

[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 ≤48 VDC, 100~240V AC(50/60Hz), ≤20W
 SD-125/135/150-2...Loudspeaker, Voltage ≤ 115 VAC, ≤ 50W
 SD-125/135/150-3...Alarm Sounder & Loudspeaker:
 Alarm sounder Voltage ≤48 VDC, 100~240V AC(50/60Hz), ≤20W,
 Loud Speaker Voltage ≤ 115 VAC, ≤ 50W

| 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 | 5505042002 | 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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