Zone 1 or 2

Safe area

Supply

controlin

BExS110D

Flameproof sounder

Flameproof for use in gas & dust hazardous areas

◆ **Up to 113dB(A) output.**

◆ **32 different sounds**

◆ **IP67 protection**

◆ **PFEER compliant**

◆ **Flameproof ATEX gas *or* ATEX gas & dust Both versions have IECEx certification.**

◆ **12V dc, 24V dc, 48V dc, 115V ac and 230V ac models.**

◆ **Second & third stage outputs.**

◆ **Auto-synchronised sound output.**

www.beka.co.uk/bexs110d

The BExS110D solid state electronic sounder produces a loud audible warning signal within a hazardous area. To avoid confusion between alarm signals, the sounder can be conditioned by internal switches to generate any one of thirty two unique alarm sounds. Maximum continuous output is 113dB(A) at 1m.

ATEX flameproof certification allows all models to be installed in Zone 1 or 2, and to be used with gases in groups IIA, IIB and IIC.

Second and third stage alarms are available on all models. This enables the alarm sound to be changed from within the safe or hazardous area, so that one sounder may be used to indicate three different alarm conditions.

Robust construction and IP67 protection allows BExS110D sounders to function reliably in severe environments. An adjustable wall mounting 'U' bracket is provided with every unit, and a stainless steel pipe mounting kit is available as an accessory.

An optional stainless steel tag plate may be etched with any tag number or applicational information and secured to the sounder 'U' bracket. See accessory data-sheet for full details.

A loudspeaker version of this sounder for use with 100V public address systems is also available.

Tone number	Tone description	Switch settings 1 2 3 4 5	Second stage alarm	Third stage alarm
Tone 1	Continuous 1000Hz *Toxic gas alarm*	0 0 0 0 0	Tone 31	Tone 11
Tone 2	Alternating 800/1000Hz at 0.25s intervals	1 0 0 0 0	Tone 17	Tone 5
Tone 3	Slow whoop 500/1200Hz at 0.3Hz with 0.5s gap repeated	0 1 0 0 0	Tone 2	Tone 5
Tone 4	Sweeping 500/1000Hz at 1Hz	1 1 0 0 0	Tone 6	Tone 5
Tone 5	Continuous 2400Hz	0 0 1 0 0	Tone 3	Tone 20
Tone 6	Sweeping 2400/2900Hz at 7Hz	1 0 1 0 0	Tone 7	Tone 5
Tone 7	Sweeping 2400/2900Hz at 1Hz	0 1 1 0 0	Tone 10	Tone 5
Tone 8	Siren 500/1200/500Hz at 0.3Hz	1 1 1 0 0	Tone 2	Tone 5
Tone 9	Sawtooth 1200/500Hz at 1Hz	0 0 0 1 0	Tone 15	Tone 2
Tone 10	Alternating 2400/2900Hz at 2Hz	1 0 0 1 0	Tone 7	Tone 5
Tone 11	Intermittent 1000Hz at 0.5Hz *General alarm*	0 1 0 1 0	Tone 31	Tone 1
Tone 12	Alternating 800/1000Hz at 0.875Hz	1 1 0 1 0	Tone 4	Tone 5
Tone 13	Intermittent 2400Hz at 1Hz	0 0 1 1 0	Tone 15	Tone 5
Tone 14	Intermittent 800Hz 0.25s on. 1s off	1 0 1 1 0	Tone 4	Tone 5
Tone 15	Continuous 800Hz	0 1 1 1 0	Tone 2	Tone 5
Tone 16	Intermittent 550Hz 150mS on, 150ms off	1 1 1 1 0	Tone 18	Tone 5
Tone 17	Alternating 544Hz (100ms)/440Hz(400ms)	0 0 0 0 1	Tone 2	Tone 20
Tone 18	Intermittent 660Hz 1.8s on, 1.8s off	1 0 0 0 1	Tone 2	Tone 5
Tone 19	1400Hz to 1600Hz sweep up over 1s 1600Hz to 1400Hz sweep down over 0.5s	0 1 0 0 1	Tone 2	Tone 5
Tone 20	Continuous 660Hz	1 1 0 0 1	Tone 2	Tone 5
Tone 21	Alternating 554/440Hz at 1Hz	0 0 1 0 1	Tone 2	Tone 5
Tone 22	Intermittent 544Hz at 0.875Hz	1 0 1 0 1	Tone 2	Tone 5
Tone 23	800Hz pulsing at 2Hz	0 1 1 0 1	Tone 6	Tone 5
Tone 24	Sweeping 800/1000Hz at 50Hz	1 1 1 0 1	Tone 29	Tone 5
Tone 25	Sweeping 2400/2900Hz at 50Hz	0 0 0 1 1	Tone 29	Tone 5
Tone 26	Simulated bell	1 0 0 1 1	Tone 2	Tone 1
Tone 27	Continuous 554Hz	0 1 0 1 1	Tone 26	Tone 5
Tone 28	Continuous 440Hz	1 1 0 1 1	Tone 2	Tone 5
Tone 29	Sweeping 800/1000Hz at 7Hz	0 0 1 1 1	Tone 7	Tone 5
Tone 30	420Hz repeating 0.626s on, 0.625s off *Australian alert signal*	1 0 1 1 1	Tone 32	Tone 5
Tone 31	1200/400Hz at 1Hz *Prepare to abandon platform*	0 1 1 1 1	Tone 11	Tone 1
Tone 32	Sweeping 500/1200Hz 3.75s on, 0.25s off 15Hz *Australian evacuation signal*	1 1 1 1 1	Tone 26	Tone 1

