

### **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

L A Brisk

**IECEx CML 18.0198X** Certificate No.:

Page 1 of 4

Certificate history:

Status:

Current

Issue No: 2

Issue 1 (2019-08-21) Issue 0 (2019-02-21)

Date of Issue: 2022-05-06

Applicant:

The Wolf Safety Lamp Co. Limited

Saxon Road Works Sheffield S8 0YA **United Kingdom** 

Equipment:

WF-300xxx and WF-250xxx LED Floodlite Luminaires

Optional accessory:

Type of Protection:

Increased Safety, Encapsulation, and Dust Protection by Enclosure

Marking:

Ex eb mb IIC T4 Gb

Ex tb IIIC T118°C Db

Ta= -40°C to +55°C or

Ta= -40°C to +40°C when the optional protective cover is fitted

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Certification Officer** 

Signature:

(for printed version)

2022-05-06

(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:

**Eurofins E&E CML Limited Unit 1, Newport Business Park New Port Road** Ellesmere Port, CH65 4LZ **United Kingdom** 







## IECEx Certificate of Conformity

Certificate No.: IECEx CML 18.0198X Page 2 of 4

Date of issue: 2022-05-06 Issue No: 2

Manufacturer: The Wolf Safety Lamp Co. Limited

Saxon Road Works Sheffield S8 0YA United Kingdom

Manufacturing The Wolf Safety Lamp Co. Limited

locations: Saxon Road Works

Sheffield S8 0YA
United Kingdom

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

Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"

60079-31:2022-01

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:

GB/CML/ExTR19.0006/00 GB/CML/ExTR19.0140/00 GB/CML/ExTR21.0267/00

**Quality Assessment Report:** 

GB/BAS/QAR06.0017/10



# IECEx Certificate of Conformity

Certificate No.: IECEx CML 18.0198X Page 3 of 4

Date of issue: 2022-05-06 Issue No: 2

### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Wolf LED Floodlite comprises a two-part aluminium body with clear glass panel in the front cover, which is available in two sizes – the WF300xxx and the WF250xxx. The front cover is secured to the base unit via four M5 screws. The luminaire is intended for use in temporary or fixed installations and is provided with appropriate mounting brackets for this purpose.

Refer to certificate Annex for full product description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below: Refer to certificate Annex for Specific Conditions of Use.



## IECEx Certificate of Conformity

Certificate No.: IECEx CML 18.0198X Page 4 of 4

Date of issue: 2022-05-06 Issue No: 2

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

This variation introduced the following modifications:

- 1. The introduction of the model type WF-250xxx.
- 2. Update of standard toIEC 60079-0Ed. 7.
- 3. To allow alternative component certified terminals tobe utilised.
- 4. Amendment to the wording of a condition of manufacture

#### Issue 2

This variation introduced the following modifications:

- 1. To allow options for alternative LEDs.
- 2. To allow options to join/repair wires.
- 3. Update of IEC 60079-7:2015 Ed. 5 to IEC 60079-7:2017 Ed. 5.1.
- 4. Update of IEC 60079-18:2014 Ed. 4 to IEC 60079-18:2017 Ed. 4.1
- 5. Update of IEC 60079-31:2013 Ed. 2 to IEC 60079-31:2022 Ed. 3.
- 6. Removal of 'op is' Marking and IEC 60079-28:2015 standard references.

#### Annex:

IECEx CML 18.0198X Issue 2 -Certificate Annex.pdf





IECEx CML 18.0198X Issue 2 Annexe to:

Applicant: Wolf Safety Lamp Company Ltd.

WF-300xxx and WF-250xxx LED Floodlite Luminaires Apparatus:

### **Description**

The Wolf LED Floodlite comprises a two-part aluminium body with clear glass panel in the front cover, which is available in two sizes - the WF300xxx and the WF250xxx. The front cover is secured to the base unit via four M5 screws. The luminaire is intended for use in temporary or fixed installations and is provided with appropriate mounting brackets for this purpose.

Certified Increased Safety terminals, which provide connection facilities for incoming cables and internal wiring connections, are fitted to a retention bracket. One or two encapsulated driver modules are mounted on the retention bracket that is secured to the rear enclosure via two M5 screws. Each module powers an LED array mounted in the base unit. The LED array comprises 18 LEDs, each LED has an optic fitted over it and the complete assembly is encapsulated. Within the luminaire range there is a choice of optics giving different beam/illumination patterns.

