

# D1xC1X05F 115dB(A) Alarm Horn & 5J Xenon Strobe

The D1xC1X05F is a globally certified alarm horn sounder featuring a re-entrant flare horn and combined with a 5 Joule Xenon strobe beacon. Robust Type 4/4X, IP66 marine grade, corrosion proof aluminium enclosure approved for Class I & II Div 1, Zone 1 & 20, IECEx and ATEX Zone 1, 2, 21 & 22 explosion proof signalling applications.

Featuring 64 alarm tone sounds, each of the available 4 stage/channels can be remotely triggered. Class D amplification provides a high sound output at optimum operating current. The threaded flameproof joint, multiple cable entries and duplicated, pluggable termination simplifies both installation and routine maintenance. The 24Vdc Class I version is approved for public (alarm horn) and private mode fire alarm use (strobe beacon).

## Features

- Maximum sound pressure level output of 115dB(A)
- Automatic synchronisation on multi-beacon & sounder systems
- UL464 / CAN/ULC-S525 & UL1638 / CAN/ULC-S526

## Approvals

- UL/cUL/ULC File ref: E230764
- IECEx Certificate: IECEx ULD 19.0008X
- ATEX Certificate: DEMKO 19 ATEX 2141X
- CSFM listing: 7136-2279:0506
- UKCA certificate: UL21UKEX2132X

## Coding

- NEC Class / Zone
    - Class I Zone 1 IIC T4 Gb Ta -55°C to +85°C
    - Class I Zone 1 IIC T4A Gb Ta -55°C to +80°C
    - Class I Zone 1 IIC T5 Gb Ta -55°C to +60°C
    - Class I Zone 1 IIC T6 Gb Ta -55°C to +45°C
  - CEC Class / Zone
    - Class I Zone 1 IIC T5 Gb Ta -55°C to +55°C
    - Class I Zone 1 IIC T6 Gb Ta -55°C to +45°C
  - NEC Class / Div
    - Class I Div 1 ABCD T4 Ta -55°C to +85°C
    - Class I Div 1 ABCD T4A Ta -55°C to +80°C
    - Class I Div 1 ABCD T5 Ta -55°C to +60°C
    - Class I Div 1 ABCD T6 Ta -55°C to +45°C
  - CEC Class / Div
    - Class I Div 1 ABCD T5 Ta -55°C to +55°C
    - Class I Div 1 ABCD T6 Ta -55°C to +45°C
  - IECEx / ATEX
    - II 2G Ex db IIC T4/T5 Gb Ta -55°C to +75°C
    - II 2G Ex db IIC T5 Gb Ta -55°C to +55°C
    - II 2G Ex db IIC T6 Gb Ta -55°C to +40°C (DC only)
    - II 2D Ex tb IIIC T115°C Db Ta -55°C to +75°C
  - NEC Class / Zone – Product version: D
    - Class II Zone 20 IIIB T4A Gb Ta -55°C to +70°C
  - NEC Class / Div – Product version: D
    - Class II Div 1 Group FG T4A Ta -55°C to +70°C
- See product manual for full voltage specific coding.



