

# BExCS110-05-R/BExDCS110-05-R Omnidirectional Horn & Strobe

The flameproof BExCS110-05-R combination alarm horn sounder and Xenon strobe beacon with omni-directional horn is suitable for Zone 1 & Zone 2 applications and the BExDCS110-05-R version also for Zone 21 & 22.

The unique radial horn on the compact BExCS110-05-R distributes the audible warning signal omnidirectionally allowing the visual signal to be orientated optimally. Sound level outputs are up to 117dB(A) at 1 metre with a choice of 32 alarm tones and 3 remotely selectable stages. Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

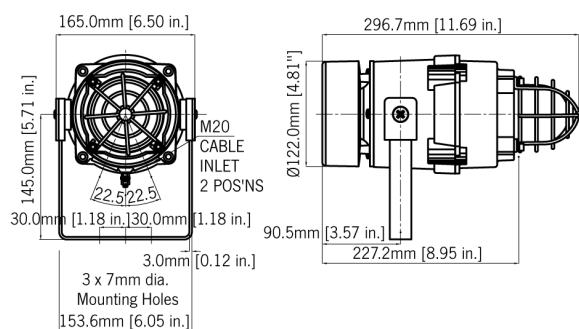
## Features

- 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.
- Xenon tubes mechanically secured against shock & vibration
- Ratchet adjustable stainless steel 'U' bracket.
- 'Programmable' version available:
  - 45 alarm tones
  - 4 remotely selectable stages
  - Any tone can be assigned to any stage
  - User configurable continuous frequency tone

## Approvals

- ATEX certificate: KEMA 01ATEX2223X,  
EN 60079-0 : 2006, EN 60079-1 : 2007,  
EN 61241-0 : 2006, EN 61241-1 : 2004
- IECEx certificate: IECEx KEM 10.0025,  
IEC 60079-0 : 2004 (Ed4), IEC 60079-1 : 2007 (Ed6),  
IEC 61241-0 : 2004 (Ed1), IEC 61241-1 : 2004 (Ed1)
- GOST-R certificate: POCC GB.JB05.B03365





## Specification

Sounder/Horn:

Maximum output: 117dB(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

Beacon:

Energy: 5 Joules (5Ws)

Flash rate: 1Hz (60 fpm)

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

Effective Intensity: 250 cd - calculated from energy (J)

Peak Candela: 34,812 cd\* - measured ref. to I.E.S.

Effective Intensity: 105 cd\* - measured ref. to I.E.S.

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

Tube life: Emissions are reduced to 70% after 8 million flashes

General:

Ingress protection: IP66/67

Housing material: Marine grade copper free LM6 Aluminium

Housing finish: Phosphated & powder coated

BEExCS110-05: Flare: High impact UL94 V0 & 5VA FR ABS (Red)

BEExDCS110-05: Flare: Anti-Static High impact ABS (Black)

Cable entries: Dual M20 ISO (one stopping plug inc)

Terminals: 0.5 to 2.5mm<sup>2</sup> cables.

Line monitoring: Min. 500 Ohm 2w,  
or 3k3 Ohm 0.5w res.  
or diode (dc versions).

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

## Part Codes

**Part Code:**      **Classification:**

BEExCS11005DR\*\* ATEX / IECEx:  
II 2G Ex d IIB T4 Ta. -50° to +70°C

GOST-R:  
1ExdIIBT4 Ta. -50° to +55°C

BEExDCS11005DR\*\* ATEX / IECEx:  
II 2G Ex d IIB T4 Ta. -50°C to. +70°C  
II 2D Ex tD A21 IP67 T115°C  
based on max Ta. of +70°C

GOST-R:  
1ExdIIBT4 Ta. -50° to +55°C  
DIP A21 Ta T5

\*\* = Voltage reference:

Options: 12DC, 24DC, 48DC, 115AC, 230AC

Add 'P' to part number for Programmable version

## Current Consumption

Version:	Alarm Sounder		Xenon Beacon	
	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

<b>S 1</b>	<b>Description</b>	<b>S 2</b>	<b>S 3</b>
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