# E2xC1LD2R Combination Radial Horn & LED

**The hazardous location E2xC1LD2R combined alarm sounder and LED beacon/status light is UL/cULs approved for Class I Div 2 and Class II Div 2 as well as IECEx and ATEX certified for Zone 2 and 22 applications.**

The unique radial horn on the compact E2xC1LD2R distributes the audible warning signal omni-directionally allowing the visual signal to be orientated optimally. The alarm horn offers a choice of 45 alarm tones and 3 remotely selectable stages. The LED beacon contains an array of 4 high output, multi-function L.E.D.s. with a total of 7 modes of operation – 5 flashing modes and 2 steady modes for use in indicator / status applications. The E2x range features enclosures manufactured from lightweight, corrosion proof GRP and high impact, fire retardant ABS re-entrant flare horns; both of which are suitable for the harshest of environments.

## Features

- Corrosion proof PPS enclosure
- Ingress protection IP66/67, Type 4/4X
- Automatic synchronisation on multi-sounder systems
- Choice of five flash rates: 1Hz, 1.5Hz, 2Hz, double and triple flash.
- High and low power Steady modes
- Three remotely selectable stages/channels on DC versions.
- Glass lens & Stainless Steel guard
- UV stable PC field replaceable lens colour filter
- Dual cable entries – stopping plug included.
- Duplicate cable terminations (in & out for daisy-chain installations)
- Ratchet adjustable stainless steel 'U' bracket.



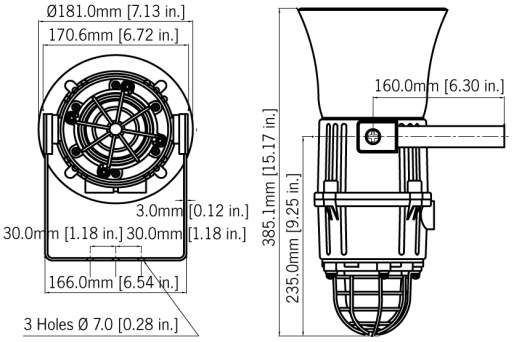
## Approvals

- ATEX certificate: DEMKO 06 ATEX 0421554X
- IECEx certificate: IECEx ULD 14.0012X
- UL/cUL File ref: E230764
- UKCA certificate: UL21UKEX2135X
- Ex EAC certified: EAC RU C-GB.AA71.B.00273/20

## Coding

- IECEx / ATEX:
  II 3G Ex ec IIC T3 Gc Ta -20°C to +55°C
  II 3D Ex tc IIIC T90°C Dc Ta -20°C to +40°C
  II 3D Ex tc IIIC T105°C Dc Ta -20°C to +55°C
- NEC Class / Zone ratings US:
  Class I Zone 2 AEx ec IIC T3 Gc Ta -20°C to +40°C
  Zone 22 AEx tc IIIB T90°C Dc Ta -20°C to +40°C
  Zone 22 AEx tc IIIB T105°C Dc Ta -20°C to +55°C
- CEC Class / Zone ratings Canada
  Class I Zone 2 Ex ec IIC T3C Gc X Ta -20°C to +40°C
  Class I Zone 2 Ex ec IIC T3B Gc X Ta -20°C to +55°C
  Zone 22 Ex tc IIIC T90°C Dc Ta -20°C to +40°C
  Zone 22 Ex tc IIIC T105°C Dc Ta -20°C to +55°C
- NEC & CEC Class / Division Ratings for US / Canada
  Class I Div 2 Group ABCD T3C Ta -20°C to +55°C
  Class II Div 2 Group FG T4A Ta -20°C to +55°C
  Class II Div 2 Group FG T5 Ta -20°C to +40°C
  Class III Div 1 & 2 Ta -20°C to +55°C






## Specification

**Alarm Horn:**

| | |
|---|---|
| Maximum output: | 114dB(A) @ 1 metre [107dB(A) @ 10ft/3m] |
| Nominal output: | 110dB(A) @ 1m +/- 3dB – Tone 2 [104dB(A) @ 10ft/3m] |
| No. of tones: | 45 (UKOOA/PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 113dB(A) Min. 105dB(A) – Tone 2 |
| Effective range: | 100m/328ft @ 1KHz |

**LED Beacon:**

| | |
|---|---|
| Source: | Array of 4 x High Power Cree® LED's |
| Modes: | 1Hz flash (60 fpm)<br>1.5Hz flash (90 fpm)<br>2Hz flash (120 fpm)<br>Double strike flash<br>Triple strike flash<br>High Power Steady<br>Low Power Steady |
| Eff. Intensity cd: | 87 cd – High Power Steady |
| Eff. Intensity cd: | 160 cd – 1Hz flash |
| Voltages: | 24V dc; 115V ac; 230V ac |

**General:**

| | |
|---|---|
| Voltages: | 24vdc; 48vdc; 115vac; 230vac |
| Ingress protection: | IP rating per EN60079-0:IP64<br>IP rating per EN60529:IP66<br>Type rating per UL50E/NEMA250:4/4X/13 |
| Enclosure: | UL94V0 GRP (PPS) & ABS |
| Lens material: | Borosilicate glass dome with PC prismatic lens. |
| Guard: | Stainless Steel dome guard as standard |
| Cable entries: | Dual M20x1.5 or 1/2"NPT |
| Terminals: | 0.5 – 2.5mm² (20-14 AWG) |
| Line monitoring: | Blocking diode included, EOL can be factory fitted |
| LED life: | 60,000 hours |
| Operating temp: | -20 to +55°C [-4° to +131°F] |
| Storage temp: | -40 to +70°C [-40° to +158°F] |
| Relative humidity: | 90% at 20°C [68°F] |
| Weight: | DC: 3.00Kg/6.6lbs AC: 3.50kg/7.7lbs |

