

Hazardous & Ordinary Locations



Features

- UL listed for USA and Canada
Class I, Div 2, Groups A-D
Class I, Zone 1, Ex d IIC/AEx d IIC Gb
Class II, Div 2, Groups F & G
Zone 21, AEx tb IIIC
Class III, Div. 1
Fire alarm and general use
- ULC listed to Canadian Safety Standards.
- Certified temperature -67°F to +158°F.
- NEMA 4X & 6/IP66 & IP67.
- Up to 115dB 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 - Glass reinforced polyester.
- Flare - High impact thermoplastic polyester.
- Stainless Steel mounting bracket and cover screws.
- Mounting bracket has ratchet facility as standard
- Optional swivel bracket available.

Introduction

The DB3B is a high power explosion proof horn, introduced as a replacement for the current DB3 with improved functionality and performance. Certified for use in a wide range of temperatures from -67°F to +158°F the Ex enclosure is manufactured from GRP with a rugged thermoplastic flare providing a corrosion free and aesthetically pleasing product.

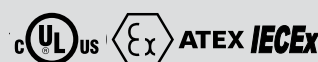
Capable of producing 115dB @ 10 feet and with a range of pre-recorded tones, the DB3B includes an integral volume control which is ideal when a lower output is required.

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 DB3B proves its versatility by additionally being able to work with a common positive supply and switching the negatives. The tone stages of the DB3B 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.



Short Flare Version



Certification and Specification

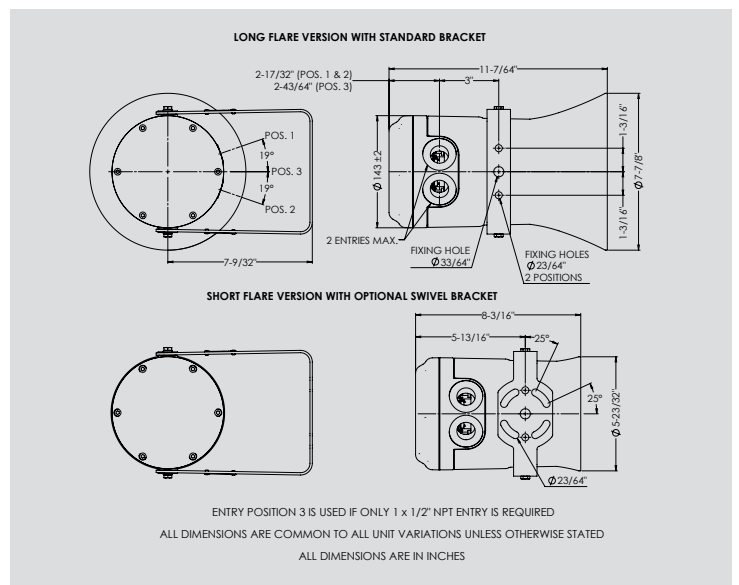
UL Haz Locs:	UL Listed for USA and Canada, fire alarm or general use, listing no. E203310. Class I, Div 2. Groups A-D. Class I, Zone 1, Ex d IIC / AEx d IIC Gb Class II, Div 2. Groups F&G. Zone 21 AEx tb IIIC. Class III Div 1.
UL Ord Locs:	UL Listed for USA and Canada, fire alarm or general use, listing no. S8116.
Material:	Ex enclosure - Flame retardant, UV stable, Glass reinforced polyester. 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:	Body - Glass reinforced polyester. V0 flammability rating. Outer Flare - Thermoplastic Polyester. V0 flammability rating.
Finish:	Body - natural black. Flare - natural black, natural red or painted as specified. (Black short flare painted black).
Voltage:	DC: 12 - 48V AC: Up to 254V. If using an EOL resistor with a value between 700Ω and 2KΩ the maximum voltage must be limited to 28.8Vdc, if using an EOL resistor with a value between 470Ω and 700Ω the maximum voltage should be limited to 26Vdc.
Weight:	10lbs/4.6kg, Based on long flare DC unit.
Ingress Protection:	NEMA 4X & 6. IP66 & IP67. (NEMA 6 and IPx7 on terminal chamber only).
Entries:	Up to 2 x 1/2" NPT or M20. Blanking plug available.
Terminals:	AC: 7 x 14AWG (4 for loop in/out power, 3 for tone selection) (Standard unit only). DC: 8 x 14AWG (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 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:	-67°F to +158°F (-55°C to +70°C)

Max output (dB)	Short GD	Long GD	Short G	Long G
1400Hz @ 10 feet	106dB	112dB	109dB	115dB

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.	
	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.

*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.



Current Consumption: Based on a continuous 970Hz tone.

Voltage	Current for IIC unit	Current for IIIC unit
12Vdc	700mA	716mA
24Vdc	329mA	339mA
48Vdc	171mA	173mA
110Vac	115mA	122mA
120Vac	106mA	113mA
220Vac	59mA	63mA
230Vac	52mA	55mA
240Vac	55mA	58mA
254Vac	59mA	63mA

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.

Model	Certification	Ex Atmosphere	Voltage	Labels	Entries	Options	Finish
DB3B							
Certification Code	Ex Atmosphere Code	Voltage Code	Labels Code	Entries Code	Options Code	Finish Code	
UL UL(ordinary locations) LW Dual ATEX/UL AU Dual IECEx/UL JU	None N* IIC Gas G IIIC Gas & Dust GD	12-48V d.c. 048* 110V a.c. 110 120V a.c. 120* 220V a.c. 220 230V a.c. 230 240V a.c. 240*	None N Duty D* Tag T*	1 x M20 1B 2 x M20 2B 2 x M20 2BP Inc 1 x plug 1 x 1/2" NPT 1C 2 x 1/2" NPT 2C 2 x 1/2" NPT 2CP Inc 1 x plug	None N Swivel bracket B EOL E* Alternative tone activation M† Volt free activation (remote) R† Short flare S Custom tones (not std 28) T‡	Natural Black NT Natural Red R Yellow Y Grey G Blue B Special S*	
* If Weatherproof select N for Ex Atmosphere		* Complies with UL regulated power supply requirements.		* Please specify.		* Please specify. † Short flare painted black.	
				* Specify value (Min 470Ω). Please note voltage limitation. † These options cannot be selected together ‡ Specify details			

All specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.