Specification

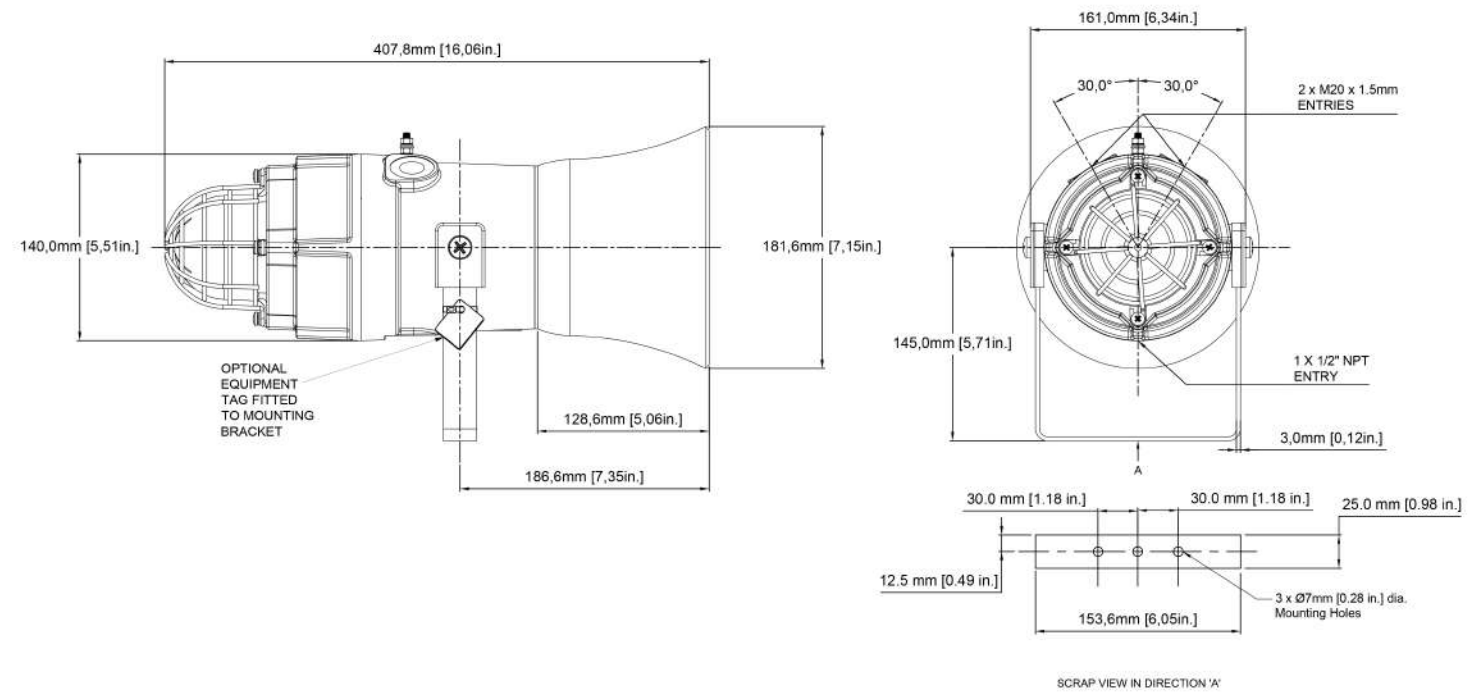
|                       |                                                                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Alarm Horn:</b>    |                                                                                                                                        |
| Maximum output:       | 115dB(A) @ 1 metre [106dB(A) @ 10ft/3m]<br>Class II version: 98dB(A) @ 1 metre [88dB(A) @ 10ft/3m]                                     |
| Nominal output:       | 110dB(A) @ 1m +/- 3dB - Tone 4 [101dB(A) @ 10ft/3m]<br>Class II version: 94dB(A) @ 1 metre [84dB(A) @ 10ft/3m]                         |
| No. of tones:         | 64 (UK00A / PFEER compliant)                                                                                                           |
| No. of stages:        | 4                                                                                                                                      |
| Volume control:       | Full range                                                                                                                             |
| Effective range:      | 125m/410ft @ 1KHz                                                                                                                      |
| Voltages DC:          | 24Vdc (20-28Vdc)                                                                                                                       |
| Voltages AC:          | 110-120Vac, 220-240Vac                                                                                                                 |
| Stage switching:      | DC units: negative or positive<br>AC units: common supply line                                                                         |
| <b>Strobe Beacon:</b> |                                                                                                                                        |
| Energy:               | 5 Joules (5Ws)                                                                                                                         |
| Flash rates:          | Option 1: 1Hz (60 fpm)<br>Option 2: 1.5Hz (90 fpm)<br>Option 3: Double Strike                                                          |
| Eff. Intensity:       | 143 cd* - measured ref. to I.E.S.                                                                                                      |
| Peak Candela:         | 46,976 cd* - measured ref. to I.E.S.                                                                                                   |
| Eff. Intensity:       | 250 cd - calculated from energy (J)                                                                                                    |
| Peak Candela:         | 500,000 cd - calculated from energy (J)                                                                                                |
| Lens colours:         | Amber, Blue, Clear, Green, Magenta, Red & Yellow                                                                                       |
| Tube life :           | Emissions reduced to 70% > 5 million flashes                                                                                           |
| <b>General:</b>       |                                                                                                                                        |
| Ingress protection:   | EN60529: IP66<br>UL50E / NEMA250: 4 / 4X / 3R / 13                                                                                     |
| Enclosure material:   | Marine grade aluminium LM6 - copper free<br>Chromated & powder coated - corrosion proof                                                |
| Enclosure colour:     | Red or Grey, custom colours available on request                                                                                       |
| Cable entries:        | 1x1/2"NPT & 2xM20 - thread adaptors available                                                                                          |
| Terminals:            | 0.5 - 2.5mm² (20-14 AWG) Pluggable, duplicated terminals                                                                               |
| Grounding stud:       | M5                                                                                                                                     |
| Line monitoring:      | Blocking diode included. EOL Min. 500 Ohm 2W, or 3k3 Ohm 0.5W resistor or diode (DC versions) can be fitted                            |
| Enclosure volume:     | <2 litres                                                                                                                              |
| Installation temp:    | -55 to +85°C [-67° to +185°F]                                                                                                          |
| Storage temp:         | -55 to +85°C [-67° to +185°F]                                                                                                          |
| Relative humidity:    | 99%                                                                                                                                    |
| Vibration test:       | 35Hz for a duration 4Hr (UL464)                                                                                                        |
| Jarring test:         | 3ft/lb Energy (UL464)                                                                                                                  |
| Impact test:          | 3x 5lb (UL464)                                                                                                                         |
| Relative humidity:    | 95% - Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist |
| Weight:               | 5.2kg/11.4lbs                                                                                                                          |

