Alarm Stages

The alarm stages are set as follows:

Stage	Apply Power To	Termination Connection	Tone
1	L & N	-	**No sound**
2	L & N	**S0** to **S1** (Factory pre-set)	Set by **DIP SW1**
3	L & N	**S0** to **S2**	Set by **DIP SW2**
4	L & N	**S0** to **S1 & S2**	Set by **DIP SW3**

Refer to Tone Selection Sheet ref: S00526 for Tone Selection, Volume Control and Cable Gland information.

Sound Pause Option

Briefly close the loop between '**S0 – Dly**' for 1 second minimum each time to give the required pause interval. The sound automatically restarts at the end of the interval.

No of times	Pause Interval
1	1 minute
2	5 minute
3	10 minutes - Closing the loop again for 1 second during this interval automatically restores the sound.

7.0 End of Line Monitoring

An end of line monitoring diode or an end of line monitoring resistor can be connected across the 24V+ and 0 terminals. If an end of line monitoring resistor is used, it must have a maximum resitance value of 3k ohms and a minimum wattage of 0.5 Watts; or a minimum resistance value of 1.2k ohms and a maximum wattage of 2 Watts.

8.0 Maintenance

During working life of the product, little or no maintenance is required. Stainless Steel is resistant to most of the acids, alkalis and chemicals. If abnormal or unusual environmental conditions occur due to accident etc, visual inspection is recommended. To avoid electrostatic charge build-up, only exterior of the product can be cleaned with a damp cloth. If spare parts are required, these can be supplied by Moflash. If any failure occurs but not caused by human factor, the product can be returned to Moflash for free repair or replacement during warranty period.

9.0 Conditions for Safety Use

i) This apparatus is suitable to be used only in ambient temperature as stated below:

Type	Ambient Temp
SD125	-40^{0}C to +70^{0}C

ii) Other than product manufacturer, painting and surface finishing are not permitted by the third party.

iii) When used in dusty atmosphere, flameproof cable entry devices or stopping plugs have to be selected and installed carefully in order to maintain the IP rating (IP66/67) of the product.

MOFLASH
SIGNALLING

INSTALLATION & TECHNICAL INFORMATION

PLEASE READ PRIOR TO INSTALLATION

SD125 Series - (Explosion Proof Sounder)

Stainless Steel

AUDIBLE SIGNALLING DEVICE

APPROVALS AND CONFORMITIES

1.0 Introduction: The SD125 Explosion Proof sounder is certified for use and installation in Zone 1 and Zone 2 areas with gas groups of IIA, IIB, IIC and temperature classification of T4~T6. It specially applies to Oil & Gas, Offshore Platform, Chemical, Petrochemical, Refinery and Marine Industries etc. Enclosure material is Stainless Steel. The sounder has 4 stage alarm tones which can be sent out. 63 tones are selectable. Users can record sounds or customize sounds into the sounder by using 5 spare tones. Tone can be present during installation.

2.0 Explosion Proof Labelling:
All products have a rating label with the following important information:
Product order no: eg SD1251BDCNNAR (Refer to the datasheet for product order selection)
Input voltage: $\leq$48v DC or 100-240v AC (50/60 Hz), $\leq$20W
Code: Ex d IIC T4~ T6 Gb, Ex tb IIIC T135^{0}C~T85^{0}C IP66
Nemko ATEX Certificate No: Nemko 14 ATEX 1009X
ATEX Mark: ⟨Ex⟩
IECEx Certificate: IECEx-NEM 14.0005X
Gas Group and Category: II 2GD
CE Mark: Mark No: 0518
Warning: **DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE IS PRESENT**
Finished product serial no (Include date of construction): ie. SD125-0201080001
SD125-Stainless Steel Sounder, **Day**-02, **Month**-01, **Year**-08, **Product Serial Number**-0001

3.0 Type Approval Standard: The SD125 series have an EC Type Examination Certificate issued by **Nemko** and have been approved to the following standards:
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).

4.0 Zones, Gas Group, Category and Temperature Classification
The SD125 series have been certified Ex d IIC T4~T6.
This means that the units can be installed in locations
with the following conditions:

Area Classification
Zone 1: Explosive gas air mixture likely to occur in normal operation.
Zone 2: Explosive gas air mixture not likely to occur, and if it does,
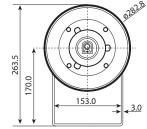it will only exist for a short time.

Gas Groupings:
Group IIA Propane Group,
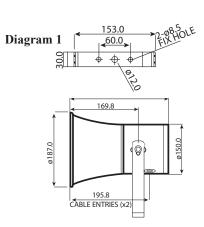IIB Ethylene Group and
IIC Hydrogen and Acetylene

Equipment Category: 2Gd
Temperature Range: -40^{0}C < Ta <70^{0}C

5.0 Installation
General Requirement: The product must be installed
in accordance with the latest issued relevant requirements
in the EN60079-0 and EN60079-1 specification or the
equivalent IEC specification- Selection, Installation
and Maintenance of electrical apparatus for use in
potentially explosive atmosphere.

Diagram 1

Product installation must be carried out in accordance with any local codes that may apply and should only be carried out by a competent electrical engineer.

Location:
The location of the unit should be made with due regard to the area over which the sounder warning signal must be audible. The unit should only be fixed to services that can carry the weight of the unit.

Mounting (Bracket Mounting):
The unit mounts via a 'U' shaped stainless steel bracket by using one 12mm diameter and two 8.5mm diameter bolt holes in the centre of the bracket (see picture 1). The alignment and positions can be adjusted by loosening the two M8 screws, which fastened the stainless steel bracket to the sounder. The sounder should be positioned such that dust, debris or water cannot enter into the horn opening.

6.0 Wiring
General Requirement: Moflash recommends that all cables and cores should be fully identified (suggest using cable from 2.0 to 2.5 mm²). Ensure that all nuts, bolts and screws are secured. Ensure that only the right and certified cable glands are used and earthed correctly. Ensure that only the right and certified stopping plugs are used to blank off unused gland entry points. In order to maintain the IP rating of the product, we recommend SS316L for this application.

Cable connection:
The cable connection is to terminals on the pcb located in the flameproof enclosure of the sounder. Cable connection should be carried out to in accordance with relevant technical requirement (see picture 1).
For **AC supply** - connect to terminals marked '**L**' & '**N**'.
Terminals provide loop in loop out facility.
For **DC supply** - connect '**+**' to '**L**' and '**-**' (0v) to '**N**'.
Alarm stages - terminals '**S0**' (common) '**S1 & S2**'
(refer to table overleaf).

Picture 1

Removal of End Cover
Unscrew the four (4) M5 retained hex socket head screws (see diagram 2). Twist the cover gently clockwise and anti-clockwise, whilst pulling away from the body, keeping the cover parallel to the body until it comes free. This will allow the cover to hang on its retaining strap.

Before replacing the cover, check the flameproof joints are clean and not damaged, the gasket is retained in its groove.

Caution: Before removing the cover ensure the power to the sounder is isolated.

Diagram 2