

# 1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 21ATEX0792X Issue: 0

4 Equipment: Explosion-proof Floodlight Type BFD610

5 Manufacturer: Sunleem Technology Incorporated Company

6 Address: No.15, Xihenggang Street,

Yangchenghu Town,

Xiangcheng District, Suzhou, Jiangsu, China

- 7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- 8 ExVeritas, Notified Body number 2804 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive
- 9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN 60079-0: 2018 EN 60079-1: 2014 EN 60079-31: 2014

- 10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- This EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- 12 The marking of the equipment shall include the following:

⟨€χ⟩ II 2 GD

II 2 GD Ex db IIB + H<sub>2</sub> T\* Gb

Ex th IIIC T\*\*\*°C Db

\*refer to description

Tamb -20°C to +40/55°C



On behalf of ExVeritas

P Lauritzen Managing Director



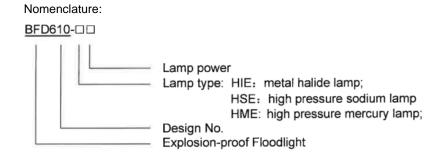
### 13 Description of Equipment or Protective System

The BFD610-\*\* explosion-proof floodlight consists of an aluminium alloy enclosure, a cemented toughened glass light transmitting cover and two entries. The enclosure is divided into two compartments as follows:

- the electrical compartment includes terminals, ballast, a capacitor, a trigger (for high pressure sodium lamp or metal halide lamp) and two entries for external connection. The two entries are closed by two blanking elements before packaging.
- the lighting compartment includes a lamp holder and a bulb.

The wire-through part between these two compartments is encapsulated.

Rating: 220V ~ 240VAC 50/60Hz



Light source can be high pressure mercury lamp, high pressure sodium lamp or metal halide lamp. Light source parameters:

Lamp type	Lamp	Ballast	Trigger	Compensation capacity	
HME	HPL-N 250W	BHLA 250L	/	CP18BU28 18uF	
	HPL-N 400W	BHLA 400L	/	CP25CU28 25uF	
HSE	SON 150W	BSN 150L	SN58(T5)	CP18BU28 18uF	
	SON 250W	BSN 250L	SN58(T5)	CP32ET28 32uF	
	SON 400W	BSN 400L	SN58(T5)	CA50FT28 50uF	
	MH UPS 175W	BPI 175L	SI53	CP12BP28 12uF	
HIE	HPI PLUS 250W	BSN 250L 200TS	SI51	CP18BU28 18uF	
	BU		3131	CF 10B020 10UF	
	MH 400W	BPI 400L	SI53	CP25CU28 25uF	

	Lamp	Temperature Class				
Lamp type		-20°C ≤ Tamb ≤ -40°C		-20°C ≤ Tamb ≤ -55°C		
		Gas	Dust	Gas	Dust	
HME	250W	T3	T190°C	T3	T195°C	
	400W	T3	T190°C	T2	T200°C	
HSE	150W	T4	T130°C	T3	T195°C	
	250W	T3	T190°C	T3	T195°C	
	400W	T3	T195°C	T2	T210°C	
	175W	T4	T135°C	T3	T195°C	
HIE	250W	T3	T190°C	Т3	T195°C	
	400W	T3	T190°C	T3	T195°C	

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### 14 <u>Descriptive Documents</u>

### 14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R3182/A/1	24 <sup>th</sup> Mar 2021	0	Initial issue of the Prime Certificate

### 14.2 Compliance Drawings:

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Description	Number	Issue	Date
BFD610 Series Flameproof Floodlight	2HRLM 511 1079	A.03	2021/2/21
Terminals	8HRLM 510 1018	A.01	18 Feb 2014
Fixing Board	8HRLM 100 1159	A.01	18 Feb 2014
Sleeve	8HRLM 210 1116	A.01	18 Feb 2014
Plug	8HRLM 325 1033	A.01	18 Feb 2014
Nameplate	8HRLM 860 1231	A.03	2021/2/21
Enclosure	8HRLM 003 1417	A.01	18 Feb 2014
Enclosure ring	8HRLM 313 1008	A.01	18 Feb 2014
Enclosure ring	8HRLM 313 1009	A.01	18 Feb 2014
Pressure frame	8HRLM 320 1015	A.01	18 Feb 2014
Well glass	8HRLM 402 1105	A.01	18 Feb 2014

### 15 <u>Conditions of Certification</u>

### 15.1 Special Conditions for Safe Use

- Repair of the threaded joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in table 3 and table 4 of EN 60079-1
- WARNING AFTER DE-ENERGIZING, DELAY 10 MINUTES BEFORE OPENING.
- WARNING DO NOT OPEN WHEN ENERGIZED.
- WARNING POTENTIAL ELECTROSTATIC CHARGING HAZARD SEE INSTRUCTIONS.
- CAUTION USE FASTENERS WITH YIELD STRESS ≥450MPa.
- In order to ensure the temperature class, the equipment shall be vertically mounted at horizontal to vertical down.

## 15.2 Conditions for Use (Routine tests) Manufacturer's responsibility

• Each apparatus shall be submitted to a static overpressure test under 1.2 MPa during minimum 10 seconds in accordance with clause 16.1 of EN 60079-1:2018

#### Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.

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