



EU Type Examination Certificate CML 18ATEX3372X Issue 2

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

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

3 Manufacturer The Wolf Safety Lamp Co. Limited

Saxon Road Works, 4 Address

Sheffield, S8 0YA, **United Kingdom**

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout, The 6 Netherlands. Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

- If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN IEC 60079-7:2015+A1:2018 EN 60079-18:2015+A1:2017

IEC 60079-31:2022 Ed. 3

The equipment shall be marked with the following:



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.



Certification Officer





11 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.

Variation 1

This variation introduced the following modifications:

- i. The introduction of the model type WF-250xxx.
- ii. Update of standard to EN IEC 60079-0:2018.
- iii. To allow alternative component certified terminals to be utilised
- iv. Amendment to the wording of a condition of manufacture.

Variation 2

This variation introduced the following modifications:

- i. To allow options for alternative LEDs.
- ii. To allow options to join/repair wires.
- iii. Update of EN 60079-7:2015 and IEC 60079-7:2015 Ed. 5 to EN IEC 60079-7:2015+A1:2018 and IEC 60079-7:2017 Ed. 5.1.
- iv. Update of EN 60079-18:2015 and IEC 60079-18:2014 Ed. 4 to EN 60079-18:2015+A1:2017 and IEC 60079-18:2017 Ed. 4.1
- v. Update of EN 60079-31:2014 and IEC 60079-31:2013 Ed. 2 to IEC 60079-31:2022 Ed. 3.
- vi. Removal of 'op is' Marking and EN 60079-28:2015 and IEC 60079-28:2015 standard references.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	21 Feb 2019	R12067C/00	Issue of prime certificate
1	21 Aug 2019	R12209A/00	The introduction of variation 1
2	06 May 2022	R14155A/00	The introduction of variation 2

Note: Drawings that describe the equipment or component are listed in the Annex.





Conditions of Manufacture 13

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 softening.
- iii. 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 ac rms test voltage.
- At the conclusion of manufacture, and before shipping, each encapsulated HV driver shall be iv. subject to a routine dielectric strength test of 1528 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 ac rms test voltage.
- At the conclusion of manufacture, and before shipping, each encapsulated LED Array shall be ٧. 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 B.V. 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 1528 Vac 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 ac rms test voltage.
- Where the manufacturer fits cable entry devices, the manufacturer shall fit suitably ATEX viii. 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.
- At the conclusion of manufacture, and before shipping, each set of component certified ix. terminals fitted into the LV luminaires shall be subject to a routine dielectric strength test of 500 Vac 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 ac rms test voltage.





14 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 conducive 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.

Certificate Annex

Certificate Number CML 18ATEX3372X

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

Manufacturer The Wolf Safety Lamp Co. Limited

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
WF – 701	1 of 1	4	12 Feb 2019	WF – 300XL General Assembly
WF – 711	1 to 3	5	12 Feb 2019	WF – 300XL Approval
WF - 803	1 of 1	2	12 Feb 2019	HV MK2 Potted Driver for WF-300XL
WF – 804	1 of 1	4	12 Feb 2019	Folded PCB LED Array
LX – 925	1 of 3	3	12 Feb 2019	LED LinkEx Compact LV MK2 Schematic
LX - 903	1 to 2	5	12 Feb 2019	LED LinkEx Compact HV MK2 Schematic
WF – 825	1 of 1	2	12 Feb 2019	LV MK2 Potted Driver For WF-825

Issue 1

Drawing No.	Sheets	Rev	Approved date	Title
WF-701	1 of 1	5	21 Aug 2019	WF-300XL General assembly
WF-711	1 to 3	6	21 Aug 2019	WF-300XL Approval
WF-721	1 to 2	1	21 Aug 2019	WF-250XL General assembly
WF-731	1 of 1	1	21 Aug 2019	WF-250XL Approval

Issue 2

Drawing No.	Sheets	Rev	Approved date	Title
WF-711	1 to 3	7	06 May 2022	WF-300XL Approval
WF-731	1 of 1	2	06 May 2022	WF-250XL Approval
WF-804	1 of 1	5	06 May 2022	Folded PCB LED Array