1-22-060 / BEx: Aluminium explosion proof

BExS110 Ex d Alarm Horn - Radial Omni-directional

The flameproof BExS110 alarm sounders are suitable for Zone 1, 2, 21 & 22 applications. Approved to IECEx, ATEX, Ex EAC and INMETRO standards.

The BExS110-R is an alarm sounder featuring a radial omni-directional horn that disperses the alarm tones radially. Ideal for applications requiring a compact audible signalling solution. The BEx explosion proof Ex d range features enclosures manufactured from corrosion proof, marine grade copper free LM6 aluminium with chromate and powder coat finish. SIL1 & SIL2 Route 2H compliant to IEC61508 (2010) as standard.

Features

- Omni-directional sound output.
- Marine grade, corrosion proof, LM6 aluminium enclosure.
- Ingress protection IP66/67
- Stainless steel fixings
- Dual M20 cable entries – adaptors available.
- Stopping plug included.
- Reverse polarity diode fitted.
- Automatic synchronisation on multi-sounder system.
- Very large termination area.
- Ratchet adjustable stainless steel 'U' bracket.
- 'Stage Programmable' version available:
  - 45 alarm tones
  - 4 remotely selectable stages
  - Any tone can be assigned to any stage
  - User configurable continuous frequency tone

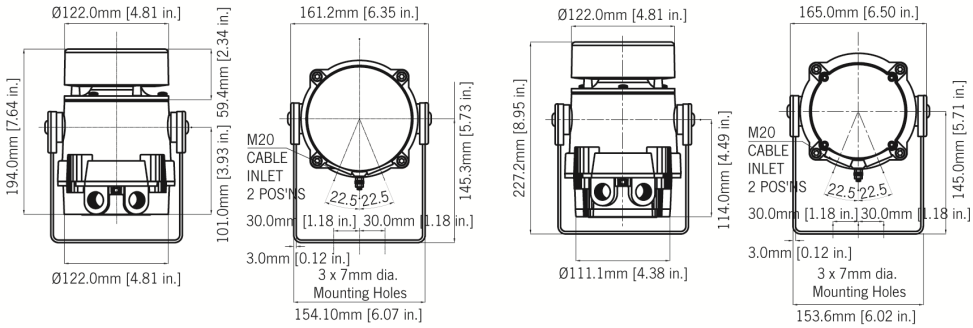


Approvals

- IECEx Certificate: KEM 10.0003X
- ATEX Certificate: KEMA 99ATEX6312X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252_21
- INMETRO certificate: 10-IEx-0009
- UKCA certificate: UL22UKEX2638X
- SIL1 & SIL2 compliant to IEC61508 (2010)

Coding

- II 2G Ex db IIB T4 Ta -50° to +70°C
- II 2G Ex db IIC T4 Ta -50° to +55°C
- II 2D Ex tb IIIC T100°C Db Ta -50°C to +55°C
- II 2D Ex tb IIIC T115°C Db Ta -50°C to +70°C



Specification

Maximum output:	115dB(A) @ 1 metre [108dB(A) @ 10ft/3m]
Nominal output:	110dB(A) @ 1m +/- 3dB – Tone 2 [101dB(A) @ 10ft/3m]
No. of tones:	32 (UKOOA / PFEER compliant)
No. of stages:	3
Volume control:	Max. 110dB(A); Min. 72dB(A) – Tone 2
Effective range:	100m/328ft @ 1KHz
Voltages DC:	12Vdc; 24Vdc; 48Vdc
Voltages AC:	115Vac; 230Vac
Stage switching:	Negative or positive
Ingress protection:	IP66/67
Enclosure matl:	Marine grade copper free LM6 Aluminium
Enclosure finish:	Chromate & powder coated finish ISO 12944-6 CX, C5VH & C5H
Colour:	Red or Special – available on request
BExS110 horn:	High impact UL94 V0 & 5VA FR ABS
Cable entries:	Dual M20 ISO (one stopping plug inc)
Terminals:	0.5 – 2.5mm² (20-14 AWG)
Enclosure volume:	<2 litres
Line monitoring:	Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted
Relative humidity:	95% – Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist
MTBF DC:	192.02 years / 1,682,086 hours – MIL 217
MTBF AC:	186.68 years / 1,635,323 hours – MIL 217
Weight:	DC: 3.00kg/6.6lbs AC: 3.20kg/7.04lbs
Version A1:	SIL1 and SIL2 Route 2H
Version P1:	Stage programmable – 4 remotely selectable stages 45 alarm tones – any tone can be assigned to any stage. User configurable continuous frequency tone SIL1 and SIL2 Route 2H
Version T1:	Tropicalised SIL1 and SIL2 Route 2H

*SPL data +/-3dB(A). Measured at optimum voltage.

