

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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Certificate No.:

IECEX BAS 11.0116

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Certificate history:

Status:

Current

Issue No: 4

Issue 3 (2017-02-09) Issue 2 (2016-01-18) Issue 1 (2013-10-14) Issue 0 (2012-01-30)

Date of Issue:

2020-03-31

Applicant:

Wolf Safety Lamp Company Limited

Saxon Road Works

Sheffield S8 0YA

United Kingdom

Equipment:

Wolf M-8x Midi Torch, TR-6x Compact Right-Angled Torches

Optional accessory:

Type of Protection:

Intrinsic Safety

Marking:

M-8x (x < 5) Ex ib I Mb M-8x (x ≥ 5) Ex ia l Ma

Ex ib IIB/IIC T3/T4 Gb Ex ib IIIB T200°C Db Ex ia IIC T3/T4 Ga Ex ib IIIB T200°C Db

TR-6x (x < 5) Ex ib I Mb TR-6x (x ≥ 5) Ex ia I Ma Ex ia IIC T3/⊓

Ex ib IIC T3/T4 Gb Ex ib IIIB T200°C Db Ex ia IIC T3/T4 Ga Ex ib IIIB T200°C Db

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Technical Manager

Position:

Signature: (for printed version)

Date:

9/4/2020

RSS- Omi

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Certificate issued by:

SGS Baseefa Limited Rockhead Business Park Staden Lane Buxton, Derbyshire, SK17 9RZ United Kingdom





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Manufacturer: Wolf Safety Lamp Company Limited

Saxon Road Works

Sheffield S8 0YA

United Kingdom

Additional manufacturing locations:

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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

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/BAS/ExTR11.0225/00 GB/BAS/ExTR13.0190/00 GB/BAS/ExTR15.0369/00 GB/BAS/ExTR17.0033/00 GB/BAS/ExTR19.0221/00

Quality Assessment Report:

GB/BAS/QAR06.0017/09



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

M-8x

The Wolf M-8x (where x is used to denote different variants) Midi Torch range are self-contained primary cell powered torches that are moulded in high impact strength plastic, contain a single LED light source and are powered by four zinc carbon R6 or four alkaline manganese LR6 cells.

The M-8x (x < 5) is designed using level of protection Ex ib for Group I, for Group IIB/IIC T3/T4 Zone 1, and for Group IIIB Zone 21, and can be marked:

Ex ib I Mb

Ex ib IIB/IIC T3/T4 Gb

Ex ib IIIB T200°C Db

The M-8x (x < 5) gas group will be either IIB or IIC, and the ambient temperature range will be either -20°C \leq T_a \leq +40°C or -40°C \leq T_a \leq +40°C as marked on each torch.

The M-8x (x \geq 5) is designed using level of protection Ex ia for Group II, for Group IIC T3/T4 Zone 0, and Ex ib for Group IIIB Zone 21, and can be marked:

Ex ia I Ma

Ex ia IIC T3/T4 Ga

Ex ib IIIB T200°C Db

M-8x ($x \ge 5$) torches will continue to be manufactured against the previous issue of this certificate marked "Da" until such time that EN 60079-0:2012 +A11:2013 becomes deharmonised. At this time further product must comply with the markings in and requirements of this issue of the certificate so must be marked "Db".

The M-8x (x \geq 5) ambient temperature range will be either -20°C \leq T_a \leq +40°C or -40°C \leq T_a \leq +40°C as marked on each torch.

For Group II T4 applications R6 cells of any type or LR6 cells of the following types may be used:- Duracell Procell, Duracell Plus, Industrial by Duracell, Procell (grey), Energizer Industrial, Energizer Ultra+, Energizer EN91, Energizer E91.

For Group I, or Group II T3, or Group IIIB applications any R6 cells or any LR6 cells may be used.

Cell types should not be mixed.

Based on IEC 60079-28:2015 ISH1:2019, the M-8x torches are now considered out of scope of IEC 60079-28. Earlier units exist that are marked "op is", whereas later units are not marked "op is". Irrespective of the marking, the M-8x torches are not considered to create an ignition risk due to optical radiation.

SPECIFIC CONDITIONS OF USE: NO



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Equipment (continued):

TR-6x

The Wolf TR-6x (where x is used to denote different variants) Compact Right Angled Torch range are self-contained primary cell powered torches that are moulded in high impact strength plastic, contain a single LED light source and are powered by four zinc carbon R6 or four alkaline manganese LR6 cells.

The TR-6x (x < 5) is designed using level of protection Ex ib for Group I, for Group IIC T3/T4 Zone 1, and for Group IIIB Zone 21, and can be marked:

Ex ib I Mb Ex ib IIC T3/T4 Gb Ex ib IIIB T200°C Db

The TR-6x ($x \ge 5$) is designed using level of protection Ex ia for Group II, for Group IIC T3/T4 Zone 0, and Ex ib for Group IIIB Zone 21, and can be marked:

Ex ia I Ma Ex ia IIC T3/T4 Ga Ex ib IIIB T200°C Db

The TR-6x ambient temperature range is -30°C \leq T_a \leq +40°C.

For Group II T4 applications R6 cells of any type or LR6 cells of the following types may be used:- Duracell Procell, Duracell Plus, Industrial by Duracell, Procell (grey), Energizer Industrial, Energizer Ultra+, Energizer EN91, Energizer E91.

For Group I, or Group II T3, or Group IIIB applications any R6 cells or any LR6 cells may be used.

Cell types should not be mixed.

Based on IEC 60079-28:2015 ISH1:2019, the TR-6x torches are now considered out of scope of IEC 60079-28. Earlier units exist that were marked "op is" at a time prior to the publication of the interpretations sheet. Later units are not marked "op is". Irrespective of the marking, the TR-6x torches are not considered to create an ignition risk due to optical radiation.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above) Variation 4.1

To permit the addition of the TR-6x Right Angled torch, and to confirm that the equipment is now considered outside the scope of IEC60079-28:2015.

Variation 4.2

To confirm the standards update to IEC 60079-0:2017

EXTR: GB/BAS/EXTR19.0221/00

File Reference: 19/0290