

DB3BM range-up to 106dB

Hazardous & ordinary locations



Overview

The DB3BM is a high power explosion proof sounder, introduced as a replacement for the current DB1 / DB1H with improved functionality and performance. Certified for use in a wide range of temperatures from -76°F to +185°F, the Ex enclosure is manufactured in either marine grade alloy or stainless steel with a rugged thermoplastic flare providing a corrosion free and aesthetically pleasing product.

Capable of producing 106 dB @ 10 feet and with a range of pre-recorded tones, the DB3BM includes an integral volume control which is ideal when a lower output is required.

The unit is provided with versatile control options allowing compatibility with a wide range of control methods and PLCs.

The standard DC unit provides 3 tone stages, each stage has 28 tones available which can be independently selected. The unit can be controlled by reversing the polarity of the power supply (2 stage) or providing a common negative and switching between multiple positive supplies.

The DB3BM proves its versatility by additionally being able to work with a common positive supply and switching the negatives. The tone stages of the DB3BM can also be controlled via voltage free contacts provided by a control panel.

The flexibility of the range continues with a wide range of supply voltages. The short flare option is a worthy addition to the range offering a high SPL in a compact unit.

Features

- UL certified for USA and Canada
 - Class I, Div 1, Groups A, B, C & D
 - Canada B, C & D
 - Class I, Div 2, Groups A, B, C & D
 - Class I, Zone 1
 - Class II, Div 2, Groups F & G
 - Zone 21
 - Class III, Div. 2
- Fire alarm and general use
- Certified temperature -60°C to +85°C (-76°F to + 185°F)
- IP66 & IP67
- Up to 106dB output @ 10 feet
- Integral volume control
- 28 tones, user selectable
- 3 stage unit remotely switchable
- Tones can be programmed to customer's specification
- DC supply voltage between 12V and 48V
- End of line resistor option
- Horn and strobe combination units available, for further details contact MEDC
- Ex enclosure - 316L stainless steel or LM25TF marine grade alloy
- Flare - high impact thermoplastic polyester
- Stainless steel mounting bracket and cover screws
- Mounting bracket has ratchet facility as standard
- Optional swivel bracket available

Certifications

UL Haz Locs	UL certified for USA and Canada, listing no E203310 Class I, Div. 1 Groups A-D (CNL Groups B-D) Class 1 Div. 2 Groups A-D Zone 1 Ex db IIC Gb / AEx db IIC Gb T4/T5/T6 Class II, Div. 2 Groups F&G, Zone 21 Ex tb IIIC Db / AEx tb IIIC Db T135°C/T100°C/T85°C Class III, Div. 2
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UL Ord Locs	UL certified for USA and Canada, listing no S8116
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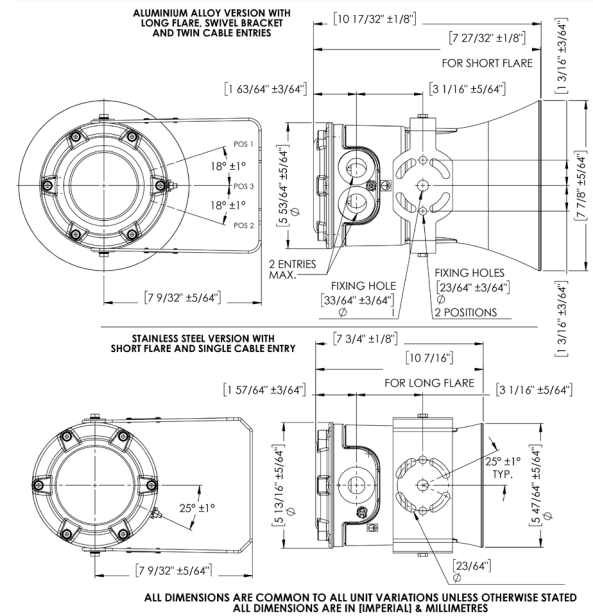
Specifications

Material	Ex enclosure – 316L stainless steel or LM25TF marine grade alloy Flare - flame retardant, high impact, UV stable, thermoplastic polyester (UV stability tested to ISO 4892 part 3) Hardware - bracket, fixings and captive cover screws in 316 stainless steel
Fire retardancy	Outer flare - thermoplastic polyester. V0 flammability rating
Finish	Body - Painted black. Flare - natural black, natural red or painted as specified
Voltage	12-48Vdc, Up to 240Vac
Weight	Alloy - 9¾ lbs/ 4.4 kg, stainless steel 18½ lbs/ 8.35 kg long flare DC unit
Ingress protection	IP66 & IP67. (IPx7 on terminal chamber only) IP65 Short Flare Version
Entries	Up to 2 x M20 or M25 or ½" or ¾" NPT. Blanking plug available
Terminals	AC: 7 x 12AWG (4 for loop in/out power, 3 for tone selection) (standard unit only) DC: 8 x 12AWG (8 for loop in/out power and tone selection) (standard unit only)
Mounting arrangement	Stainless steel bracket with ratchet facility, optional swivel bracket available
Labels	Optional stainless steel duty and tag labels available
Tone information	28 tones per stage. Additional custom tones available (contact MEDC) Suitable for use with 200Hz tones
Certified temperature	-76°F to +185°F (-60°C to +85°C) T4/T135°C -76°F to +131°F (-60°C to +55°C) T5/T100°C -76°F to +104°F (-60°C to +40°C) T6/T85°C

Tone activation and selection

Voltage	Unit	No. of stages	Tone activation	Tone selection
DC	Standard	1	Apply power	1 x DIP switch
		2	Reverse polarity	2 x DIP switches
			Common -ve with 2 +ve supplies	2 x DIP switches
			*Common +ve with 2 -ve supplies	2 x DIP switches
			Independent control 2 -ve & 2 +ve	2 x DIP switches
	3	Common -ve with 3 +ve supplies	3 x DIP switches	
Alternative tone activation (Option M)	2	*Common -ve with 2 +ve supplies	2 x DIP switches.	
	3	Common +ve with 3 -ve supplies	3 x DIP switches.	
AC	Volt free activation (remote) (Option R)	1 - 5	Volt free activation (remote switching)	1 x DIP switch for stage 1. Tones preselected for subsequent stages
	Standard	1	Apply power	1 x DIP switch
AC	Volt free activation (remote) (Option R)	1 - 2	Volt free activation (remote switching)	1 x DIP switch for stage 1 Tone preselected for the 2nd stage

General arrangement drawing (all dimensions in inches)



Current consumption: Average consumption, based on a continuous 970Hz tone

Voltage	Current
12Vdc	716mA
24Vdc	356mA
48Vdc	171mA
110Vac	122mA
120Vac	110mA
220Vac	63mA
230Vac	63mA
240Vac	58mA

Max output (dB) 1400Hz @ 10 feet	Short	Long
	103dB	106dB

Tolerance +/- 3dB

*Reverse polarity line monitoring can be used with common positive or negative switching to give up to 2 operational stages and a 3rd monitoring connection. An EOL resistor can be fitted as shown in the technical manual. All connection details are shown in the technical manual.

Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

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