Part Codes

Part Code:	Identifier:	Description:
Product type:	BExS110	Explosion proof alarm horn sounder
Type:	DR	Ex d, Radial omni-directional horn
Voltage:	DC012	12V dc
	DC024	24V dc
	DC048	48V dc
	AC115	115V ac
	AC230	240V ac
Cable entries:[e]	A	2 x M20x1.5mm
	B	2 × 1/2" NPT – adaptors
	C	2 × 3/4" NPT – adaptors
	D	2 x M25x1.5mm – adaptors
	E	1 × 1/2" NPT – adaptor
	F	1 × 3/4" NPT – adaptor
	G	1 x M25x1.5mm – adaptor
Stopping plug/ adaptor material: [m]	B	Brass
	N	Nickel Plated
	S	Stainless Steel
Bracket matl & tag: [s]	1	A2 304 Stainless Steel
	2	A4 316 Stainless Steel
	3	A2 304 St/St with Equip. Tag
	4	A4 316 St/St with Equip. Tag
Product version: [v]	A1	Default – IECEx, ATEX, Ex EAC & INMETRO– SIL1 & SIL2
	P1	Stage programmable – IECEx, ATEX, Ex EAC & INMETRO – SIL1 & SIL2
	T1	Tropicalised – IECEx, ATEX, Ex EAC & INMETRO – SIL1 & SIL2
Enclosure colour: [x]	R	Red
	S	Special – contact E2S
Accessories:		
SP65-0001-A4		Pole Mount Bracket Kit St/St A4 (316)
SP65-0003-A4		Sunshade – St/St A4 (316)

Current Consumption

Version:	Voltage:	Current:
12V dc	+/-25%	195mA
24V dc	+/-25%	265mA
48V dc	+/-25%	130mA
115V ac 50/60Hz	+10/-10%	110mA
230V ac 50/60Hz	+10/-10%	56mA

Tone table

S 1	Description	S 2	S 3
T 1	Continuous 1000Hz Toxic Gas Alarm	T 31	T 11
T 2	Alternating 800/1000Hz at 0.25s intervals	T 17	T 5
T 3	Slow Whoop 500/1200Hz at 0.3Hz with 0.5s gap ...	T 2	T 5
T 4	Sweeping 800/1000 at 1Hz	T 6	T 5
T 5	Continuous at 2400Hz	T 3	T 27
T 6	Sweeping 2400/2900Hz at 7Hz	T 7	T 5
T 7	Sweeping 2400/2900Hz at 1Hz	T 10	T 5
T 8	Siren 500/1200/500Hz at 0.3Hz	T 2	T 5
T 9	Sawtooth 1200/500Hz at 1Hz	T 15	T 2
T 10	Alternating 2400/2900Hz at 2Hz	T 7	T 5
T 11	Intermittent 1000Hz at 0.5Hz General alarm	T 31	T 1
T 12	Alternating 800/1000Hz at 0.875Hz	T 4	T 5
T 13	Intermittent 2400Hz at 1Hz	T 15	T 5
T 14	Intermittent 800Hz 0.25s on 1s off	T 4	T 5
T 15	Continuous at 800Hz	T 2	T 5
T 16	Intermittent 660Hz 150mS on, 150mS off	T 18	T 5
T 17	Alternating 544Hz (100mS)/440Hz(400mS)	T 2	T 27
T 18	Intermittent 660Hz 1.8s on, 1.8s off	T 2	T 5
T 19	1400Hz to 1600Hz sweep up over 1s -1600Hz to ...	T 2	T 5
T 20	Continuous 660Hz	T 2	T 5
T 21	Alternating 554/440Hz at 1Hz	T 2	T 5
T 22	Intermittent 554Hz at 0.875Hz	T 2	T 5
T 23	800Hz pulsing at 2Hz	T 6	T 5
T 24	Sweeping 800/1000Hz at 50Hz	T 29	T 5
T 25	Sweeping 2400/2900Hz at 50Hz	T 29	T 5
T 26	Simulated bell sound	T 2	T 1
T 27	Continuous 554Hz	T 26	T 5
T 28	Continuous 440Hz	T 2	T 5
T 29	Sweeping 800/1000Hz at 7Hz	T 7	T 5
T 30	420Hz repeating 0.625s on, 0.625s off Austral...	T 32	T 5
T 31	1200/500Hz at 1 Hz Prepare to Abandon Platform	T 11	T 1
T 32	Sweeping 500/1200Hz 3.75s on, 0.25s off 15Hz	T 26	T 1

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