

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx SIR 17.0013	X issue N	1 0,:0	Certificate history
Status:	Current			
Date of Issue:	2017-12-06	Page 1 of 3		
Applicant:	Wolf Safety Lamp Saxon Road Works Sheffield S8 0YA United Kingdom	Company Ltd.		
Equipment: Optional accessory:	WF-300xxx LED Flo	odlite Luminaire		
Type of Protection:	Increased Safety, E	ncapsulation,Optical Radiat	ion and Dust Pr	otection by Enclosure
Marking:	Ex eb mb op is IIC T4 Ex tb op is IIIC T118° Ta = -40°C to +55°C	Gb C Db		
Approved for issue on b Certification Body:	ehalf of the IECEx	C Ellaby		
Position:		Deputy Certification Manage	۶r	
Signature: (for printed version)		hay	P.P. A.G	Boyes
Date:		2017-12	2-06	
 This certificate and so This certificate is not if The Status and auther 	hedule may only be rep transferable and remain nticity of this certificate	roduced in full. s the property of the issuing b may be verified by visiting the	ody. Official IECEx W	Vebsite.
Certificate issued by: SIRA C Unit 6, Hay Hawarde Ur	ertification Service CSA Group warden Industrial Park n, Deeside, CH5 3US nited Kingdom		ra	CSA Group



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Manufacturer:

Wolf Safety Lamp Company Ltd. Saxon Road Works Sheffield S8 0YA United Kingdom

Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-18 : 2014 Edition: 4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
IEC 60079-28 : 2015 Edition: 2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition: 5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

This Certificate **does not** indicate compliance with electrical 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 Report: GB/SIR/ExTR17:0235/00

Quality Assessment Report:

GB/BAS/QAR06.0017/07



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Wolf LED Floodlite comprises a two part aluminium metal body with clear glass panel in the front cover. The front cover is secured to the base unit using 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 Annexe for additional EQUIPMENT information and CONDITIONS OF MANUFACTURE.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The enclosures paint coated surface is 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 installed 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.

Annex: IECEx SIR 17 0013X Iss 0_Annexe.pdf

Annexe to: IECEx SIR 17.0013X Issue 0

Applicant: Wolf Safety Lamp Company Ltd.

Apparatus: WF-300xxx LED Floodlite Luminaire

The Wolf LED Floodlite comprises a two part aluminium metal body with clear glass panel in the front cover. The front cover is secured to the base unit using 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. Two encapsulated driver modules are mounted on the retention bracket that is secured to the rear enclosure using two M5 screws. Each module powers an LED array mounted in the base unit. The LED array comprises of 18 LEDs, each LED has an optic fitted over it and the complete assembly is encapsulated. Within the luminaire ranges there is a choice of optics giving different beam/illumination patterns.

Internal and external earthing facilities are provided, 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. The LV version is certified between 0 to 50V AC/DC and operates between 18V to 50V. The HV version is certified between 0 to 264V AC/DC and has an operational voltage of 90V to 264V.

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.

Conditions of Manufacture

- 1. 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.
- 2. At the conclusion of manufacture, and before shipping, each encapsulated LV driver shall be subject to a routine dielectric strength test of 500Vac 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.
- 3. At the conclusion of manufacture, and before shipping, each encapsulated HV driver shall be subject to a routine dielectric strength test of 1528Vac 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.
- 4. At the conclusion of manufacture, and before shipping, each encapsulated LED Array shall be subject to a routine dielectric strength test of 700Vdc, 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.
- 5. 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 Sira of any modifications of the terminals that may impinge upon the explosion safety design of their products.
- 6. 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 1528Vac 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.

Date: 06 December 2017

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Sira Certification Service

CSA Group

Unit 6 Hawarden Industrial Park, Hawarden, CH5 3US, United Kingdom Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330 Email: <u>ukinfo@csagroup.org</u> Web: <u>www.csagroupuk.org</u>

Form 9530 Issue 1

Annexe to: IECEx SIR 17.0013X Issue 0

Applicant: Wolf Safety Lamp Company Ltd.

Apparatus: WF-300xxx LED Floodlite Luminaire



- 7. Where the manufacturer fits cable entry devices, the manufacturer shall fit suitably certified cable entry devices that are certified to the same edition of IEC 60079-0, IEC 60079-7, and IEC 60079-31 to which the equipment is certified. The cable entry devices shall maintain the degree of ingress protection IP64/67.
- 8. 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 500Vac 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.

Date: 06 December 2017

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Sira Certification Service

 Unit 6 Hawarden Industrial Park,

 Hawarden, CH5 3US, United Kingdom

 Tel:
 +44 (0) 1244 670900

 Fax:
 +44 (0) 1244 681330

 Email:
 ukinfo@csagroup.org

 Web:
 www.csagroupuk.org