

# D2xC2X05 Haz Loc Alarm Horn & 5 Joule Xenon Strobe

The hazardous location combination D2xC2X05 alarm horn sounder & 5J Xenon Strobe beacon/status warning light is UL/cULs/ULC approved for Class I Div 2, Class II Div 2, Class I Zone 2/22 as well as IECEx and ATEX certified for Zone 2 and 22 applications.

The D2xC2X05 features a 5 Joule, 94.78cd Xenon strobe beacon with max. 116dB(A) alarm horn sounder. The high output alarm horn features 64 tones with remotely selectable stages enabling multiple warnings to be signalled from one device.

The 24Vdc version is UL approved to UL464 & UL1638 and ULC to CAN/ULC-S525 for private mode fire alarm use.

## Features

- UL464/UL1638 Private mode fire use
- CAN/ULC-S525 Fire Alarm
- UL464/UL1638 General signaling
- Auto-synchronised – audible and visual
- 94.78 effective candela
- 107dB(A) @ 10ft/3m max. sound output – UL464
- 64 alarm tones, 4 remotely selectable alarm stages/channels
- Marine grade aluminium enclosure
- Ingress protection Type 4/4X/3R/13, IP66
- High impact resistant Borosilicate glass lens
- Stainless steel lens guard as standard
- Field changeable lens colour filter
- Duplicate, pluggable cable terminations for 4 wires
- Supervisory diode
- Dual 1/2"NPT entries
- Supplied with haz loc rated stopping plugs
- Compact footprint

## Approvals

- UL File ref: E230764
- IECEx cert: IECEx ULD 14.0004X
- ATEX cert: DEMKO 14 ATEX 4786493904X
- CSFM listing: 7136-2279:0501

## Coding

- NEC / CEC:
  - Class I Div 2 ABCD T3 Ta -40°C to +50°C
  - Class II Div 2 FG T6 Ta -40°C to +50°C (48Vdc & AC: T5)
  - Class III Div 1&2 Ta -40°C to +50°C
- NEC:
  - Class I Zone 2 AEx nA IIC T2 Gc Ta -40°C to +50°C (48Vdc & AC: T3)
  - Zone 22 AEx tc IIIC 85°C Dc Ta -40°C to +50°C (48Vdc & AC: 95°C)
- CEC:
  - Class I Zone 2 Ex nA IIC T3 Gc X Ta -40°C to +50°C
  - Zone 22 Ex tc IIIC 75°C Dc Ta -40°C to +50°C (48Vdc & AC: 95°C)
- IECEx & ATEX:
  - II 3G Ex nA IIC T3 Gc Ta -40°C to +50°C
  - II 3D Ex tc IIIC 75°C Dc Ta -40°C to +50°C (48Vdc & AC: 95°C)



## Specification

### Alarm Horn

#### Sounder:

Maximum output: 116dB(A) @ 1 metre [107dB(A) @ 10ft/3m]

Nominal output: 112dB(A) @ 1m +/- 3dB - Tone 2 [103dB(A) @ 10ft/3m]

No. of tones: 64 (UK00A / PFEER compliant)

No. of stages: 4

Volume control: Adjustable -12dB(A) [Tone 2]

Effective range: 125m/410ft @ 1KHz

Synchronization: All alarm tones synchronize

### Xenon Strobe Beacon/Light:

Energy: 5 Joules (5Ws)

Flash rate: 1Hz (60 fpm)

Peak Candela: 500,000 cd - calculated from energy (J)

Effective Intensity  
cd: 250 cd - calculated from energy (J)

Peak Candela: 33,410 cd\* - measured ref. to I.E.S.

Effective Intensity  
cd: 94.78 cd\* - measured ref. to I.E.S.

Lens colours: Amber, Blue, Clear, Green, Magenta, Red & Yellow

Synchronization: Synchronized 1Hz flash rate (DC voltage versions)

### General:

Voltages DC: 24V dc, 48V dc

In rush: 2.1A for <9ms

Voltages AC: 115Vac, 230Vac

Ingress protection: IP rating per EN60529:IP66  
Type rating per UL50E/NEMA250:4/4X/3R/13

Enclosure  
material: Marine grade LM6 aluminum alloy

Enclosure colour: Red (RAL3000), Grey (RAL7038)

Lens material: Borosilicate glass dome with PC prismatic lens cover

Guard: Stainless Steel dome guard as standard

Cable entries: 2 x 1/2" NPT

Stopping plug: Stopping plug included  
Optional brass, nickel plated or stainless steel

Ground/Earth  
stud: M5

Terminals: 0.5 - 2.5mm<sup>2</sup> (20-14 AWG)

Line monitoring: Blocking diode included  
EOL can be factory fitted

Operating temp: -40 to +50°C [-40° to +122°F]

