



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

Certificate No.: IECEx NEM 14.0005X Issue No: 0 Certificate history:  
Issue No. 0 (2014-02-13)

Status: **Current** Page 1 of 4

Date of Issue: **2014-02-13**

Applicant: **Moflash Signalling Ltd**  
Unit 18 Klaxon Industrial Estate, Tyseley  
Birmingham B11 2HA.  
**United Kingdom**

Electrical Apparatus: **Sounder & Loud Speaker**  
*Optional accessory:*

Type of Protection: **Ex d**

Marking: Ex d IIC T4( Tamb=-40 ? ~+70 ? ) T5 ( Tamb=-40 ? ~+60 ? ) /T6 ( Tamb=-40 ? ~+55 ? ) Gb  
Ex tb IIIC T135 ? ( Tamb=-40 ? ~+70 ? ) /T100 ? ( Tamb=-40 ? ~+60 ? ) /T85 ? ( Tamb=-40 ? ~+55 ? )  
IP66

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

Asle Kaastad

*Position:*

Certification Manager

*Signature:  
(for printed version)*

*Date:*

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:

**NEMKO**  
Gaustadelleen 30  
Oslo N-0314  
Norway





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Manufacturer: **Moflash Signalling Ltd**  
Unit 18 Klaxon Industrial Estate, Tyseley  
Birmingham B11 2HA  
**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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2008</b> Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"

*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:

CN/CQM/ExTR13.0037/00 NO/NEM/ExTR14.0006/00

#### Quality Assessment Report:

GB/SIR/QAR14.0001/00



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## Schedule

### EQUIPMENT:

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

There are three different materials of the enclosure of the product, SD-125 (stainless steel), SD-135 (aluminum alloy), SD-150 (GRP). The product is made up of; Main body, back-cover and front-cover, connected together by a spigot (flameproof joint). Furthermore the product has a sounder driver which is screwed into the front cover by an Ex thread. A sintered disc is press fitted into a slot of this and kept in place by a press fitted ring. In addition a horn arrangement is attached to the front cover. There can be four optional sizes of cable entries (M20/M25 or 1/2NPT, 3/4NPT).

### Designation

**Type SD-125/135/150-1 with an build in amplifier PCB, function as an alarm sounder.**

**Type SD-125/135/150-2 with or without a build in audio transformer, function as loudspeaker.**

Type SD-125/135/150-3 with build in audio transformer and amplifier PCB, function as sounder/

**Loudspeaker**

### CONDITIONS OF CERTIFICATION: YES as shown below:

Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 1 and 2 of EN/IEC 60079-1.



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## EQUIPMENT (continued):

### Electrical Ratings:

SD-125/135/150-1...Alarm Sounder, Voltage  $\leq 48$  VDC, 100~240V AC(50/60Hz),  $\leq 20$ W

SD-125/135/150-2...Loudspeaker, Voltage  $\leq 115$  VAC,  $\leq 50$ W.

SD-125/135/150-3...Alarm Sounder & Loudspeaker: Alarm sounder Voltage  $\leq 48$  VDC, 100~240V AC(50/60Hz),  $\leq 20$ W, Loud Speaker Voltage  $\leq 115$  VAC,  $\leq 50$ W

Product	Ambient temperature	Marking
SD 125, SD 135 & SD 150	Tamb=-40°C~+70°C	Ex d IIC T4 Gb. Ex tb IIIC T135°C IP66
	Tamb=-40°C~+60°C	Ex d IIC T5 Gb. Ex tb IIIC T100°C IP66
	Tamb=-40°C~+55°C	Ex d IIC T6 Gb. Ex tb IIIC T85°C IP66

### Routine Test:

A routine pressure test according to EN 60079-1 clause 16 shall be carried out on all enclosures with the following pressures

SD 125-	1.2MPa
SD 135-	1.3MPa
SD 150-	1.3Mpa