

# BExCS110-05-R / BExDCS110-05-R

## Omni-directional Alarm Sounder & Xenon Combination

The flameproof BExCS110-05-R combination alarm sounder and Xenon 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 omni-directionally 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.

### Tone table:

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

Country specific or custom tone configurations and alarm frequencies are available upon request.

### Effective Candela lens colour factor:

Amber	Blue	Clear	Green	Red	Yellow
0.51	0.12	1.00	0.49	0.15	0.86

### Part codes:

Part Code:	Classification:
BExCS11005DR**	ATEX / IECEx: II 2G Ex d IIB T4 Ta. -50° to +70°C GOST-R: 1ExdIIBT4 Ta. -50° to +55°C
BExDCS11005DR**	ATEX / IECEx: II 2G Ex d IIB T4 Ta. -50°C to. +70°C based on max Ta. of +70°C GOST-R: 1ExdIIBT4 Ta. -50° to +55°C DIP A21 Ta T5

\*\* = Voltage reference:

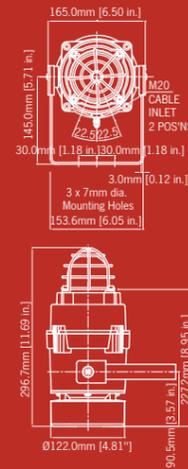
Options: 12DC, 24DC, 48DC, 115AC, 230AC

Add 'P' to part number for Programmable version

### Current consumption:

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

Xenon Beacon Version:	Voltage:	Current:
12V dc	10-14V	750mA
24V dc	20-28V	300mA
48V dc	42-54V	180mA
115V ac 50/60Hz	+/-10%	140mA
230V ac 50/60Hz	+/-10%	55mA



### Specification:

Sounder/Horn:	
Maximum output:	117dB(A) @ 1 metre
Nominal output:	110dB(A) @ 1m +/- 3dB - Tone 2
No. of tones:	32 (UK00A / PFEER compliant)
No. of stages:	3
Volume control:	Max. 110dB(A); Min. 72dB(A) - Tone 2
Effective range:	100m @ 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 - calc. from energy (J)
Effective candela:	250 cd - calc. from energy (J)
Peak Candela:	34,812 cd* - measured ref. to I.E.S.
Effective candela:	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
Housing finish:	Phosphated & powder coated
BExCS110-05 flare:	High impact UL94 V0 & 5VA FR ABS (Red)
BExDCS110-05 flare:	Anti-Static High impact ABS (Black)
Cable entries:	Dual M20 ISO (one stopping plug inc)
Terminals:	0.5 to 4.0mm <sup>2</sup> cables.
Line monitoring :	Min. 500 Ohm 2w, or 3k3 Ohm 0.5w res. or diode (dc versions).
Weight :	DC: 4.80kg AC: 5.00kg

\*Candela measurements representative of performance with clear lens at optimum voltage.

### 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