Storage temp: -40 to +70°C [-40° to +158°F]

Relative humidity: 95%

Weight: DC: 4.00kg/8.82lbs AC: 4.50kg/9.92lbs

## Part Codes

### Part Code:

### Ident.: Description:

Product type: D2xC2X05 Combination Alarm Horn & 5J Xenon Strobe  
Beacon / Warning Light

Voltage: AC115 115-120Vac 50/60Hz  
AC230 220-230Vac 50/60Hz  
DC024 24V dc  
DC048 48V dc

Cable entries: [e] A 2 x M20x1.5  
B 2 x 1/2" NPT

Stopping plug  
material: [m] N Nickel plated brass  
S Stainless Steel

Lens guard matl & 1 A2 304 Stainless Steel  
tag: [s] 2 A4 316 Stainless Steel  
3 A2 304 St/St with Equip. Tag  
4 A4 316 St/St with Equip. Tag

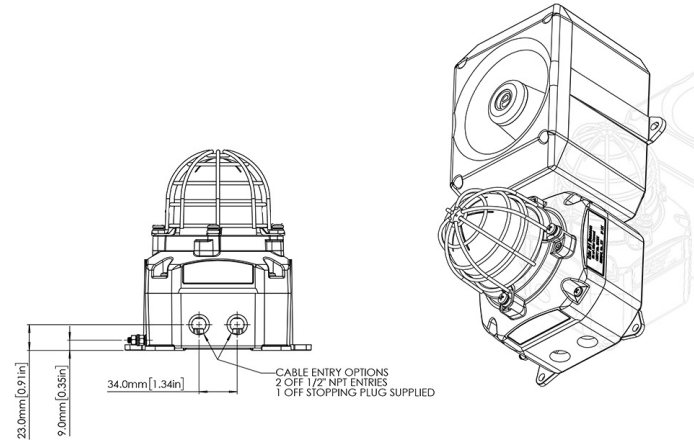
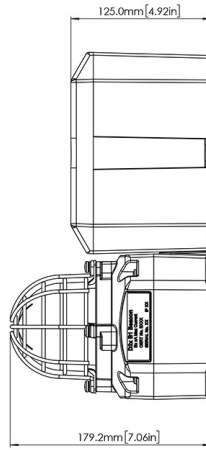
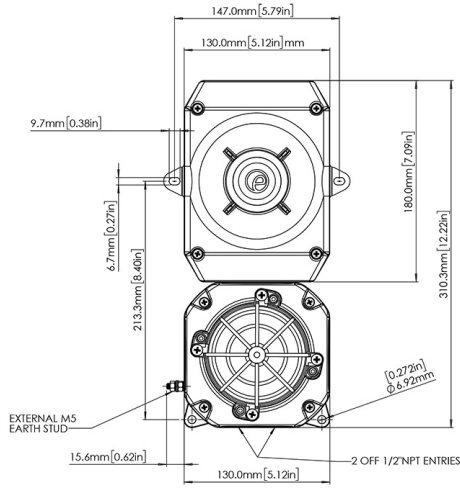
Version: [v] A1 UL, cUL, IECEx & ATEX

Enclosure: [x] G Grey RAL7038  
R Red RAL3000

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

## Current Consumption

Nominal Voltage:	Voltage range:	Nominal current [Beacon]:	Nominal current [Alarm Horn]:
24V dc	20-28V dc	296mA	313mA
48V dc	48V dc	145mA	181mA
115V ac	115-120Vac 50/60Hz	80mA	89mA
230V ac	220-230Vac 50/60Hz	30mA	52mA