Part Codes

| Part Code:                          | Identifier:                         | Description:                                                                                                                                                                                                                                       |
|-------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product type:                       | D1xC1X05                            | Combined Alarm Horn & Xenon Strobe                                                                                                                                                                                                                 |
| Horn type:                          | F                                   | Flare re-entrant horn                                                                                                                                                                                                                              |
| Voltage:                            | DC024<br>AC115<br>AC230             | 20-28V dc<br>110-120Vac<br>220-240Vac                                                                                                                                                                                                              |
| Cable entries:[e]                   | A<br>B<br>C<br>D<br>F<br>G<br>Note: | 2 x M20x1.5mm & 1 x 1/2"NPT<br>2 x 1/2"NPT - adaptors<br>2 x 3/4"NPT - adaptors<br>2 x M25x1.5mm - adaptors<br>1 x 3/4"NPT - adaptor<br>1 x M25x1.5mm - adaptor<br>All entries, excluding thread adaptors, supplied with stopping plugs installed. |
| Stopping plug/<br>adaptor material: | B<br>N<br>S                         | Brass<br>Nickel Plated<br>Stainless Steel                                                                                                                                                                                                          |
| Bracket/Guard<br>material: [s]      | 1<br>3                              | A4 316 Stainless Steel<br>A4 316 St/St with Equip. Tag                                                                                                                                                                                             |
| Product version:                    | A<br>D                              | UL, cUL, ULC, IECEx, ATEX, PESO, CSFM<br>Class II - UL, cUL                                                                                                                                                                                        |
| Product option:                     | 1<br>Z<br>T<br>X<br>Y               | Standard product<br>Custom alarm tone software - contact E2S<br>Tropicalisation<br>Custom configuration - contact E2S<br>Stage control Config. 4                                                                                                   |
| Enclosure colour:                   | G<br>[X]<br>R                       | Grey<br>Red                                                                                                                                                                                                                                        |
| Lens colour: [y]                    | A<br>B<br>C<br>G<br>M<br>R<br>Y     | Amber<br>Blue<br>Clear<br>Green<br>Magenta<br>Red<br>Yellow                                                                                                                                                                                        |
| <b>Accessories:</b>                 |                                     |                                                                                                                                                                                                                                                    |
| SP65-0001-A4                        |                                     | Pole Mount Bracket Kit 2" St/St A4 (316)                                                                                                                                                                                                           |
| SP65-0003-A4                        |                                     | Sunshade - St/St A4 (316)                                                                                                                                                                                                                          |

