

BExCS110-L2 Omni-directional Alarm Horn & LED Beacon

The flameproof BExCS110-L2-R combination omni-directional alarm horn sounder and high output LED beacon is suitable for Zone 1, 2, 21 & 22 applications. Approved to IECEx and ATEX standards.

The unique radial horn on the compact BExCS110-L2-R distributes the audible warning signal omni-directionally allowing the visual signal to be orientated optimally. Sound level outputs are up to 115dB(A) at 1 metre with a choice of 32 alarm tones and 3 remotely selectable stages. The LED beacon contains an array of 4 high output, multi-function L.E.D.s. with a total of 7 modes of operation – 5 flashing modes and 2 steady modes for use in indicator / status applications. DC voltage versions feature three remotely selectable stages enabling multiple warnings to be signalled from one device.

Features

- Marine grade, corrosion proof, LM6 aluminium enclosure
- Omni-directional sound output.
- Automatic synchronisation on multi-beacon & sounder systems.
- Beacons can be set to 'flip-flop' alternating mode with other units on multi-beacon systems.
- Very large termination area.
- Dual M20 cable entries – adaptors available.
- Stopping plug included.
- Ratchet adjustable stainless steel 'U' bracket.
- Reverse polarity diode fitted.
- IP66/67 ingress protection.
- 160 candela effective light intensity.
- UV stable PC, field replaceable, colour lens filters.
- 'Stage Programmable' version available with 45 tones & 4 remotely selectable stages.

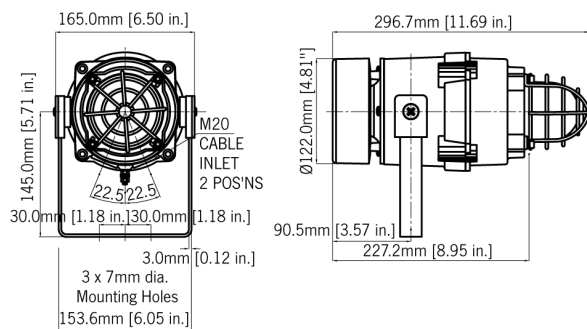
Approvals

- IECEx KEM 10.0025X
- ATEX KEMA 01ATEX2223X
- TR-CU Ex EAC certificate: RU C-GB.AA71.B.00109
- PESO CCOE certified: P471505

Coding

- II 2G Ex d IIB T5 Gb Ta. -50°C to +50°C
- II 2G Ex d IIB T4 Gb Ta. -50°C to +70°C
- II 2D Ex tb IIIC T70°C Db Ta. -50°C to +40°C
- II 2D Ex tb IIIC T85°C Db Ta. -50°C to +55°C
- II 2D Ex tb IIIC T100°C Db Ta. -50°C to +70°C





Specification

Alarm Horn Sounder:

Maximum output: 115dB(A) @ 1 metre [106dB(A) @ 10ft/3m]

Nominal output: 110dB(A) @ 1m +/- 3dB - Tone 2 [101dB(A) @ 10ft/3m]

No. of tones: 32 (UK00A / PFEER compliant)

No. of stages: 3

Volume control: Max. 110dB(A); Min. 72dB(A) - Tone 2

Effective range: 100m/328ft @ 1KHz

Voltages: 24V dc; 48V dc; 115V ac; 230V ac

Stage switching: Negative or positive

LED Beacon:

Source: Array of 4 x High Power Cree® LED's

Modes:

- 1Hz flash (60 fpm)
- 1.5Hz flash (90 fpm)
- 2Hz flash (120 fpm)
- Double strike flash
- Triple strike flash
- High Power Steady
- Low Power Steady

Eff. Intensity cd: 87 cd - High Power Steady

Eff. Intensity cd: 160 cd - 1Hz flash

Voltages: 24V dc; 115V ac; 230V ac

General:

Ingress protection: IP66/67

Enclosure matl: Marine grade copper free LM6 Aluminium

Enclosure finish: Chromate & powder coated

Horn material: High impact UL94 V0 & 5VA FR ABS (Red)

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

Temperature: -50° to +70°C (-58°F to +158°F)

Relative humidity: 95% - Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist

Weight: DC: 4.80kg/10.56lbs AC: 5.00kg/11lbs

SPL data +/-3dB(A), Candela with clear lens - at optimum voltage

Part Codes

Version:	Code:	Description:
Product type:	BExCS110L2	Explosion proof Alarm Horn Sounder & LED
Type:	DPR	Ex d, UV stable PC Colour Lens Radial Omni-directional Horn
Voltage:	DC024 DC048 AC115 AC230	24V dc 48V dc 115V ac 240V ac
Cable Entry Type: [e]	A B C D E F G	2 x M20x1.5mm 2 x 1/2" NPT - adaptors 2 x 3/4" NPT - adaptors 2 x M25x1.5mm - adaptors 1 x 1/2" NPT - adaptor 1 x 3/4" NPT - adaptor 1 x M25x1.5mm - adaptor
Adaptor/Stopping plug material: [m]	B N S	Brass Nickel Plated Stainless Steel
Bracket/Guard matl & tag: [s]	1 2 3 4	A2 304 Stainless Steel A4 316 Stainless Steel A2 304 St/St with Equip. Tag A4 316 St/St with Equip. Tag
Product version: [v]	A1 P1 T1	Default - IECEx & ATEX Stage programmable - IECEx & ATEX Tropicalised - IECEx & ATEX
Enclosure colour: [x]	R S	Red RAL3000 Special - contact E2S
Lens colour: [y]	A, B, C G, M, R, Y	Amber, Blue, Clear Green, Magenta, Red, Yellow
Accessories:		
SP65-0001-A2		Pole Mount Bracket Kit 2" St/St A2 (304)
SP65-0001-A4		Pole Mount Bracket Kit 2" St/St A4 (316)
SP65-0003-A2		Sunshade - St/St A2 (304)
SP65-0003-A4		Sunshade - St/St A4 (316)

Current Consumption

	Alarm Horn			LED Beacon		
Version:	Voltage:	Current:	Voltage:	Steady High Power:	Steady Low Power:	Flashing 1Hz:
24V dc	+/-25%	265mA	18-54V	240mA	134mA	110mA
115V ac 50/60Hz	+/-10%	110mA	+/-10%	95mA	78mA	90mA
230V ac 50/60Hz	+/-10%	56mA	+/-10%	48mA	37mA	45mA

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