Internal and external earthing facilities are provided and up to two cable entry holes are provided depending on customer requirements. Increased Safety/Dustproof certified glands or blanking plugs are used in conjunction with the cable entry holes. LV versions are certified between 0 to 50 V ac/dc and operate between 18V or 19V to 50 V. HV versions are certified between 0 to 264 V ac/dc.

Within the luminaire range linkable products can be specified which allow for numerous luminaires to be interlinked so power is fed from one point to multiple luminaires in a string configuration. The luminaire is certified for use with approved, sacrificial accessories.

### **Conditions of Manufacture**

The following conditions are required of the manufacturing process for compliance with the certification.

- Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. At the conclusion of manufacture, and before shipping, each encapsulated LED Array, LV Driver, and HV driver shall be subject to a routine visual inspection to ensure no damage of the encapsulant is evident, such as cracks in the compound, exposure of the encapsulated parts, flaking, inadmissible shrinkage, swelling, decomposition, failure of adhesion, or
- At the conclusion of manufacture, and before shipping, each encapsulated LV driver shall be subject to a routine dielectric strength test of 500 Vac rms, for a period of 60 seconds, without breakdown between the potting compound surface and the enclosure. Alternatively, a test at 1.2 times the test voltage may be applied for at least 100 ms. The test is also permitted to be conducted at a dc voltage of 140% of the specified rms test voltage.
- At the conclusion of manufacture, and before shipping, each encapsulated HV driver shall be subject to a routine dielectric strength test of 1,528 V rms, for a period of 60 seconds, without

Eurofins E&E CML Limited Newport Business Park New Port Road Ellesmere Port CH65 4LZ

T +44 (0) 151 559 1160 E info@cmlex.com

www.cmlex.com

Certificate Annex IECEx Version: 9.0 Approval: Approved



- breakdown between the potting compound surface and the enclosure. Alternatively, a test at 1.2 times the test voltage may be applied for at least 100 ms. The test is also permitted to be conducted at a dc voltage of 140% of the specified rms test voltage.
- v. At the conclusion of manufacture, and before shipping, each encapsulated LED Array shall be subject to a routine dielectric strength test of 700 Vdc, for a period of 60 seconds, without breakdown between the positive solder pad of the folded PCB and the surface of the potting compound directly above the positive solder pad. Alternatively, a test at 1.2 times the test voltage may be applied for at least 100 ms.
- vi. The equipment covered by this certificate incorporates component certified terminals; it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these terminals. The manufacturer shall inform CML of any modifications of the terminals that may impinge upon the explosion safety design of their products.
- vii. At the conclusion of manufacture, and before shipping, each set of component certified terminals fitted into the HV luminaires shall be subject to a routine dielectric strength test of 1,528 V rms, for a period of 60 seconds, without breakdown between the un-insulated live parts and the enclosure. Alternatively, a test at 1.2 times the test voltage may be applied for at least 100 ms. The test is also permitted to be conducted at a dc voltage of 140% of the specified rms test voltage.
- viii. Where the manufacturer fits cable entry devices, the manufacturer shall fit suitably IECEx equipment certified cable entry devices, marked Ex eb IIC and Ex tb IIIC Db. The cable entry devices shall maintain the degree of ingress protection IP64/67 and be suitable for an upper temperature of at least 75°C, as well as the lower ambient.
- ix. At the conclusion of manufacture, and before shipping, each set of component certified terminals fitted into the LV luminaires shall be subject to a routine dielectric strength test of 500 V rms, for a period of 60 seconds, without breakdown between the un-insulated live parts and the enclosure. Alternatively, a test at 1.2 times the test voltage may be applied for at least 100 ms. The test is also permitted to be conducted at a dc voltage of 140% of the specified rms test voltage.

### **Specific Conditions of Use**

The following conditions relate to safe installation and/or use of the equipment.

- i. The enclosures paint coated surface may be non-conducting and may generate an ignition-capable level of electrostatic charge under certain extreme conditions within a dust atmosphere. The user shall ensure that the equipment shall not be used in a location where the external conditions are conductive to the build-up of electrostatic charge on non-conductive surfaces. Additionally, the equipment shall only be cleaned with a damp cloth.
- ii. The equipment is certified for use with an approved range of accessories that are designed to protect the product and must be supplied by Wolf Safety. Refer to the manufacturer's instructions regarding the replacement frequency of the approved accessories.
- iii. Fitting the Protective Cover lowers the maximum ambient temperature from +55°C to +40°C.