

Horns for Hazardous & Ordinary Locations



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 exterior 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.

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 Eaton
- Exterior 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

* Depending on version.

† Contact MEDC for details

EATON

Powering Business Worldwide



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

Certification and Specification

UL Haz Locs:	UL Listed for US 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 US & 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 Eaton) Suitable for use with 200Hz tones.
Certified temperature:	-67°F to +158°F (-55°C to +70°C)

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

Maximum Output (dB) 1400 HZ @ 10 feet:

	Short GD	Long GD	Short G	Long G
Short/Long				
db	106dB	112dB	109dB	115dB

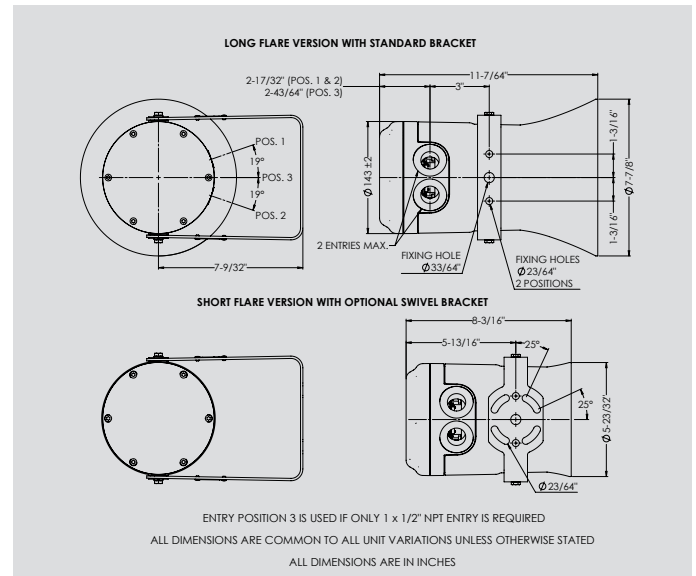
Ordering Requirements

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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Tone information	28 tones per stage	Additional custom tones available (contact MEDC)		
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.
		3	Independent control 2 -ve & 2 +ve	2 x DIP switches.
			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.
			Volt free activation (remote). (Option R).	1 - 5
AC	Standard.	1	Apply power.	1 x DIP switch
		1 - 2	Volt free activation (remote). (Option R).	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.

Note: Only Priority 1 can be supervised.

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Printed in USA
Publication No. TD450044EN
April 2014

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