

# SOUNDERS – Up to 118 dB(A) EExd(e), Weatherproof DB3 Range



Sounder/Beacon  
Combination Unit



## Introduction

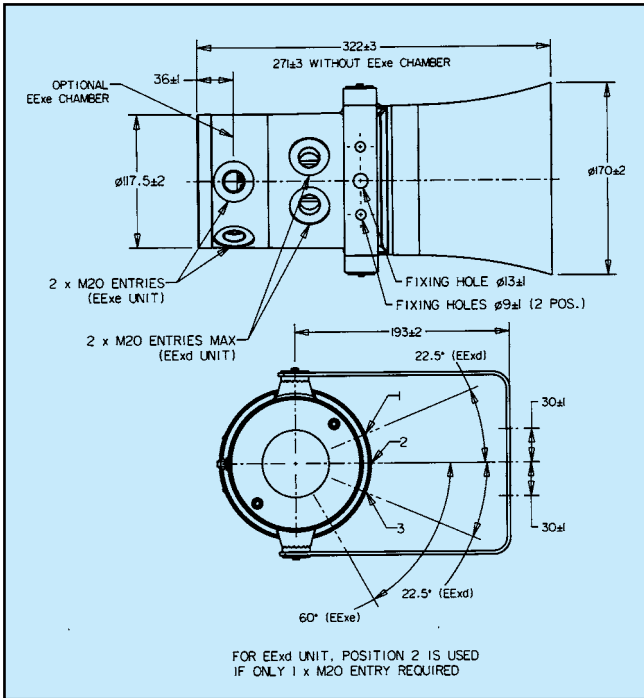
This range of light weight all GRP, flameproof sounders is intended for use in potentially explosive gas and dust atmospheres and has been designed with high ingress protection to cope with the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

The flamepaths, flare and the body, are manufactured completely from a UV stable glass reinforced polyester. Stainless steel screws and sinter are incorporated thus ensuring a corrosion free product. A tapered flamepath is used to overcome the problems of assembly of parallel spigot flamepaths.

An optional Exe terminal chamber is available.

An uncertified version is available for use in non-explosive atmospheres.

- ★ Zone 1, Zone 2 and non-Ex use.
- ★ EExde IIC T5.
- ★ ATEX approved, Ex II 2GD.
- ★ Optional Exe terminal chamber.
- ★ BASEEFA certified.
- ★ UL Listed for USA and Canada
  - Hazardous locations:
    - Class I, Div 2, Groups A-D.
    - Class II, Div 2, Groups F & G
    - Class I, Zones 1 & 2, AExd IIC T4.
  - Ordinary locations: Audible-Signal Device.
- ★ GOST 'R' & 'K' certified.
- ★ Chinese (CQST) certified.
- ★ Australian (SAA) certified.
- ★ Brazilian (Inmetro) certified.
- ★ IP66 and IP67.
- ★ \*Certified temperature  $-55^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ .
- ★ All GRP corrosion free flamepaths.
- ★ Up to 118dBA output.
- ★ Integral volume control.
- ★ 27 tones, user selectable.
- ★ Tones comply with UK00A/PFEER guidelines.
- ★ Two tones may be switched via the external voltage supply – now available in AC and DC versions.
- ★ Tones may be programmed to customer specification.
- ★ d.c. version accepts any voltage between 12V d.c. and 48V d.c.
- ★ End of line resistor option.
- ★ Sounder/Beacon Combination Unit available.  
\*Depending on version.



Terminals:	4 x 2.5mm <sup>2</sup> (a.c.), 6 x 2.5mm <sup>2</sup> (d.c.).
Earth Continuity:	Included on EExde version.
Mounting:	Stainless steel bracket with ratchet facility.
Labels:	Duty and tag labels optional.
Cable Entries:	Up to 2 x 20mm EExd 2 x 20mm EExe. Up to 2 x 1/2" NPT UL. Note: ATEX/UL Dual Listed version up to 2x 1/2" NPT or 2xM20 via adapter (fitted).
Tone Selection:	27 user selectable tones.
Sounder/Beacon Unit:	The DB3 may be combined with an MEDC beacon to create a combined audio/visual alarm. Contact MEDC for price and specification
Two Stage Unit DB3P:	Switchable between two tones: D.C. (i) Reversing the polarity of the supply, or (ii) by a 3 wire common +ve system, switching between the two -ve lines. A.C. (iii) Closing/opening connection between 2 terminals e.g. by using a volt free relay contact at the panel. 2 tones must be specified at time of order.
3/4 Tone Unit:	Remote 3 or 4 tone available – contact sales office for details.

