

# DB4B loudspeaker range up to 25 watts

## Hazardous & ordinary locations



### Overview

The DB4B is a high power explosion proof loudspeaker, introduced as a replacement for the current DB4 with improved intelligibility and acoustic performance. Certified for use in a wide range of temperatures from -67°F to +185°F the Ex enclosure is manufactured from GRP with a rugged thermoplastic flare providing a corrosion free and aesthetically pleasing product.

### Features

- UL certified for USA and Canada  
Class I, Div 2, Groups A-D  
Class I, Zone 1  
Class II, Div 2, Groups F & G  
Zone 21  
Class III, Div. 1
- Certified temperature -55°C to +85°C (-67°F to + 185°F)\*
- NEMA 4X & 6/IP66 & IP67
- SIL 2 certified
- 114dB at 25W, 10 feet\*
- 8W, 15W & 25W versions
- Power tapings, via integral transformer
- Frequency response 350Hz - 8kHz
- 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
- Optional resettable fuse†

\* Depending on version

† Contact MEDC for details

The frequency response of the unit ensures that critical voice messages and general alarm tones are highly intelligible. The specific SPL figure for sensitivity, 1W @ 10 feet is 100dB whilst at 10 feet the 25W unit produces 114dB, the 15W unit 112dB and the 8W unit 110dB.

Options include DC blocking capacitors for monitored systems, resettable fuses for compliance with marine regulations and a swivel bracket that gives the installer greater flexibility when positioning the unit. The short flare option is a worthy addition to the range offering a high SPL and wide dispersion angle in a compact unit.



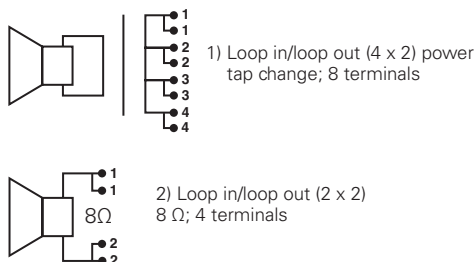
<b>UL Haz Locs</b>	UL certified for USA and Canada, listing no. E203310 Class I, Div 2. Groups A-D. Class I, Zone 1, Ex db IIC / AEx db IIC T3/T4/T5/T6 Gb Class II, Div 2. Groups F&G. Zone 21 Ex tb IIIC / AEx tb IIIC T200°C/T135°C/T100°C/T85°C Db Class III Div 1
<b>UL Ord Locs</b>	UL certified for USA and Canada, listing no. S8847
<b>SIL</b>	SIL2 certified to IEC61508. Cert number FSP 22008

<b>Material</b>	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
<b>Fire retardancy</b>	Body - glass reinforced polyester. V0 flammability rating Outer flare - thermoplastic polyester. V0 flammability rating
<b>Finish</b>	Body - natural black Flare - natural black, natural red or painted as specified (black short flare painted black)
<b>Rated power</b>	8W, 15W or 25W
<b>Frequency range</b>	Frequency response 350Hz to 8kHz 8W and 15W units are available for use @ 200Hz
<b>Weight</b>	11lbs/5.0kg, Based on long flare with transformer
<b>Ingress protection</b>	NEMA 4X & 6, IP66 & IP67. (IPX7 & NEMA 6 on terminal chamber only)
<b>Entries</b>	Up to 2 x 1/2" NPT or M20. Blanking plug available
<b>Terminals</b>	8 x 12AWG
<b>Mounting arrangement</b>	Stainless steel bracket with ratchet facility, optional swivel bracket available
<b>Labels</b>	Optional duty and tag labels available
<b>Dispersion angle</b>	Long flare (short in brackets), -6dB, 1kHz = 140° (240°), 4kHz = 40° (50°)
<b>Driver impedance</b>	8Ω
<b>SPL 1W/10 feet (sensitivity)</b>	100dB (IIC long flare)

Values in dB @ 10 feet (Unsmoothed, peak values)	8W		15W		25W	
	Short	Long	Short	Long	Short	Long
IIC Gas	106	110	109	112	111	114
IIC Gas and Dust	101	104	104	106	106	108

Power	Minimum Temperature	Maximum Temperature
25 Watt	-55°C	+70°C T4/T135°C, +40°C T5/T100°C
15 Watt	-55°C	+85°C T3/T200°C, +70°C T4/T135°C, +40°C T5/T100°C
8 Watt	-55°C	+85°C T4/T135°C, +55°C T5/T100°C, +40°C T6/T85°C

Tappings	Power		
	8W	15W	25W
1:2	8.0	15.0	25.0
2:3	4.0	7.5	12.5
3:4	2.0	5.0	6.0
1:3	1.5	4.0	4.0
2:4	0.7	2.0	2.0
1:4	0.4	0.8	1.0



