



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 12.0070X** issue No.:1

Status: **Current**

Certificate history:
Issue No. 1 (2012-12-6)
Issue No. 0 (2012-6-19)

Date of Issue: **2012-12-06** Page 1 of 4

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

Electrical Apparatus: **LX-XXX LinkEx LED Luminaires**
Optional accessory:

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

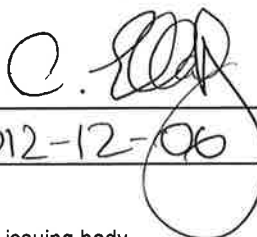
Marking: **Ex e mb IIC T3 Gb**
Ex t IIIC T170°C Db IP 6X
(-20°C to +40°C)

Approved for issue on behalf of the IECEx
Certification Body: **C Ellaby**

Position: **Deputy Certiiftaion Manager**

Signature:
(for printed version)

Date:



2012-12-06

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](http://www.iecex.com).

Certificate issued by:

SIRA Certification Service
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

sira
CERTIFICATION



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Page 2 of 4

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

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 : 2007-10
Edition: 5 | Explosive atmospheres - Part 0: Equipment - General requirements |
| IEC 60079-18 : 2009
Edition: 3 | Explosive atmospheres Part 18: Equipment protection by encapsulation "m" |
| IEC 60079-31 : 2008
Edition: 1 | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't' |
| IEC 60079-7 : 2006-07
Edition: 4 | 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/ExTR12.0134/00](#)

[GB/SIR/ExTR12.0278/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0017/03](#)

[GB/BAS/QAR06.0017/04](#)



IECEx Certificate of Conformity

Certificate No.: IECEx SIR 12.0070X

Date of Issue: 2012-12-06

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The LX-XXX LinkEx LED Luminaires are suitable for temporary lighting installations and are fully described in the Annexe to this certificate.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The user/installer shall ensure that, when the luminaire is fitted with a previously certified Socket that has associated special conditions for safe use, they shall take into account any restrictions or conditions for safe use that are applicable to these devices.
2. Some of the Sockets used in this equipment may bear intrinsically safe marking, this safety concept is not relevant to the construction of the luminaires covered by this certificate, however, these luminaires do rely on the other concepts, flameproof and increased safety, that are applied to these certified Sockets. The user shall therefore take this into consideration when installing this equipment and the luminaires shall not be involved with any intrinsically safe circuitry.



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Certificate No.: IECEx SIR 12.0070X

Date of Issue: 2012-12-06

Issue No.: 1

Page 4 of 4

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

Issue 1 – this Issue introduced the following changes:	
1.	The luminaires were re-designated as 'temporary lighting', the Description of Equipment was therefore amended accordingly, as a consequence, the warning label, 'Do not move when energised', is no longer required.
2.	The anti-static coating on the end caps and bump rings was removed; in addition, optional ribs were added to the end cap.
3.	A statement about independent Ingress Protection testing was introduced into the Description of Equipment.
4.	The fuse rating on drawing LX-924 was corrected and is now defined as 5A, 125V.
5.	An optional 'ferrite' was added to the 24 V driver.
6.	Minor changes to the gear tray were recognised.
7.	Plastic wire supports were added to the encapsulated LED assemblies.
8.	Alternative protective ring materials were introduced.
9.	An alternative potted fuse construction was recognised.
10.	The introduction of alternative driver box grommets.
11.	The type reference name of the silicone gasket was changed.
12.	An alternative, external, non-metallic label may be allowed to be fitted.
13.	The use of additional, thermal protective fuses was permitted.
14.	Drawing number LX-710 was removed since the information it detailed that is relevant to explosion safety has now been included on other drawings.
15.	An explanatory Condition of Certification was added to address the Intrinsic Safety marking may be applied to some of the previously certified Sockets.
16.	Addition of clamp/magnet accessory.
17.	Removal of ATX socket certificate number; IECEx LCI 04.0014 and replacement with IECEx LCI 07.0012U, which are the flange mounted versions.

