

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

The BExCTS110-05D is a flameproof telephone initiated combined alarm horn sounder and Xenon strobe beacon. Suitable for Zone 1, 2, 21 & 22. Approved to IECEx, ATEX, Ex EAC and INMETRO standards.

The BExCTS110-05D 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. 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 BEx range features enclosures manufactured from corrosion proof, marine grade copper free LM6 aluminium with a chromate and powder coat finish. All models contain dual cable entries, large termination areas containing in & out terminals and an ingress protection of IP66/67.

## 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.

## 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
- 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

### 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 (UK00A / 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 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 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: 95% - Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist

MTBF AC: 66.56 years / 583,091 hours - MIL217

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

SPL data +/-3dB(A), Candela with clear lens - at optimum voltage

## Part Codes

### Part Code:

### Identifier: Description:

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 entries:[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

Stopping plug/  
adaptor material: B Brass  
N Nickel Plated  
[m] S Stainless Steel

Bracket/Guard  
matl & tag: [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

Product version: [v]A1 Default - IECEx, ATEX, Ex EAC & INMETRO

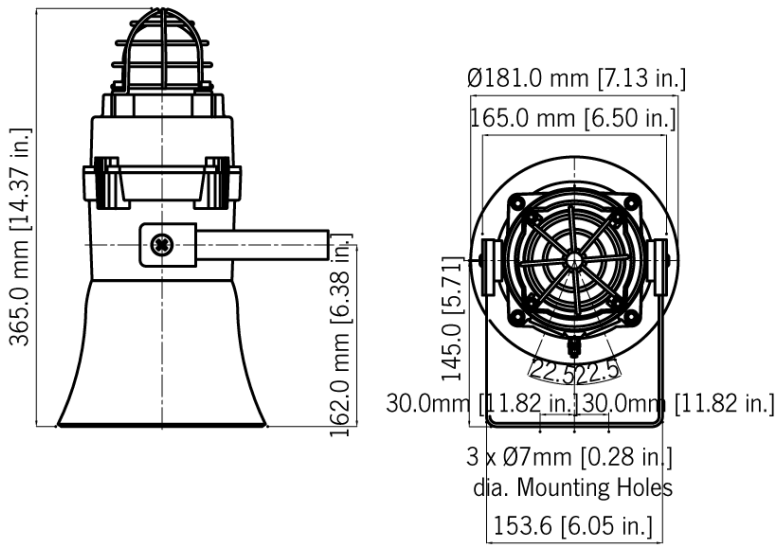
Enclosure colour: R Red  
[x] S Special - contact E2S

Lens colour: [y] A Amber  
B Blue  
C Clear  
G Green  
M Magenta  
R Red  
Y Yellow

Accessories: SP65-0001-A4Pole Mount Bracket Kit St/St A4 (316)  
SP65-0003-A4Sunshade - St/St A4 (316)

## 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

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