## Tone table

S 1	Description	S 2	S 3	S 4
T 1	1000 Continuous - PFEER Toxic Gas	T 3	T 2	T 44
T 2	1200/500 @ 1Hz Sweeping - DIN / PFEER P.T.A.P.	T 1	T 3	T 44
T 3	1000 @ 0.5Hz (1s on, 1s off) Intermittent - P...	T 1	T 2	T 44
T 4	1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NF C 48...	T 44	T 24	T 1
T 5	544(100mS)/440 (400mS) - NF S 32-001	T 52	T 19	T 1
T 6	1500/500 - (0.5s on , 0.5s off) x3 + 1s gap - ...	T 7	T 44	T 1
T 7	500-1500Hz Sweeping 2 sec on 1 sec off - AS4428	T 6	T 44	T 1
T 8	500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) - NEN ...	T 44	T 24	T 35
T 9	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	T 18	T 34	T 1
T 10	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	T 21	T 34	T 1
T 11	420(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201 ...	T 44	T 1	T 8
T 12	1000(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201...	T 44	T 1	T 8
T 13	422/775 - (0.85 on, 0.5 off) x3 + 1s gap - ...	T 44	T 1	T 8
T 14	1000/2000 @ 1Hz - Singapore	T 23	T 3	T 35
T 15	300 Continuous	T 44	T 24	T 35
T 16	440 Continuous	T 44	T 24	T 35
T 17	470 Continuous	T 44	T 24	T 35
T 18	500 Continuous - IMO code 2 (Low)	T 44	T 24	T 35
T 19	554 Continuous	T 64	T 24	T 35
T 20	660 Continuous	T 44	T 24	T 35
T 21	800 Continuous - IMO code 2 (High)	T 44	T 24	T 35
T 22	1200 Continuous	T 44	T 24	T 35
T 23	2000 Continuous	T 15	T 3	T 35
T 24	2400 Continuous	T 48	T 20	T 35
T 25	440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent	T 1	T 44	T 8
T 26	470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent	T 1	T 44	T 8
T 27	470 @ 5Hz (0.10s on, 0.10s off) Intermittent	T 1	T 44	T 8
T 28	544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent	T 44	T 24	T 8
T 29	655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent	T 1	T 44	T 8
T 30	660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent	T 44	T 24	T 8
T 31	660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent	T 30	T 24	T 8
T 32	745 @ 1Hz (0.50s on, 0.50s off) Intermittent	T 44	T 24	T 8

S 1	Description	S 2	S 3	S 4
T 33	800 (0.25s on, 1.00s off) Intermittent	T 53	T 24	T 8
T 34	800 @ 2Hz (0.25s on, 0.25s off) - IMO code 3...	T 56	T 24	T 8
T 35	1000 @ 1Hz (0.50s on, 0.50s off) Intermittent	T 44	T 24	T 8
T 36	2400 @ 1Hz (0.50s on, 0.50s off) Intermittent	T 21	T 24	T 8
T 37	2900 @ 5Hz (0.10s on, 0.10s off) Intermittent	T 53	T 24	T 8
T 38	363/518 @ 1Hz (0.50s / 0.50s) Alternating	T 1	T 8	T 19
T 39	450/500 @ 2Hz (0.25s / 0.25s) Alternating	T 1	T 8	T 19
T 40	554/440 @ 1Hz (0.50s / 0.50s) Alternating	T 44	T 24	T 19
T 41	554/440 @ 0.65Hz (0.76s / 0.76s) Alternating	T 1	T 8	T 19
T 42	561/760 @ 0.83Hz (0.60s / 0.60s) Alternating	T 1	T 8	T 19
T 43	780/600 @ 0.96Hz (0.52s / 0.52s) Alternating	T 1	T 8	T 19
T 44	800/1000 @ 2Hz (0.25s / 0.25s) Alternating	T 5	T 24	T 19
T 45	970/800 @ 2Hz (0.25s / 0.25s) Alternating	T 1	T 8	T 19
T 46	800/1000 @ 0.875Hz (0.57s / 0.57s) Alternating	T 53	T 24	T 19
T 47	2400/2900 @ 2Hz (0.25s / 0.25s) Alternating	T 57	T 24	T 19
T 48	500/1200 @ 0.3Hz (1.67s / 1.67s) Sweeping	T 44	T 24	T 12
T 49	560/1055 @ 0.18Hz (2.73s / 2.73s) Sweeping	T 44	T 24	T 12
T 50	560/1055 @ 3.3Hz (0.15s / 0.15s) Sweeping	T 44	T 24	T 12
T 51	600/1250 @ 0.125Hz (4s / 4s) Sweeping	T 44	T 24	T 12
T 52	660/1200 @ 1Hz (0.50s / 0.50s) Sweeping	T 64	T 24	T 12
T 53	800/1000 @ 1Hz (0.50s / 0.50s) Sweeping	T 56	T 24	T 12
T 54	800/1000 @ 7Hz (0.07s / 0.07s) Sweeping	T 57	T 24	T 12
T 55	800/1000 @ 50Hz (0.01s / 0.01s) Sweeping	T 54	T 24	T 12
T 56	2400/2900 @ 7Hz (0.07s / 0.07s) Sweeping	T 57	T 24	T 12
T 57	2400/2900 @ 1Hz (0.50s / 0.50s) Sweeping	T 47	T 24	T 12
T 58	2400/2900 @ 50Hz (0.01s / 0.01s) Sweeping	T 54	T 24	T 12
T 59	2500/3000 @ 2Hz (0.25s / 0.25s) Sweeping	T 44	T 24	T 12
T 60	2500/3000 @ 7.7Hz (0.65s / 0.65s) Sweeping	T 44	T 24	T 12
T 61	800Hz Motor Siren	T 44	T 24	T 12
T 62	1200Hz Motor Siren	T 44	T 24	T 12
T 63	2400Hz Motor Siren	T 44	T 24	T 12
T 64	Simulated Bell	T 44	T 21	T 12