

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



Sounder/Beacon
Combination Unit



Now VNIPO Approved

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°C to +70°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.

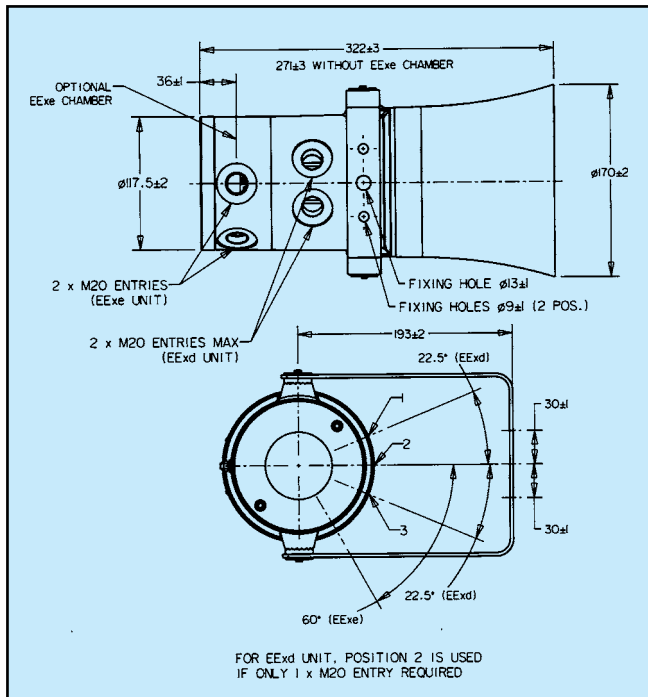
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Terminals:	4 x 2.5mm ² (a.c.), 6 x 2.5mm ² (d.c.).
Earth Continuity:	Included on EEExde version.
Mounting:	Stainless steel bracket with ratchet facility.
Labels:	Duty and tag labels optional.
Cable Entries:	Up to 2 x 20mm EEExd 2 x 20mm EEEx. Up to 2 x 1/2" NPT UL. Note: ATEX/UL Dual Listed version up to 2x1/2" 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
Type	Type	Voltage	Label	Entries	Features	Colour
DB3 Standard unit	Uncertified W	12V - 48V d.c. 048	Duty D*	1 x 20mm (EEExd) 1B	None N	Natural Black N
DB3P Two stage	EEExd D	110V a.c. 110	Tag T*	2 x 20mm (EEExd/EEExde) 2B	End of line resistor E*	Red R
DB3L Low temp. standard unit	EEExde E	120V a.c. 120	None N	1 x 1/2" NPT (UL only) 1C	Special tone S	Special S
*DB3LP Low temp. two stage	UL Listed *UL	220V a.c. 220	*Please specify wording	2 x 1/2" NPT (UL only) 2C	*State value.	*Please specify
	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 DM					
	Inmetro Exde EM					

*Not all options are available UL listed.

Specification

Certification: CENELEC EN50014, 18, 19.
BASEEFA Cert. No. BAS00ATEX2097X, EEExd IIC.
BASEEFA Cert. No. BAS00ATEX2098X, EEExde 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: 1Exd IIC T4 & 1Exde IIC T4.
Russian Fire Alarm (VNIPO) 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 EEExe).
Certified Temperature:	EEExd EEExde 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



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.