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

## Part Codes

| Part Code: | Ident.: | Description: |
|---|---|---|
| Product type: | E2xC1LD2 | Combined alarm horn & LED beacon |
| Type: | R | Radial Omni-directional Horn |
| Voltage: | AC115<br>AC230<br>DC024 | 115V ac 50/60Hz<br>230V ac 50/60Hz<br>24V dc |
| Cable entries:[e] | A<br>B<br>C | M20x1.5 & ½" NPT<br>M20x1.5 & M20x1.5<br>½" NPT & ½" NPT |
| Stopping plug material: [m] | N | Nylon |
| Bracket & Guard & tag: [s] | 1<br>2<br>3<br>4 | 304 A2 Stainless Steel<br>316 A4 Stainless Steel<br>304 A2 Stainless Steel & Equip. Tag<br>316 A4 Stainless Steel & Equip. Tag |
| Version: [v] | A1 | UL, cULs, IECEx & ATEX |
| Enclosure: [x] | B | Black |
| Lens colour: [y] | A, B, C<br>G, M, R<br>Y | Amber, Blue, Clear<br>Green, Magenta, Red<br>Yellow |
| Accessories: | SP65-0001-A4<br>SP65-0003-A4 | Pole Mount Bracket Kit St/St A4 (316)<br>Sunshade – St/St A4 (316) |

## Current Consumption

| | Alarm Horn | | LED Beacon | | | |
|---|---|---|---|---|---|---|
| Version: | Voltage: | Current: | Voltage: | Steady High Power: | Steady Low Power: | Flashing 1Hz: |
| 24V dc | +/-25% | 265mA | 18-54V | 240mA | 134mA | 110mA |
| 115V ac 50/60Hz | +/-10% | 110mA | +/-10% | 95mA | 78mA | 90mA |
| 230V ac 50/60Hz | +/-10% | 56mA | +/-10% | 48mA | 37mA | 45mA |

## Tone table

| S 1 | Description | S 2 | S 3 |
|---|---|---|---|
| T 1 | 340 Hz Continuous | T 2 | T 5 |
| T 2 | 800/1000Hz @ 0.25 sec Alternating | T 17 | T 5 |
| T 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | T 2 | T 5 |
| T 4 | 800/1000Hz @ 1Hz Sweeping | T 6 | T 5 |
| T 5 | 2400Hz Continuous | T 3 | T 20 |
| T 6 | 2400/2900Hz @ 7Hz Sweeping | T 7 | T 5 |
| T 7 | 2400/2900Hz @ 1Hz Sweeping | T 10 | T 5 |
| T 8 | 500/1200/500Hz @ 0.3Hz Sweeping | T 2 | T 5 |
| T 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | T 15 | T 2 |
| T 10 | 2400/2900Hz @ 2Hz Alternating | T 7 | T 5 |
| T 11 | 1000Hz @ 1Hz Intermittent | T 2 | T 5 |
| T 12 | 800/1000Hz @ 0.875Hz Alternating | T 4 | T 5 |
| T 13 | 2400Hz @ 1Hz Intermittent | T 15 | T 5 |
| T 14 | 800Hz 0.25sec on, 1 sec off Intermittent | T 4 | T 5 |
| T 15 | 800Hz Continuous | T 2 | T 5 |
| T 16 | 660Hz 150mS on, 150mS off Intermittent | T 18 | T 5 |
| T 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | T 2 | T 27 |
| T 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | T 2 | T 5 |
| T 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | T 2 | T 5 |
| T 20 | 660Hz Continuous | T 2 | T 5 |
| T 21 | 554Hz/440Hz @ 1Hz Alternating | T 2 | T 5 |
| T 22 | 544Hz @ 0.875 sec. Intermittent | T 2 | T 5 |
| T 23 | 800Hz @ 2Hz Intermittent | T 6 | T 5 |
| T 24 | 800/1000Hz @ 50Hz Sweeping | T 29 | T 5 |
| T 25 | 2400/2900Hz @ 50Hz Sweeping | T 29 | T 5 |
| T 26 | Bell | T 2 | T 15 |
| T 27 | 554Hz Continuous | T 26 | T 5 |
| T 28 | 440Hz Continuous | T 2 | T 5 |
| T 29 | 800/1000Hz @ 7Hz Sweeping | T 7 | T 5 |
| T 30 | 300Hz Continuous | T 2 | T 5 |
| T 31 | 660/1200Hz @ 1Hz Sweeping | T 26 | T 5 |
| T 32 | Two T chime. | T 26 | T 15 |
| T 33 | 745Hz @ 1Hz Intermittent | T 2 | T 5 |
| T 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | T 38 | T 45 |
| T 35 | 420Hz @ 0.625 sec Australian Alert | T 36 | T 5 |
| T 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | T 35 | T 5 |
| T 37 | 1000Hz Continuous - PFEER Toxic Gas | T 9 | T 45 |
| T 38 | 2000Hz Continuous | T 34 | T 45 |
| T 39 | 800Hz 0.25sec on, 1 sec off Intermittent | T 23 | T 17 |
| T 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | T 31 | T 27 |
| T 41 | Motor Siren - slow rise to 1200 Hz | T 2 | T 5 |
| T 42 | Motor Siren - slow rise to 800 Hz | T 2 | T 5 |
| T 43 | 1200 Hz Continuous | T 2 | T 5 |
| T 44 | Motor Siren - slow rise to 2400 Hz | T 2 | T 5 |
| T 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. ... | T 38 | T 34 |



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