Current Consumption

| Nominal Voltage: | Voltage range:        | Xenon Strobe Nominal current: | Alarm Horn Nominal current: | Combined Nominal current: | Combined Max. current: |
|------------------|-----------------------|-------------------------------|-----------------------------|---------------------------|------------------------|
| 24Vdc            | 20-28Vdc              | 323mA                         | 185mA                       | 508mA                     | 555mA                  |
| 115Vac           | 110-120Vac<br>50/60Hz | 129mA                         | 73mA                        | 200mA                     | 264mA                  |
| 230Vac           | 220-240Vac<br>50/60Hz | 79mA                          | 48mA                        | 127mA                     | 149mA                  |



## Tone table

| S 1 | Description                                      | S 2 | S 3 | S 4 |
|-----|--------------------------------------------------|-----|-----|-----|
| T1  | 1000 Continuous PFEER Toxic Gas                  | Any | T2  | T44 |
| T2  | 1200/500 @ 1Hz Sweeping DIN/PFEER P.T.A.P.       | Any | T3  | T44 |
| T3  | 1000 @ 0.5Hz (1s on, 1s off) Intermittent PFE... | Any | T2  | T44 |
| T4  | 1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s NF C 48-265  | Any | T24 | T1  |
| T5  | 544(100mS)/440 (400mS) NF S 32-001               | Any | T19 | T1  |
| T6  | 1500/500 - (0.5s on , 0.5s off) x3 + 1s gap A... | Any | T44 | T1  |
| T7  | 500-1500Hz Sweeping 2 sec on 1 sec off AS4428    | Any | T44 | T1  |
| T8  | 500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) NEN 2575  | Any | T24 | T35 |
| T9  | 1000 (1s on, 1s off)x7 + (7s on, 1s off) IMO ... | Any | T34 | T1  |
| T10 | 1000 (1s on, 1s off)x7 + (7s on, 1s off) IMO ... | Any | T34 | T1  |
| T11 | 420(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 Te... | Any | T1  | T8  |
| T12 | 1000(0.5s on, 0.5s off)x3 + 1s gap ISO 8201 T... | Any | T1  | T8  |
| T13 | 422/775 (0.85 on, 0.5 off) x3 + 1s gap NFPA T... | Any | T1  | T8  |
| T14 | 1000/2000 @ 1Hz - Singapore                      | Any | T3  | T35 |
| T15 | 300 Continuous                                   | Any | T24 | T35 |
| T16 | 440 Continuous                                   | Any | T24 | T35 |
| T17 | 470 Continuous                                   | Any | T24 | T35 |
| T18 | 500 Continuous IMO code 2 (Low)                  | Any | T24 | T35 |
| T19 | 554 Continuous                                   | Any | T24 | T35 |
| T20 | 660 Continuous                                   | Any | T24 | T35 |
| T21 | 800 Continuous IMO code 2 (High)                 | Any | T24 | T35 |
| T22 | 1200 Continuous                                  | Any | T24 | T35 |
| T23 | 2000 Continuous                                  | Any | T3  | T35 |
| T24 | 2400 Continuous                                  | Any | T20 | T35 |
| T25 | 440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent  | Any | T44 | T8  |
| T26 | 470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent   | Any | T44 | T8  |
| T27 | 470 @ 5Hz (0.10s on, 0.10s off) Intermittent     | Any | T44 | T8  |
| T28 | 544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent  | Any | T24 | T8  |
| T29 | 655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent | Any | T44 | T8  |
| T30 | 660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent  | Any | T24 | T8  |
| T31 | 660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent   | Any | T24 | T8  |
| T32 | 745 @ 1Hz (0.50s on, 0.50s off) Intermittent     | Any | T24 | T8  |

