

BEXCS110-05 COMBINATION ALARM

Special detection Product Datasheet

Features

- 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

Product overview

The flameproof BExCS110-05 combination alarm sounders and Xenon beacons are suitable for Zone 1 & Zone 2 applications.

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.



Product name	Part number	Description
BExCS110-05	116-M6040	EX d Combination Alarm, 117 dB(A), 24V DC, Red
BExCS110-05	116-M6041	EX d Combination Alarm, 117 dB(A), 24V DC, Amber
BExCS110-05	116-M6042	EX d Combination Alarm, 117 dB(A), 230V AC, Red

Other configurations on request

Technical Specification	
Sounder/Horn	
Maximum output	117dB(A) @ 1 metre
Nominal output	110dB(A) @ 1m +/- 3dB - Tone 2
No. of tones	32 (UKOOA / 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	34,812 cd
Effective Intensity cd	105 cd*
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
BExCS110-05 flare	High impact UL94 V0 & 5VA FR ABS (Red)
Cable entries	Dual M20 ISO
Terminals	0.5 to 4.0mm ² cables.
Line monitoring	Min. 500 Ohm 2w, or 3k3 Ohm 0.5w res. or diode (dc versions).
Weight	DC: 4.80kg AC: 5.00kg

*All candela data is representative of performance with clear lens at optimum voltage.

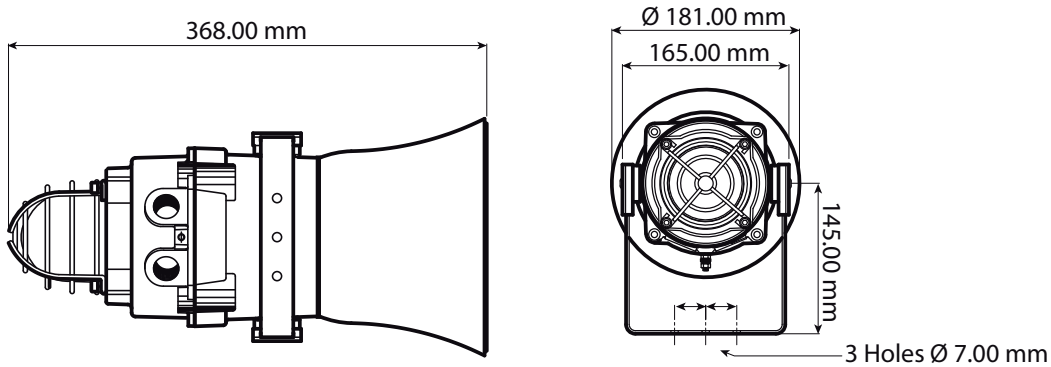
Effective Candela lens colour factor:

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

Approvals	
ATEX	KEMA 01ATEX2223X, EN 60079-0 : 2006, EN 60079-1 : 2007, EN 61241-0 : 2006, EN 61241-1 : 2004
IECEX	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	POCC GB.JB05.B02205

Classifications	
ATEX/IECEX	II 2G Ex d IIB T4 Ta. -50° to +70°C
GOST-R	1ExdIIBT4 Ta. -50° to +55°C

Dimension drawing



Frequencies

Stage 1	Frequency description	dB(A)@1m	Stage 2	Stage 3
Tone 1	1000 Hz Continuous - PFEER Toxic Gas	110.0	Tone 31	Tone 11
Tone 2	800/1000Hz @ 0.25 sec Alternating	110.0	Tone 17	Tone 5
Tone 3	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop	110.5	Tone 2	Tone 5
Tone 4	800/1000Hz @ 1Hz Sweeping	110.0	Tone 6	Tone 5
Tone 5	2400Hz Continuous	109.0	Tone 3	Tone 27
Tone 6	2400/2900Hz @ 7Hz Sweeping	109.0	Tone 7	Tone 5
Tone 7	2400/2900Hz @ 1Hz Sweeping	220.0	Tone 10	Tone 5
Tone 8	500/1200/500Hz @ 0.3Hz Sweeping	110.5	Tone 2	Tone 5
Tone 9	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	110.5	Tone 15	Tone 2
Tone 10	2400/2900Hz @ 2Hz Alternating	109.0	Tone 7	Tone 5
Tone 11	1000Hz @ 0.5Hz Intermittent	110.0	Tone 31	Tone 1
Tone 12	800/1000Hz @ 0.875Hz Alternating	110.0	Tone 4	Tone 5
Tone 13	2400Hz @ 1Hz Intermittent	109.0	Tone 15	Tone 5
Tone 14	800Hz 0.25sec on, 1 sec off Intermittent	103.0	Tone 4	Tone 5
Tone 15	800Hz Continuous	103.0	Tone 2	Tone 5
Tone 16	660Hz 150mS on, 150mS off Intermittent	104.0	Tone 18	Tone 5
Tone 17	544Hz (100mS)/440Hz (400mS) - NF S 32-001	107.2	Tone 2	Tone 27
Tone 18	660Hz 1.8sec on, 1.8sec off Intermittent	105.0	Tone 2	Tone 5
Tone 19	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265	117.0	Tone 2	Tone 5
Tone 20	660Hz Continuous	106.0	Tone 2	Tone 5
Tone 21	554Hz/440Hz @ 1Hz Alternating	107.0	Tone 2	Tone 5
Tone 22	544Hz @ 0.875 sec. Intermittent	107.0	Tone 2	Tone 5
Tone 23	800Hz @ 2Hz Intermittent	103.0	Tone 6	Tone 5
Tone 24	800/1000Hz @ 50Hz Sweeping	107.0	Tone 29	Tone 5
Tone 25	2400/2900Hz @ 50Hz Sweeping	109.0	Tone 29	Tone 5
Tone 26	Bell	117.0	Tone 2	Tone 1
Tone 27	554Hz Continuous	107.0	Tone 26	Tone 5
Tone 28	440Hz Continuous	104.0	Tone 2	Tone 5
Tone 29	800/1000Hz @ 7Hz Sweeping	106.0	Tone 7	Tone 5
Tone 30	AS2220: 420Hz repeating 0.625 sec on, 0.625 sec off.	104.0	Tone 32	Tone 5
Tone 31	660/1200Hz @ 1Hz Sweeping	110.5	Tone 11	Tone 1
Tone 32	AS2220: 500-1200Hz 3.75s on 0.25s off (15 cycles/min)	110.5	Tone 26	Tone 1

Current consumption

Version	Alarm sounder		Xenon beacon	
	Voltage range	Current	Voltage range	Current
12 V DC	+/-25%	195mA	10-14V DC	750mA
24 V DC	+/-25%	265mA	20-28V DC	300mA
48 V DC	+/-25%	130mA	42 -54V DC	180mA
115V AC 50/60Hz	+/-10%	110mA	+/-10%	140mA
230V AC 50/60Hz	+/-10%	56mA	+/-10%	55mA