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	Wattage	Transformer	Labels	Entries	Options	Finish																																																		
DB4B																																																										
	<table><tr><th>Certification</th><th>Code</th></tr><tr><td>UL</td><td>UL</td></tr><tr><td>UL (ordinary locations)</td><td>UW</td></tr><tr><td>Dual ATEX/UL</td><td>AU</td></tr><tr><td>Dual IECEx/UL</td><td>JU</td></tr></table>	Certification	Code	UL	UL	UL (ordinary locations)	UW	Dual ATEX/UL	AU	Dual IECEx/UL	JU		<table><tr><th>Wattage</th><th>Code</th></tr><tr><td>8 Watt</td><td>8</td></tr><tr><td>15 Watt</td><td>15</td></tr><tr><td>25 Watt</td><td>25*</td></tr></table> <p>* Select 25 if 8Ω is required</p>	Wattage	Code	8 Watt	8	15 Watt	15	25 Watt	25*		<table><tr><th>Labels</th><th>Code</th></tr><tr><td>None</td><td>N</td></tr><tr><td>Duty</td><td>D*</td></tr><tr><td>Tag</td><td>T*</td></tr></table> <p>* Please specify</p>	Labels	Code	None	N	Duty	D*	Tag	T*		<table><tr><th>Options</th><th>Code</th></tr><tr><td>None</td><td>N</td></tr><tr><td>Swivel bracket</td><td>B</td></tr><tr><td>Capacitor</td><td>C*</td></tr><tr><td>Short flare</td><td>S</td></tr></table> <p>* Specify value</p>	Options	Code	None	N	Swivel bracket	B	Capacitor	C*	Short flare	S	<table><tr><th>Finish</th><th>Code</th></tr><tr><td>Natural black</td><td>N†</td></tr><tr><td>Natural red</td><td>R</td></tr><tr><td>Yellow</td><td>Y</td></tr><tr><td>Grey</td><td>G</td></tr><tr><td>Blue</td><td>B</td></tr><tr><td>Special</td><td>S*</td></tr></table> <p>* Please specify † Short flare painted black</p>	Finish	Code	Natural black	N†	Natural red	R	Yellow	Y	Grey	G	Blue	B	Special	S*
Certification	Code																																																									
UL	UL																																																									
UL (ordinary locations)	UW																																																									
Dual ATEX/UL	AU																																																									
Dual IECEx/UL	JU																																																									
Wattage	Code																																																									
8 Watt	8																																																									
15 Watt	15																																																									
25 Watt	25*																																																									
Labels	Code																																																									
None	N																																																									
Duty	D*																																																									
Tag	T*																																																									
Options	Code																																																									
None	N																																																									
Swivel bracket	B																																																									
Capacitor	C*																																																									
Short flare	S																																																									
Finish	Code																																																									
Natural black	N†																																																									
Natural red	R																																																									
Yellow	Y																																																									
Grey	G																																																									
Blue	B																																																									
Special	S*																																																									
		<table><tr><th>Ex atmosphere</th><th>Code</th></tr><tr><td>None</td><td>N*</td></tr><tr><td>IIC Gas</td><td>G</td></tr><tr><td>IIIC Gas and Dust</td><td>GD</td></tr></table> <p>* If weatherproof or UL (ordinary locations) select N for Ex Atmosphere</p>	Ex atmosphere	Code	None	N*	IIC Gas	G	IIIC Gas and Dust	GD		<table><tr><th>Transformer</th><th>Code</th></tr><tr><td>8Ω</td><td>N</td></tr><tr><td>100V</td><td>100</td></tr><tr><td>70V</td><td>70</td></tr><tr><td>25V</td><td>25</td></tr></table>	Transformer	Code	8Ω	N	100V	100	70V	70	25V	25		<table><tr><th>Entries</th><th>Code</th></tr><tr><td>1 x M20</td><td>1B</td></tr><tr><td>2 x M20</td><td>2B</td></tr><tr><td>2 x M20</td><td>2BP</td></tr><tr><td>inc 1 x plug</td><td></td></tr><tr><td>1 x ½" NPT</td><td>1C</td></tr><tr><td>2 x ½" NPT</td><td>2C</td></tr><tr><td>2 x ½" NPT</td><td>2CP</td></tr><tr><td>inc 1 x plug</td><td></td></tr></table>	Entries	Code	1 x M20	1B	2 x M20	2B	2 x M20	2BP	inc 1 x plug		1 x ½" NPT	1C	2 x ½" NPT	2C	2 x ½" NPT	2CP	inc 1 x plug																	
Ex atmosphere	Code																																																									
None	N*																																																									
IIC Gas	G																																																									
IIIC Gas and Dust	GD																																																									
Transformer	Code																																																									
8Ω	N																																																									
100V	100																																																									
70V	70																																																									
25V	25																																																									
Entries	Code																																																									
1 x M20	1B																																																									
2 x M20	2B																																																									
2 x M20	2BP																																																									
inc 1 x plug																																																										
1 x ½" NPT	1C																																																									
2 x ½" NPT	2C																																																									
2 x ½" NPT	2CP																																																									
inc 1 x plug																																																										

[illegible]

The graph displays the sound pressure level of a swept sine wave across a frequency range from 200 Hz to 10 kHz. The y-axis represents the sound pressure level in decibels (dB), ranging from 60 to 120. The x-axis represents frequency in Hertz (Hz) on a logarithmic scale, with major ticks at 200 Hz, 1 kHz, 2 kHz, and 10 kHz. The curve starts at approximately 60 dB at 200 Hz, rises steadily to about 100 dB at 500 Hz, reaches a peak of approximately 115 dB around 1.5 kHz, and then fluctuates between 95 dB and 110 dB up to 10 kHz.