

# BExCS110-05 Omni-directional Horn & Strobe

**Flameproof BExCS110-05-R omni-directional combination alarm horn sounder and Xenon strobe beacon for Zone 1, 2, 21 & 22. Approved to IECEx, ATEX, Ex EAC and INMETRO standards.**

The radial horn on the compact BExCS110-05-R distributes the audible warning signal omni-directionally allowing the visual signal to be orientated optimally. The alarm horn & Xenon beacon may be connected from a single power supply for simultaneous operation or from separate supplies for independent operation. The BEx range features enclosures manufactured from corrosion proof, marine grade copper free LM6 aluminium with a chromate and powder coat finish. All models have dual cable entries, large termination areas, containing in & out terminals, and an ingress protection of IP66/67.

## Features

- Omni-directional sound output.
- Marine grade, corrosion proof, LM6 aluminium enclosure
- Automatic synchronisation on multi-beacon & sounder systems.
- Beacons can be set to 'flip-flop' alternating mode with other units on multi-beacon systems.
- Xenon tubes mechanically secured against shock & vibration
- 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.
- 120 candela effective light intensity.
- UV stable PC, field replaceable, colour lens filters.
- 'Stage Programmable' version available with 45 alarm tones and 4 remotely selectable stages.

## Approvals

- IECEx Certificate: KEM 10.0025X
- ATEX Certificate: KEMA 01ATEX2223X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252\_21
- INMETRO certificate: 16IEEx-0034
- PESO CCOE certified: P471505
- UKCA certificate: UL22UKEX2639X

## Coding

- II 2G Ex db IIB T5 Gb Ta. -50°C to +40°C
- II 2G Ex db IIB T4 Gb Ta. -50°C to +70°C
- II 2D Ex tb IIIC T110°C Db Ta. -50°C to +55°C
- II 2D Ex tb IIIC T125°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 DC: 12vdc; 24vdc; 48vdc

Voltages AC: 115vac; 230vac

Stage switching: Negative or positive

Beacon:

Energy: 5 Joules (5Ws)

Flash rate: 1Hz (60 fpm)

Peak Candela: 500,000 cd - calculated from energy (J)

Eff. Intensity: 250 cd - calculated from energy (J)

Peak Candela: 39,463 cd\* - measured ref. to I.E.S.

Eff. Intensity: 120 cd\* - measured ref. to I.E.S.

Lens colours: Amber, Blue, Clear, Green, Magenta, Red & Yellow

Tube life: Emissions reduced to 70% after 5 million flashes

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 - 2.5mm<sup>2</sup> (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

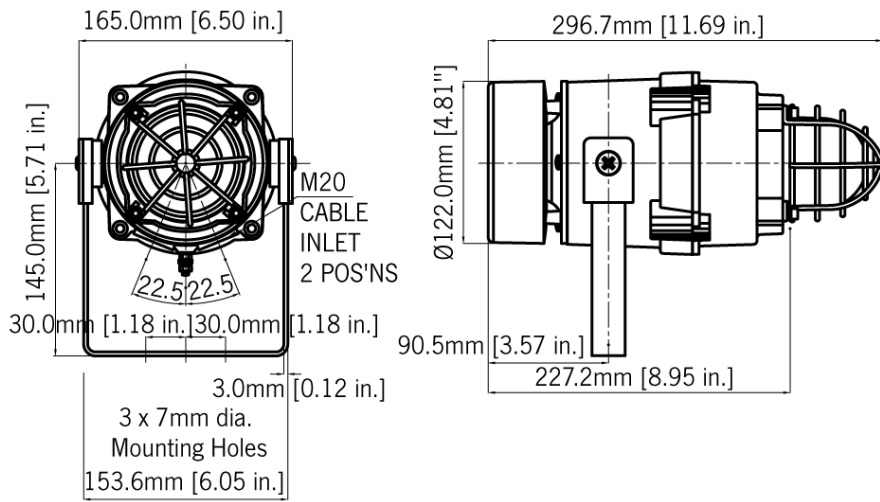
## Part Codes

Version:	Part identifier:	Description:
Product type:	BExCS11005	Explosion proof Alarm Horn Sounder & 5J Xenon
Type:	DPR	Ex d, UV stable PC Colour Lens, Radial Omni-directional Horn
Voltage:	DC012 DC024 DC048 AC115 AC230	12V dc 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, Ex EAC & INMETRO Stage programmable Tropicalised
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-A4 SP65-0003-A4	Pole Mount Bracket Kit 2" St/St A4 (316) Sunshade - St/St A4 (316)

## Current Consumption

Current consumption: Alarm Sounder Xenon Beacon

Version:	Voltage:	Current:	Voltage:	Current:
12V dc	+/-25%	195mA	10-14V	750mA
24V dc	+/-25%	265mA	20-28V	300mA
48V dc	+/-25%	130mA	42-54V	180mA
115V ac 50/60Hz	+/-10%	110mA	+/-10%	140mA
230V ac 50/60Hz	+/-10%	56mA	+/-10%	55mA



## Tone table

### S 1 Description

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