

**[1] EC-TYPE EXAMINATION CERTIFICATE**

**[2] Equipment or Protected System Intended for use  
in Potentially explosive atmospheres  
Directive 94/9/EC**

- [3] EC-Type Examination Certificate Number:** Nemko 14 ATEX 1009X **Issue 0**
- [4] Equipment or Protective System:** Sounder & Loud speaker– SD 125/135/150.
- [5] Applicant/ Manufacturer:** Moflashing Signalling Ltd
- [6] Address:** Unit 18 Klaxon Industrial Estate, Tyseley  
Birmingham B11 2HA,  
United Kingdom.
- [7] This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.**
- [8] Nemko AS, notified body number 0470 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.**
- The examination and test results are recorded in confidential report no. D0001080**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:**  
EN 60079-0:2012 (IEC 60079-0:2011) , EN 60079-1:2007 (IEC 60079-1:2007) and  
EN 60079-31:2009 (IEC 60079-31:2008)
- [10] If the sign “X” is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.**
- [11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC.  
Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.**
- [12] The marking of the equipment or protective system shall include the following:**



II 2GD

Ex d IIC T4~T6 Gb

Ex tb IIIC T135°C~T85 °C IP66

Oslo, 2014-02-12



**Asle Kaastad**  
**Certification Manager, Ex-products**

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## [13] Schedule

### [14] EC-TYPE EXAMINATION CERTIFICATE No. Nemko 14 ATEX 1009X Issue 0

#### [15] Description of Equipment or Protective System

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

#### 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

#### [16] Report No. D0001080

##### Descriptive Documents

Name/Title	Drawing No.	Rev.	Date	Sheets
General Drawing SD 125	55050100000	1.01	13.03.05	2
Dispense Drawing SD 125	55050100001	1.01	13.03.05	2
Part List SD 125	55050100002	1.01	13.03.05	1
Back Cover BC 125	55050110102	1.01	13.03.05	1
Main box SD 125	55050110101	1.01	13.03.05	1
Front cover SD 125	55050110103	1.01	13.03.05	1
Sounder Driver SD 125	55050100620	1.01	13.03.05	1
General Drawing SD 135	55050426000	1.01	13.03.05	1
Dispense Drawing SD 135	55050426001	1.01	13.03.05	2
Part List SD 135	55050420002	1.01	13.03.05	1

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Back Cover SD 135	55030426101	1.01	13.03.05	1
Main body SD 135	55050426101	1.01	13.03.05	1
Sounder Driver SD 135, 15/ 20 W	50050440680	1.01	13.03.05	1
Sounder Driver SD 135, 35W	50050440690	1.01	13.03.05	1
Sounder Driver SD 135, 50 W	50050440695	1.01	13.03.05	1
General Drawing SD 150	55050200000	1.01	13.03.05	2
Dispense Drawing SD 150	55050200001	1.01	13.03.05	2
Part List SD 150	55050200002	1.01	13.03.05	1
Main body SD 150	55050250101	1.01	13.03.05	1
Main box SD 150	55060250101	1.01	13.03.05	1
Front cover SD 150	55050250104	1.01	13.03.05	1
Back Cover SD 150	55050250102	1.01	13.03.05	1
Sounder Driver SD 150	50050100620	1.01	13.03.05	1
Alternative lid screw for 150 serious	55060250401	1.01	13.08.25	1
Alternative lid screw for 150 serious	55060250402	1.01	13.08.25	1
Name plate Alarm Sounder/ Loudspeaker Ex d	M55050010501	1	14.01.08	1

**Certificate History and Associated Nemko Reports**

Issue	Date	Report	Description
0	2014-02-12	D0001080	Prime Certificate released

**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

**[17] Specific Condition for Use**

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.

**[18] Essential Health and Safety Requirements**

Not applicable

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