Visit www.beka.co.uk to hear these tones

BEKA
associates

BEKA associates Ltd. Old Charlton Rd. Hitchin, Hertfordshire, SG5 2DA, U.K. Tel. (01462) 438301 Fax (01462) 453971 e-mail sales@beka.co.uk www.beka.co.uk

SPECIFICATION

Power supply

Model	12V dc	24V dc	48V dc	115V ac	230V ac
Voltage	9 to 15V	15 to 28V	36 to 58V	115V ±10%	230V ±10%
Current	195mA	250mA	130mA	110mA	56mA

Output

Continuously rated sound level at 1m	110 ± 3dB(A) @ 1000Hz
Volume control	Reduces output by 20dB(A).
Second & third stage alarms	
24V dc model	By application of positive or negative dc voltage.
115V & 230V models	By interconnection of sounder terminals.

Certification

Europe ATEX

Code		Group II Category 2G
		Ex d IIC T4 Tamb -50 to 55°C
		Ex d IIB T4 Tamb -50 to 70°C
	or	Group II Category 2D
		Ex tD A21 IP67 T100 Tamb +55°C
		Ex tD A21 IP67 T115 Tamb +70°C.

Dust option, see How to order

Certificate number	KEMA 99ATEX6312
Location	
Gas	Zone 1 or 2
Dust	Zone 21 or 22
End of line monitoring (24V model only)	A resistor or diode may be fitted inside the enclosure for monitoring line continuity. The resistor must have a minimum value of 3,300Ω and a minimum power rating of 0.5W, or a minimum value of 500Ω and a minimum power rating of 2W.

International IECEx

Code		Ex d IIC T4 Ta -50°C to 55°C
		Ex d IIB T4 Ta -50°C to 70°C
	or	Ex tD A21 IP67 T100 Ta +55°C
		Ex tD A21 IP67 T115 Ta +70°C

Dust option, see How to order

Certificate number	IECEx KEM 10.0003

Environmental

Operating temp.	-50 to 70°C *See certificate for details*
Storage temp.	-50 to 70°C
Enclosure	IP67
EMC	In accordance with EU Directive 2004/108/EC