## 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. **For standard products, available ex-stock, contact sales office for details.**

Unit Type	Certification	Voltage	Labels	Entries	Options	Colour			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
Type	Details	Type	Code	Voltage	Code	Label	Code	Features	Code
DB3	Standard unit	Uncertified	W	12V - 48V d.c.	048	Duty	D*	None	N
DB3P	Two stage	EExd	D	110V a.c.	110	Tag	T*	End of line resistor	E*
*DB3L	Low temp. standard unit	EExde	E	120V a.c.	120	None	N	Special tone	S
*DB3LP	Low temp. two stage	UL Listed	*UL	220V a.c.	220	*Please specify wording			
		UL (Ordinary Locations)	UW	230V a.c.	230				
		ATEX/UL Dual Listed	AU	240V a.c.	240				
		GOST 'R' Exd	DG	254V a.c.	254				
		GOST 'R' Exde	EG						
		GOST 'K' Exd	DK						
		Chinese (CQST)	Q						
		Inmetro Exd	EM						
		Inmetro Exde	DM						
		*Not all options are available UL listed.							
				Entries	Code			Colour	Code
				1 x 20mm (EExd)	1B			Natural Black	N
				2 x 20mm (EExd/EExde)	2B			Red	R
				1 x 1/2" NPT (UL only)	1C			Special	S*
				2 x 1/2" NPT (UL only)	2C			*Please specify	

All the above 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, consult sales office for clarification.

## Specification

Certification: CENELEC EN50014, 18, 19.  
 BASEEFA Cert. No. BAS00ATEX2097X, EExd IIC.  
 BASEEFA Cert. No. BAS00ATEX2098X, EExde IIC.  
 Zones 1 and 2.

### UL Listed for USA and Canada

– Hazardous locations:  
 Class I, Div 2, Groups A-D.  
 Class II, Div 2, Groups F & G.  
 Class I Zones 1 & 2, AExd IIC T4.  
 Listing No: E203310.

– Ordinary locations: Audible-Signal Device.  
 Listing No. S8116.

Refer to UL data sheet at rear of catalogue for complete information.

**GOST 'R' Certification:** 1 Exd IIC T4 & 1 Exde IIC T4.  
 Russian Fire Alarm (VNIIP) Approved.

**GOST 'K' Certification:** Exd IIC T4.

**Chinese (CQST) Certification:** Exd IIC T4.

**Brazilian (Inmetro) Certification:** BR-Ex d IIC T5/T4/T135°C.  
 BR-Ex de IIC T5/T4/T135°C.

Material: Body & horn in anti-static, UV stable, glass reinforced polyester.  
 Swivel bracket & captive cover screws in stainless steel.

Finish: Body and horn, natural black or epoxy paint coated to client's colour requirements.

Sound Output: Long Flare: 115dB(A) ± 3dB(A) (tone dependent).  
 Short Flare: 108dB(A) ± 3dB(A) (tone dependent).

Volume Control:	*Nominal Output (dBA)	Input Current (mA)
	93	50
	105	100
	108	150
	111	200
	112	250
	114	300
	115	350

\*Output measured with 24V input voltage. Tone set to 970Hz continuous.

Weight: 6.0kg approx. dependent on model (+0.5kg for EExe).

Certified Temperature:	EExd	EExde	UL	GOST 'R' & 'K' Exd	GOST 'R' Exde	Chinese Exd
DB3 & DB3P	-20°C to +70°C	-20°C to +45°C	-55°C to +70°C	-20°C to +50°C	-20°C to +40°C	-20°C to +55°C
DB3L & DB3LP	-55°C to +55°C	-55°C to +70°C	n/a	-55°C to +55°C	-55°C to +55°C	n/a

Ingress Protection: IP66 and IP67.

Fire Retardancy: GRP is fire retardant to ISO 1210.

Voltage: Up to 48V d.c. Up to 254V a.c.

Current Consumption:	V	I
	12V d.c.	760mA
	24V d.c.	380mA
	48V d.c.	190mA
	110V a.c.	135mA
	120V a.c.	124mA
	220V a.c.	68mA
	230V a.c.	65mA
	240V a.c.	62mA
	254V a.c.	59mA