DB1 sounders range up to 113 dB(A)

Ex d, weatherproof

Overview

This range of lightweight, flameproof Sounders have been designed with a high weatherproof rating to cope with the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

Electronic circuitry allows the DB1P and DB1HP to be switched between two selectable tones by either reversing the supply polarity, or connecting a second voltage supply.

The higher output DB1H and DB1HP are particularly suitable for noisy environments.

Stainless steel, one of the most durable materials available on the market, is both hard wearing and corrosion resistant, increasing the life of products in harsh environments and therefore reducing maintenance costs.

Features

- Zone 1 and Zone 2 use
- Ex d, IIB T5 /T6*
- ATEX approved, Ex II 2G Gb
- UL Listed – Class I, Div 1. Groups C & D
- IECEx certified, Gb
- TR CU certified
- CCOE certified
- IP66
- Certified temperature: –20ºC to +70ºC*

- SIL 1 certified*
- Up to 113 dB(A) output
- Available in marine grade alloy or stainless steel
- 27 output tones, user selectable
- Telephone initiate option
- Tones can be selected remotely
- Tones comply with UKOOA/PFEER guidelines
- Any two tones may be switched via the external voltage supply
- End of line resistor option
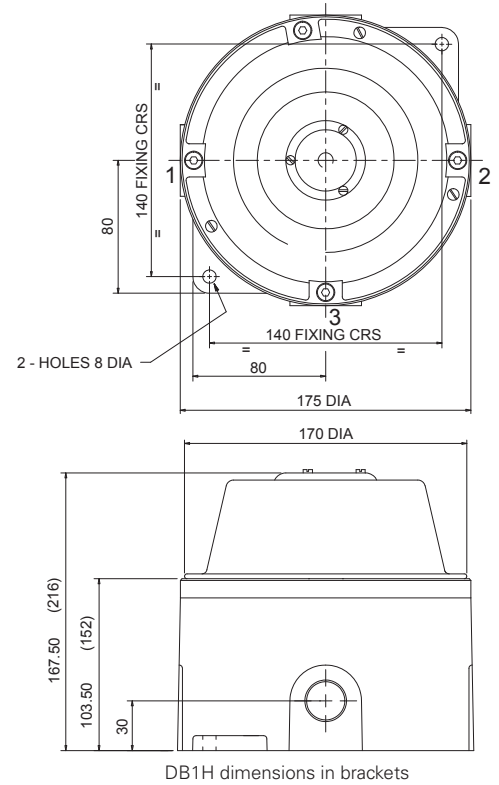
  *Model dependent

ATEX *IECEx* UL EAC

Please check here for latest version of the datasheet

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Certifications

ATEX DB1P Ex d	Cert. no. BAS00ATEX0207X Certified to: EN60079-0, EN60079-1 Ex db IIB T6 Gb (Tamb. -20°C to +60°C)
ATEX DB1HP Ex d	Cert. no. BAS00ATEX0209X Certified to: EN60079-0, EN60079-1 Ex db IIB T5 Gb (Tamb. -20°C to +70°C)
IECEx DB1P Ex d	Cert. no. IECEx BAS 10.0065X Certified to: IEC60079-0, IEC60079-1 Ex db IIB T6 Gb (Tamb. -20°C to +60°C)
IECEx DB1HP Ex d	Cert. no. IECEx BAS 10.0064X Certified to: IEC60079-0, IEC60079-1 Ex db IIB T5 Gb (Tamb. -20°C to +70°C)
UL Haz Locs	Listing no. E187688 Class I, Div 1, Groups C & D
TR CU DB1P Ex d	1Ex d IIB T6 Gb
SIL	SIL 1 certified to IEC61508. Cert number 20151119-4786827453 (DB1HP only)

Specifications

Material	LM25 corrosion resistant alloy or ANC4B stainless steel with stainless steel cover screws ABS flare
Finish	Epoxy paint finish as standard or to customer specification
Certified temp	ATEX: –20ºC to +60ºC (DB1P) ATEX: –20ºC to +70ºC (DB1HP) UL: –25ºC to +70ºC
Weight	DB1P: 3.5 Kg alloy, 8.3 Kg stainless DB1HP: 5.6 Kg alloy, 12.7 Kg stainless
Ingress protection	IP66
Entries	Up to 3 x M25 or M20
Terminals	Suitable to accept up to 4mm² cable Note: Terminals limited to 2.5mm² cable on a.c. version with telephone initiate option only
Output	DB1P: 103±3dB(A) DB1HP: 110±3dB(A) @ 1 metre Note: Sound level is dependent upon the tone selection
Labels	Tag and duty labels optional
Tone selection	Single Stage Unit a.c 27 user selectable tones including, PFEER/UKOOA tones Two Stage Unit d.c Switchable between any two of the 27 tones by either: (i) Reversing the polarity of the supply, or (ii) By a 3 wire common +ve system, switching between the two – ve lines Note: Reverse monitoring is achievable on Two Stage Version by selection of terminals

General arrangement drawing (all dimensions in mm)

DB1H dimensions in brackets

Current consumption

	DB1P	DB1HP
12Vdc	125mA	900mA
24Vdc	250mA	700mA
48Vdc	250mA	350mA
120Vac	60mA	200mA
240Vac	50mA	100mA

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	Material	Voltage	Entries	Duty	Tag	Options	Finish

Model
DB1P
DB1HP

Certification	Code
ATEX	B
IECEx	J
UL	UL
TR CU	G

Voltage	Code
12Vdc	012
24Vdc	024
48Vdc	048
110Vac	110*
240Vac	240

*Not available on DB1HP UL

Duty	Code
None	N
Required	D*

*Please specify

Tag	Code
None	N
Required	T*

*Please specify

Finish	Code
Red	R
Grey	G
Special	S*

*Please specify

Material	Code
Stainless steel	S
Alloy	A*

*UL is only available in Alloy

Entries	Code
M20	A
M25	B
½" NPT (UL only)	C
¾" NPT (UL only)	D
LHS	1*
RHS	2*
Bottom	3*

*Prefix position with entry size code
e.g. A1A3 = M20 left and bottom entries

Options	Code
None	N
Telephone initiate	T†
Relay initiate	R
Remote tone select	S
End of line resistor	E*

* State value
† Not available UL certified