

BExCS110-05 Explosion Proof Alarm & Strobe

The flameproof BExCS110-05 combination alarm horn sounders and Xenon strobe beacons are suitable for Zone 1, 2, 21 & 22. Approved to IECEx, ATEX, Ex EAC and INMETRO standards.

Sound level outputs are up to 117dB(A) at 1 metre with a choice of 32 alarm tones and 3 remotely selectable stages. Alarm horn & Xenon beacon may be connected from a single power supply for simultaneous operation or from separate supplies for independent operation. The BEx explosion proof Ex d range features enclosures manufactured from corrosion proof, marine grade copper free LM6 aluminium with a chromate and powder coat finish. All models have dual cable entries, large termination areas containing in & out terminals and an ingress protection of IP66/67.

Features

- Marine grade, corrosion proof, LM6 aluminium enclosure
- 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
- 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.
- 'Stage Programmable' version available with 45 tones & 4 remotely selectable stages.



Approvals

- IECEx KEM 10.0025X
- ATEX KEMA 01ATEX2223X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252_21
- INMETRO certificate: 16-Ex-0034
- PESO CCOE certified: P471505

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

Alarm Horn Sounder:

| | |
|------------------|---|
| 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) |
| 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) |
| 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 ² (20-14 AWG) |
| Enclosure volume: | <2 litres |
| Line monitoring: | Blocking diode included EOL Min. 500 Ohm 2w, or 3k3 Ohm 0.5w resistor or diode (DC versions) can be fitted |
| 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 |
| Weight: | DC: 4.80kg/10.56lbs AC: 5.00kg/11lbs |
| SPL data +/-3dB(A), Candela with clear lens - at optimum voltage | |

Part Codes

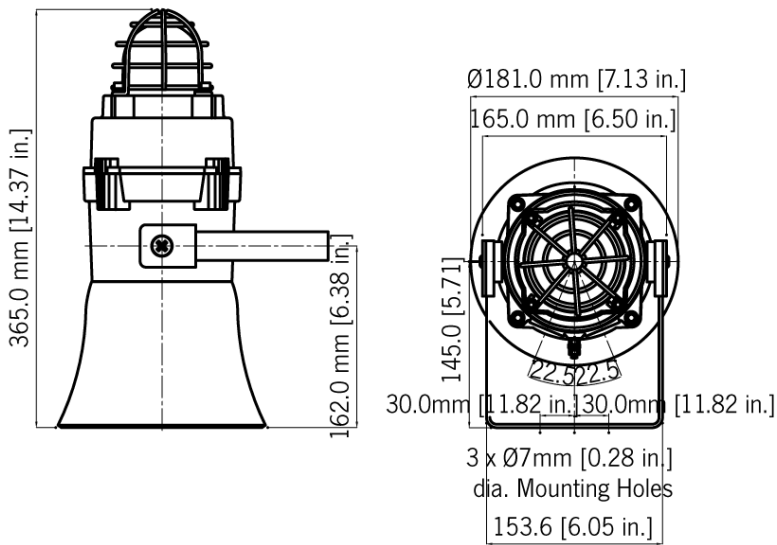
| Version: | Part identifier: | Description: |
|-------------------------------------|---|--|
| Product type: | BExCS11005 | Explosion proof Alarm Horn Sounder & 5J Xenon Beacon |
| Type: | DPF | Ex d, UV stable PC Colour Lens, Flare Horn |
| Voltage: | DC012 DC024 DC048 AC115 AC230 | 12V dc 24V dc 48V dc 115V ac 240V ac |
| Cable Entry Type: | A B C D E F G | 2 x M20x1.5mm 2 x 1/2" NPT - adaptors 2 x 3/4" NPT - adaptors 2 x M25x1.5mm - adaptors 1 x 1/2" NPT - adaptor 1 x 3/4" NPT - adaptor 1 x M25x1.5mm - adaptor |
| Adaptor/Stopping plug material: [m] | B N S | Brass Nickel Plated Stainless Steel |
| Bracket/Guard matl & tag: [s] | 1 2 3 4 | A2 304 Stainless Steel A4 316 Stainless Steel A2 304 St/St with Equip. Tag A4 316 St/St with Equip. Tag |
| Product version: [v] | A1 P1 T1 | Default - IECEX, ATEX, Ex EAC & INMETRO Stage programmable - IECEX, ATEX, Ex EAC & INMETRO Tropicalised - IECEX, ATEX, Ex EAC & INMETRO |
| Enclosure colour: [x] | R S | Red RAL3000 Special - contact E2S |
| Lens colour: [y] | A B C G M R Y | Amber Blue Clear Green Magenta Red Yellow |
| Accessories: | SP65-0001-A4 SP65-0003-A4 | Pole Mount Bracket Kit 2" St/St A4 (316) Sunshade - St/St A4 (316) |

Current Consumption

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

| S 1 Description | S 2 | S 3 |
|---|------|------|
| 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 |