Mechanical

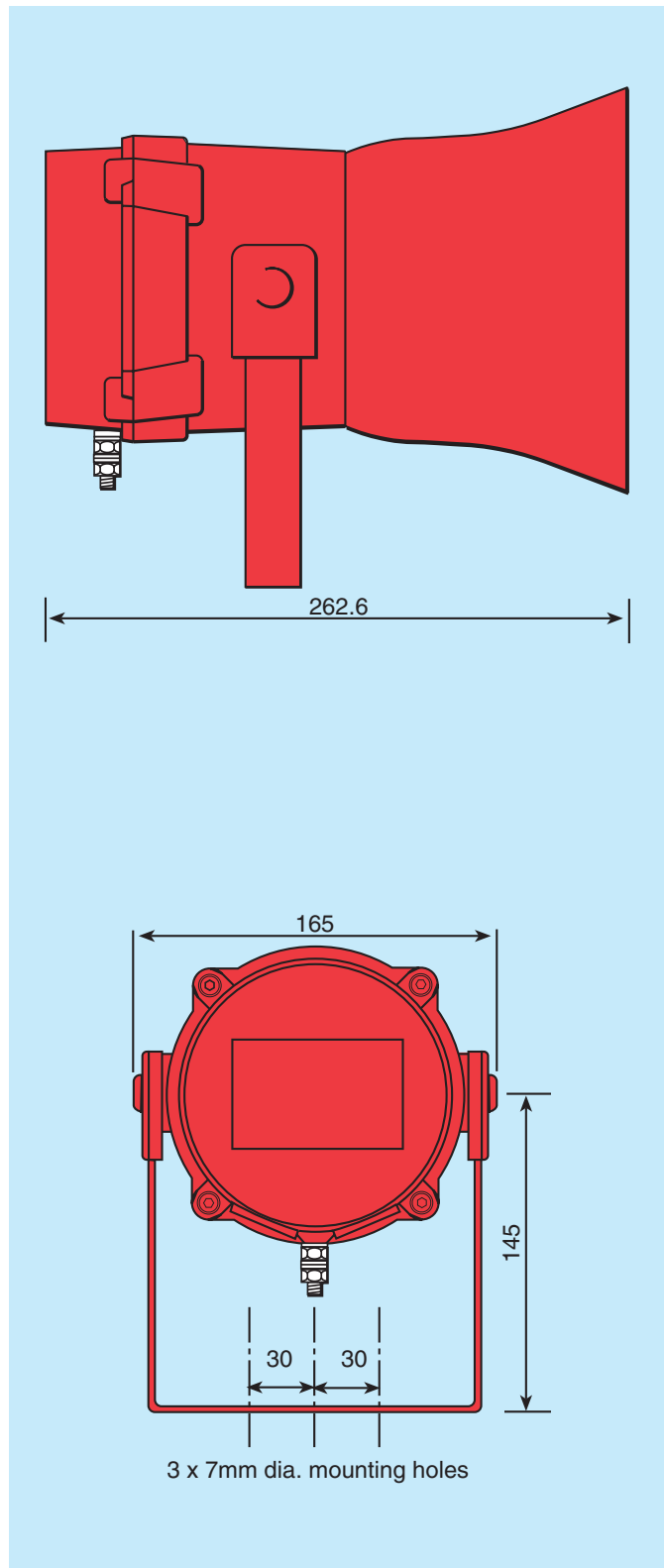|	
Enclosure material	
Body	Marine grade LM6 aluminium, phosphated & powder coated finish providing good resistance to high humidity and salt spray.
Horn	
Gas certification	High impact UL94, V0 & 5VA FR ABS
Dust certification	Anti-static, high impact ABS
Terminals	Screw clamp for one 4mm^2 or two 2.5mm^2 conductors.
Cable entry	Two tapped M20
Weight	3.4kg

Accessories

Tag plate	Etched stainless steel plate can be fitted to sounder 'U' bracket
Pipe mounting kit	BA393 stainless steel heavy duty using 'V' bolt for 40-80mm outside diameter vertical or horizontal pipe.

DIMENSIONS (mm)

262.6

165

145

30 30

3 x 7mm dia. mounting holes

HOW TO ORDER

Please specify

Certification & Model No.	
ATEX & IECEx gas certification.	BExS110D
or ATEX & IECEx gas & dust certification.	BExDS110D
Voltage	12V dc; 24V dc; 48V dc; 115V ac or 230V ac.
Tag plate	Legend required
Pipe mounting kit	BA393