Annexe to: IECEx SIR 12.0070X Issue 1
Applicant: Wolf Safety Lamp Company Limited
Apparatus: LX-XXX LinkEx LED Luminaires



The LX-XXX LinkEx LED Luminaires are suitable for temporary lighting installations. The luminaires comprise a clear, tubular, polycarbonate lamp envelope with two polycarbonate end mouldings. The lamp envelope is all treated with a clear anti static coating to safely dissipate any static electricity. The end mouldings are secured to the tube via the internal gear tray, which is fabricated from steel or aluminium, two M5 and two M6 screws and bonded seals are used to secure each end cap. A silicone gasket is fitted within a groove on each end cap, thus maintaining the IP54/IP64 (as applicable) ratings. The luminaires have additionally been independently tested according to the requirements of EN/IEC 60529 to meet IP 67, with no sockets fitted, IP 66 when sockets are fitted and IP54 for Stahl Type 8575 or 8591 sockets.

The luminaires' are fitted with replaceable bump ring clamped between the seal ring and end plate, giving additional protection to the luminaire.

180° variant – These comprise a main gear tray, with the driver and terminal connection blocks on the underside with two LED strips fitted to the upper, distributing the light through 180°.

360° variant – These comprise two gear trays and two narrow channels, with the driver and terminal connection blocks fitted along with two LED strips, one fitted to each side, distributing the light through 360°.

The following optional supply terminal blocks may be fitted:

Manufacturer	Type Ref.	Coded	Certificate no.
Weidmüller	Type BK	Ex e II	Sira 01ATEX3247U
Weidmüller	Type MK6	Ex e II	Sira 01ATEX3249U
Phoenix Contact GmbH & Co. KG	Type G5/...EX	Ex e II	PTB 06ATEX1034U

Luminaires can be supplied with sockets fitted to the end caps with bolts, nuts and sealing washers and/or various lengths of cable with plugs fitted. The following optional certified sockets may be fitted to the linkable versions only:

Manufacturer	Type Ref.	Coded	Certificate Number
Cooper Crouse-Hinds GmbH	Type GHG 51.R....	Ex ed [ia] IIC T6 or T5 Ex tD A21 IP66 T80°C	IECEX BKI 04.0002
R. Stahl	Type 8591/...-..*....	Ex de IIC T6 Ex tD A21 IP66 T52°C	IECEX BKI 07.0001
ATX	Type PCX	Ex de IIC T6 or T5 Ex tD A21 IP66 T68°C	LCIE 02 ATEX 0001U
Marechal	Type DXN1	Ex de IIC T* Ex tD A21 IP66/67 T*	IECEX LCI 09.0005X
Stahl	Type 8570	Ex de IIC T6 Ex tD A21 IP 66 T80°C	IECEX PTB 05.0023

The luminaires are designed for use with an electrical supply of either 85Vac to 264Vac, 50/60Hz or 19Vdc/ac, rms to 28Vdc/ac, rms.

The luminaires may be mounted in any attitude and are suitable for use with accessories.

The coding is applicable, as follows:

Ex emb IIC T3 Gb (-20°C to +40°C)
 Ex t IIIC T170°C Db IP 64

Coding when fitted with Stahl Type 8575 sockets:
 Ex emb IIC T3 Gb (-20°C to +40°C)

Annexe to: IECEx SIR 12.0070X Issue 1
Applicant: Wolf Safety Lamp Company Limited
Apparatus: LX-XXX LinkEx LED Luminaires



Conditions Of Manufacture

- i. 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 60079-18:2009 Clause 9.1.
 - An electric strength test of $2U + 1000$ V (where U is the supply voltage) with a minimum of 1500 V ac, shall be applied between circuit and casing for at least 1 minute as required by IEC 60079-7:2006, Clause 6.1. No breakdown shall occur. Alternatively, a test at 1.2 times the test voltage may be applied for at least 100 ms.
- ii. 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.
- iii. When the luminaire is fitted with a socket that has associated special conditions for safe use, the manufacturer shall take all reasonable steps to ensure that the user/installer complies with these conditions.