

# BExCTS110-05 Flare Horn Alarm & Strobe - Telephone Initiated

The BExCTS110-05D is a flameproof telephone initiated combined alarm horn sounder and Xenon strobe beacon. The unit produces a loud audible signal and a visual signal, when triggered by a telephone ringing signal and can be used in hazardous areas where potentially flammable atmospheres may be present. Zone 1, 2, 21 & 22. Approved to IECEx, ATEX, Ex EAC and INMETRO standards.

Thirty two different sounds can be selected by internal switches, (see tone table on Page 5). The sounder produces output levels in the 110dB(A) range and the beacon produces an output level of 5 joules. The unit can be used in Zone 1 and Zone 2 areas with gases in groups IIA and IIB and with Temperature Classifications of T1, T2, T3, and T4.

## Features

- The sounder and beacon can be set individually to either run continuously or pulsed at the cadence of the ringing tone.
- Marine grade, corrosion proof, LM6 aluminium enclosure
- Xenon tube 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.
- 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 two M20 cable entries, large termination areas containing in & out terminals and an ingress protection of IP66/67.



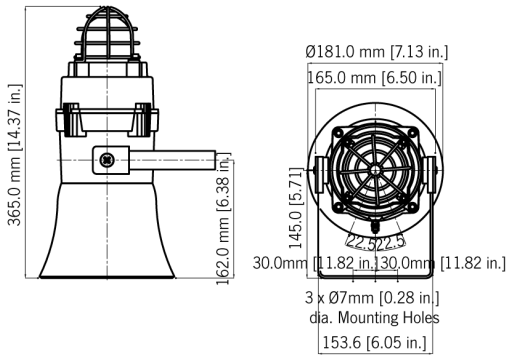
## Approvals

- IECEx KEM 10.0025X  
IEC 60079-0 : 2011  
IEC 60079-1 : 2007-4  
IEC 60079-31 : 2013
- ATEX KEMA 01ATEX2223X  
EN 60079-0 : 2012 + A11  
EN 60079-1 : 2007  
EN 60079-31 : 2014
- TR-CU Ex EAC certificate: RU C-GB.AA71.B.00109
- Inmetro certificate: 16-IEEx-0034

## Coding

- II 2G Ex d IIB T5 Gb Ta. -50°C to +40°C
- II 2G Ex d 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

### 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)
Volume control:	Max. 110dB(A); Min. 72dB(A) - Tone 2
Effective range:	100m/328ft @ 1KHz
Voltages DC:	12vdc; 24vdc; 48vdc
Voltages AC:	115vac; 230vac

### 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 are reduced to 70% after 8 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 included)
Terminals:	0.5 - 2.5mm <sup>2</sup> (20-14 AWG)
Enclosure volume:	<2 litres
Grounding stud:	M5
Temperature range:	-50° to +70°C (-58°F to +158°F)
Relative humidity:	90% at 20°C [68°F]
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 code:

Product type:	BExCTS11005Explosion proof Telephone Initiated Alarm Horn Sounder & 5J Xenon Beacon	
Type:	DPF	Ex d, UV stable PC Colour Lens, Flare Horn
Voltage:	DC012	12V dc
	DC024	24V dc
	DC048	48V dc
	AC115	115V ac
	AC230	240V ac
Cable Entry Type: [e]	A	2 x M20x1.5mm
	B	2 x 1/2" NPT - adaptors
	C	2 x 3/4" NPT - adaptors
	D	2 x M25x1.5mm - adaptors
	E	1 x 1/2" NPT - adaptor
	F	1 x 3/4" NPT - adaptor
	G	1 x M25x1.5mm - adaptor
Note:	<i>M20 stopping plugs for unused entries supplied with all options</i>	
Adaptor/Stopping plug material: [m]	B	Brass
	N	Nickel Plated
	S	Stainless Steel
Bracket/Guard material: [s]	1	A2 304 Stainless Steel
	2	A4 316 Stainless Steel
	3	A2 304 St/St with Equip. Tag
	4	A4 316 St/St with Equip. Tag (304)
Product version: [v]	A1	Default - IECEx, ATEX, Ex EAC & INMETRO
Enclosure colour: [x]	R	Red RAL3000
	S	Special - contact E2S
Lens colour: [y]	A	Amber
	B	Blue
	C	Clear
	G	Green
	M	Magenta
	R	Red
	Y	Yellow

## 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

### S 1 Description

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