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 15.0115X issue No.:1

Certificate history:
Issue No. 1 (2016-7-14)
Issue No. 0 (2016-2-22)

Status: **Current**

Date of Issue: **2016-07-14** Page 1 of 5

Applicant: **Wolf Safety Lamp Company Limited**
Saxon Road Works
Sheffield
S8 0YA
United Kingdom

Equipment: **Wolf ATEX LED Inspection Leadlamp**
Optional accessory:

Type of Protection: **Increased Safety, Encapsulation and Dust Protection by Enclosure**

Marking:

Ex eb mb op is I Mb

Ta = -30°C ≤ Ta ≤ +55°C

Ex eb mb op is IIC T4 Gb
Ex mb op is tb IIIC T95°C Db
Ta = -30°C ≤ Ta ≤ +55°C

Approved for issue on behalf of the IECEx Certification Body: N Jones

Position: Certification Manager

Signature:
(for printed version)

Date: 2016-07-14

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

sira CERTIFICATION

CSA Group

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Manufacturer: **Wolf Safety Lamp Company Limited**
Saxon Road Works
Sheffield
S8 0YA
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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/ExTR16.0032/00 GB/SIR/ExTR16.0175/00

Quality Assessment Report:

GB/BAS/QAR06.0017/06

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The Wolf ATEX LED Inspection Leadlamp is a portable, handheld, LED lamp. The enclosure consists of an elliptical aluminium enclosure with a clear, polycarbonate, domed lens at the front and an aluminium cover at the back. The lens and the back cover are sealed to the main body of the enclosure using a black or yellow gasket and four fasteners on each of the front and back faces. Underneath the clear lens, there is a clear/diffused inner dome which contains LEDs and an encapsulating compound. The main body of the enclosure contains two compartments; a smaller terminal room compartment for connection of the power supply to the driver and a larger, encapsulated compartment housing the LED driver. The main enclosure, at the terminal room, has an M20 entry for connection of a suitably certified cable gland.
The aluminium enclosure is housed in a plastic handle which leaves only the clear polycarbonate domed lens exposed. The cable passes through the bottom of the handle to the cable gland. Although the handle provides mechanical protection, it does not form the explosion protection enclosure.
Refer to EQUIPMENT (Continued) for additional information

CONDITIONS OF CERTIFICATION: YES as shown below:

1. This equipment shall not be used in mining locations where oils, greases or hydraulic liquids may be present.

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EQUIPMENT(continued):

The equipment is certified for three rating options, as defined in the table below:

Model no.	Voltage rating / V (ac or dc)	Current / mA
SP-600Hxxx	0 to 264	80
SP-600Lxxx	0 to 54	600
SP-600ELxxx	0 to 16	800

The equipment may be marked with other voltage ratings within this range.

The handle has various fitting options, such as a clamp, hook, magnet, blanking plug and cage which may be used with the equipment. The equipment also has the option of being used with a plastic protective bag in accordance with the manufacturer's certification specifications.

In addition to the IP requirements of the applied standards, the equipment has been additionally tested to IP67 in accordance with IEC 60529.

Conditions of manufacture

The Manufacturer shall comply with the following:

1. The following routine tests shall be performed on each product manufactured:
   - The encapsulated parts of the apparatus shall be subjected to a visual inspection. No visible damage of the compound shall be evident, such as cracks, exposure of the encapsulated parts, flaking, impermissible shrinkage, discoloration, swelling decomposition or softening, as required by IEC 60079-18:2014.
   - For equipment which uses the High Voltage driver (model SP-600Hxxx), a dielectric strength test of 1528 V ac, shall be applied between circuit and casing for at least 1 minute, as required by EN 60079-7:2007, Clause 6.1. No breakdown shall occur. As an alternative to the ac test voltage, a test voltage of 2139 V dc may be applied.
   - For equipment which uses the Low Voltage driver (model SP-600Lxxx) or the Extra Low Voltage driver (model SP-600ELxxx), a dielectric strength test of 500 V r.m.s. shall be applied between the circuit and the casing for at least 1 minute, as required by EN 60079-7:2007, Clause 6.1. No breakdown shall occur. As an alternative to the ac test voltage, a test voltage of 700 V dc may be applied.

     As an alternative to the specified test voltages, the test voltages may also be increased by a factor of 1.2 and applied for at least 100 ms.
2. The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of their products

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1 – this Issue introduced the following changes:

1 Thermal fuse rating revised to permit temperature rating of ≤130°C.

2 To permit the use of a wire link to allow the relocation of capacitor 'C5'.

3 Following appropriate assessment to demonstrate compliance, IEC 60079-28:2015 Ed 2 was added to the list of standards, the marking was amended accordingly.