

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

| Certificate No.: | IECEx NEM 14.0006X | 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 & Beacon

Optional accessory:

Type of Protection: Ex d

Marking:

 $\mbox{Ex d IIC T4(Tamb=-40°C $^{+}70°C$) $T5(Tamb=-40°C $^{+}60°C$) $T6 (Tamb=-40°C $^{+}55°C$) $Gb$. }$ 

Ex tb IIIC T135°C T4(Tamb=-40°C~+70°C)T100°C(Tamb=-40°C~+60°C) T85°C (Tamb= -40°C~+55°C)

IP66.

Approved for issue on behalf of the IECEx Asle Kaastad

Certification Body:

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.

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:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-31: 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

Edition:1

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/ExTR13.0039/00 NO/NEM/ExTR14.0007/00

Quality Assessment Report:

GB/SIR/QAR14.0001/00



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Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

This certificate covers two types of sounder & Beacons (combination units); SB-125 is stainless steel and SB-150 is GRP. These products consist of two different structures; single unit and a combination of several units called wall mounted combination. The single unit product is made up of; Main body, back-cover and front-cover, connected together by a spigot joint (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. A glass dome is installed in the back-cover by using a cemented joint. Inside the enclosures it's installed different PCB, terminals and light sources. In additional a horn arrangement is attached to the front cover to distribute the sound coming out of the sound driver. The structure of the wall mounted units is based on the same techniques as above but the units are individually (sounder, Beacon, Junction box). To electrically connect the different units together it's installed a connection device (type CT 20) with cemented joint. This is screwed into the different units by using Ex threads (M20\* 1,5). Each individually unit have four optional sizes of cable entries (M20/M25 or 1/2NPT, 3/4NPT).

#### 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):

#### Designation

Type SB-125/150-1, single unit of sounder and beacon.

Type SB-125/150-(X), wall mounted combination of one sounder and X numbers of beacons.

Type SB-125/150-(X)J, wall mounted combination of one sounder, X numbers of beacons and one innetion box

Type SB-125/150-(X)P, wall mounted combination of one sounder, X numbers of beacons and one pushbottom.

### **Electrical Ratings**

Beacon / Light, Voltage ≤48 VDC, 100~"240V AC(50/60Hz), ≤25W Alarm Sounder, Voltage ≤48 VDC, 100~"240V AC(50/60Hz), ≤20W Loudspeaker, Voltage ≤ 115 VAC, ≤ 50W

| Product      | Ambient temperature | Marking                                 |  |
|--------------|---------------------|---|--|
| SB 125 / 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

1.4MPa

SB 125-

SB 150- 1.4MPa