| S 1 | Description                                      | S 2 | S 3 | S 4 |
|-----|--------------------------------------------------|-----|-----|-----|
| T33 | 800 (0.25s on, 1.00s off) Intermittent           | Any | T24 | T8  |
| T34 | 800 @ 2Hz (0.25s on, 0.25s off) IMO code 3.a ... | Any | T24 | T8  |
| T35 | 1000 @ 1Hz (0.50s on, 0.50s off) Intermittent    | Any | T24 | T8  |
| T36 | 2400 @ 1Hz (0.50s on, 0.50s off) Intermittent    | Any | T24 | T8  |
| T37 | 2900 @ 5Hz (0.10s on, 0.10s off) Intermittent    | Any | T24 | T8  |
| T38 | 363/518 @ 1Hz (0.50s/0.50s) Alternating          | Any | T8  | T19 |
| T39 | 450/500 @ 2Hz (0.25s/0.25s) Alternating          | Any | T8  | T19 |
| T40 | 554/440 @ 1Hz (0.50s/0.50s) Alternating          | Any | T24 | T19 |
| T41 | 554/440 @ 0.65Hz (0.76s/0.76s) Alternating       | Any | T8  | T19 |
| T42 | 561/760 @ 0.83Hz (0.60s/0.60s) Alternating       | Any | T8  | T19 |
| T43 | 780/600 @ 0.96Hz (0.52s/0.52s) Alternating       | Any | T8  | T19 |
| T44 | 800/1000 @ 2Hz (0.25s/0.25s) Alternating         | Any | T24 | T19 |
| T45 | 970/800 @ 2Hz (0.25s/0.25s) Alternating          | Any | T8  | T19 |
| T46 | 800/1000 @ 0.875Hz (0.57s/0.57s) Alternating     | Any | T24 | T19 |
| T47 | 2400/2900 @ 2Hz (0.25s/0.25s) Alternating        | Any | T24 | T19 |
| T48 | 500/1200 @ 0.3Hz (1.67s/1.67s) Sweeping          | Any | T24 | T12 |
| T49 | 560/1055 @ 0.18Hz (2.73s/2.73s) Sweeping         | Any | T24 | T12 |
| T50 | 560/1055 @ 3.3Hz (0.15s/0.15s) Sweeping          | Any | T24 | T12 |
| T51 | 600/1250 @ 0.125Hz (4s/4s) Sweeping              | Any | T24 | T12 |
| T52 | 660/1200 @ 1Hz (0.50s/0.50s) Sweeping            | Any | T24 | T12 |
| T53 | 800/1000 @ 1Hz (0.50s/0.50s) Sweeping            | Any | T24 | T12 |
| T54 | 800/1000 @ 7Hz (0.07s/0.07s) Sweeping            | Any | T24 | T12 |
| T55 | 800/1000 @ 50Hz (0.01s/0.01s) Sweeping           | Any | T24 | T12 |
| T56 | 2400/2900 @ 7Hz (0.07s/0.07s) Sweeping           | Any | T24 | T12 |
| T57 | 2400/2900 @ 1Hz (0.50s/0.50s) Sweeping           | Any | T24 | T12 |
| T58 | 2400/2900 @ 50Hz (0.01s/0.01s) Sweeping          | Any | T24 | T12 |
| T59 | 2500/3000 @ 2Hz (0.25s/0.25s) Sweeping           | Any | T24 | T12 |
| T60 | 2500/3000 @ 7.7Hz (0.65s/0.65s) Sweeping         | Any | T24 | T12 |
| T61 | 800Hz Motor Siren                                | Any | T24 | T12 |
| T62 | 1200Hz Motor Siren                               | Any | T24 | T12 |
| T63 | 2400Hz Motor Siren                               | Any | T24 | T12 |
| T64 | Simulated Bell                                   | Any | T21 | T12 |