIB 2xM25x1,5 ExFL-IIC 2xM20x1,5
Dimensions	ExFL-IIB 380x300x125mm ExFL-IIC 380x300x100mm

Product reference	ExFL-IIB 60W 24V ExFL-IIC 60W 24V	ExFL-IIB 60W 42V ExFL-IIC 60W 42V	ExFL-IIB 100W 42V ExFL-IIC 100W 42V
Input voltage range	24 VAC / 50-60 Hz	42 VAC / 50-60 Hz	42 VAC / 50-60 Hz
Input power	60W	60W	100W
Power factor	>0,95	>0,95	>0,95
IP protection	IP66		
Ex category	II 2G; II 2D		
Ex marking ExFL-IIB	Ex db op is IIB T6 Gb; Ex op is tb IIIC T80 Db		
Ambient temperature ExFL-IIB	T6, T80 Ta: -40°C to +50°C		
Ex marking ExFL-IIC	Ex db op is IIC T6 Gb; Ex op is tb IIIC T80 Db		
Ambient temperature ExFL-IIC	T6, T80 Ta: -20°C to +50°C		
Light angle	60°, 90°, 120°, T2M, T3M		60°, 90°, 120°
Housing	Die-cast aluminum, powder coated, tempered glass 10mm		
Weight ExFL-IIB	9,15kg (without bracket)		
Weight ExFL-IIC	10,2kg (without bracket)		
Inlet type	ExFL-IIB 2xM25x1,5 ExFL-IIC 2xM20x1,5		
Dimensions	ExFL-IIB 380x300x125mm ExFL-IIC 380x300x100mm		

Warning labels:

The following warnings can be applied on the enclosure:

WARNING: DO NOT OPEN WHEN ENERGIZED AND AT LEAST 30 MIN. AFTER DISCONNECTION

(16) Test documents are listed in the test report No. 22 0206749.

Routine test:

The manufacturer shall carry out the routine test of mechanical strength of the enclosure in accordance with clause 16.1 of EN 60079-1 with static overpressure, not less than:

- 12 bar (compartment with driver – version IIB)
- 9.1 bar (compartment with LED lightning source – version IIB)
- 15 bar (compartment with driver – version IIC)
- 8 bar (compartment with LED lightning source – version IIC).

(17) Special conditions for safe use

Supply cable of floodlight shall be suitable at least for an operating temperature of 85°C for version with power greater than 100 W if intended to maximum ambient temperature of 50 °C.

Screws used for fastening the parts of floodlight shall have a yield strength equal or higher than 700 N/mm<sup>2</sup> (screws A2-70).

The flameproof joints have different values from those specified in the tables of the EN 60079-1 standard. For information regarding the dimensions of the flameproof joints contact the manufacturer.

(18) Essential Health and Safety Requirements

This EU type Examination certificate covers only the Essential Health and Safety Requirements related to the Directive 2014/34/EU.