1-34-041 / D2x: Aluminium hazardous location

D2xC2LD3 Horn & LED Synchronized UL464 & UL1971

The haz loc D2xC2LD3 is an auto-synchronizing alarm horn & LED warning light / beacon tested to UL464 & UL1971 suitable for public mode fire alarm, ADA compliant, hearing impaired applications. UL1971 rating of 79.3cd. NFPA 72 compliant 20ms pulse.

The D2xC2LD3 utilises an array of super high power Cree® LED's, orientated to optimise visibility in any direction. The 20ms pulse creates an intense flash comparative to a Xenon strobe. Multiple D2xC2LD3 units will auto-synchronize when powered from the same power source removing the need for any additional sync modules on the circuit. The horn & LED light can be powered from the same source, simplifying installation and reducing cabling costs. UL1971 effective candela rating of 79.3cd. The unit is UL/cUL, ULC, IECEx and ATEX approved for hazardous locations.

Features

- Public mode fire use UL1971 & CAN/ULC-S526
- Private mode fire use UL1638
- Auto-synchronized for over 2 hours per UL1971
- 79.3 eff. candela – UL1971 Public mode fire
- 107.5 eff. candela – UL1638 Private mode fire
- 252.0 eff. candela – UL1638 General signaling
- 107dB(A) @ 10ft/3m max. sound output
- 64 alarm tones, 4 remotely selectable alarm stages/channels
- Choice of four UL1971 tested flash rates: 1Hz, 1.3Hz, 1.5Hz & 2Hz
- Marine grade aluminium enclosure
- Ingress protection Type 4/4X/3R/13, IP66
- High impact resistant Borosilicate glass lens
- Duplicate, pluggable cable terminations
- Supervisory diode
- Dual 1/2"NPT entries
- Supplied with haz loc rated stopping plugs/adaptors



Approvals

- UL File ref: E230764
- IECEx cert: IECEx ULD 14.0004X
- ATEX cert: DEMKO 14 ATEX 4786493904X

Coding

- NEC / CEC:
  Class I Div 2 ABCD T4 Ta -40°C to +50°C
  Class II Div 2 FG T6 Ta -40°C to +50°C
  Class III Div 1&2 Ta -40°C to +50°C
- NEC:
  Class I Zone 2 AEx ec IIC Gc T4 Ta -40°C to +50°C
  Zone 22 AEx tc IIIB T75°C Dc Ta -40°C to +50°C
- CEC:
  Class I Zone 2 Ex ec IIC Gc X T4 Ta -40°C to +50°C
  Zone 22 Ex tc IIIC T75°C Dc X Ta -40°C to +50°C
- IECEx & ATEX:
  II 3G Ex ec IIC T4 Gc Ta -40°C to +50°C
  II 3D Ex tc IIIC T75°C Dc Ta -40°C to +50°C
  See product manual for full voltage specific coding.



Specification

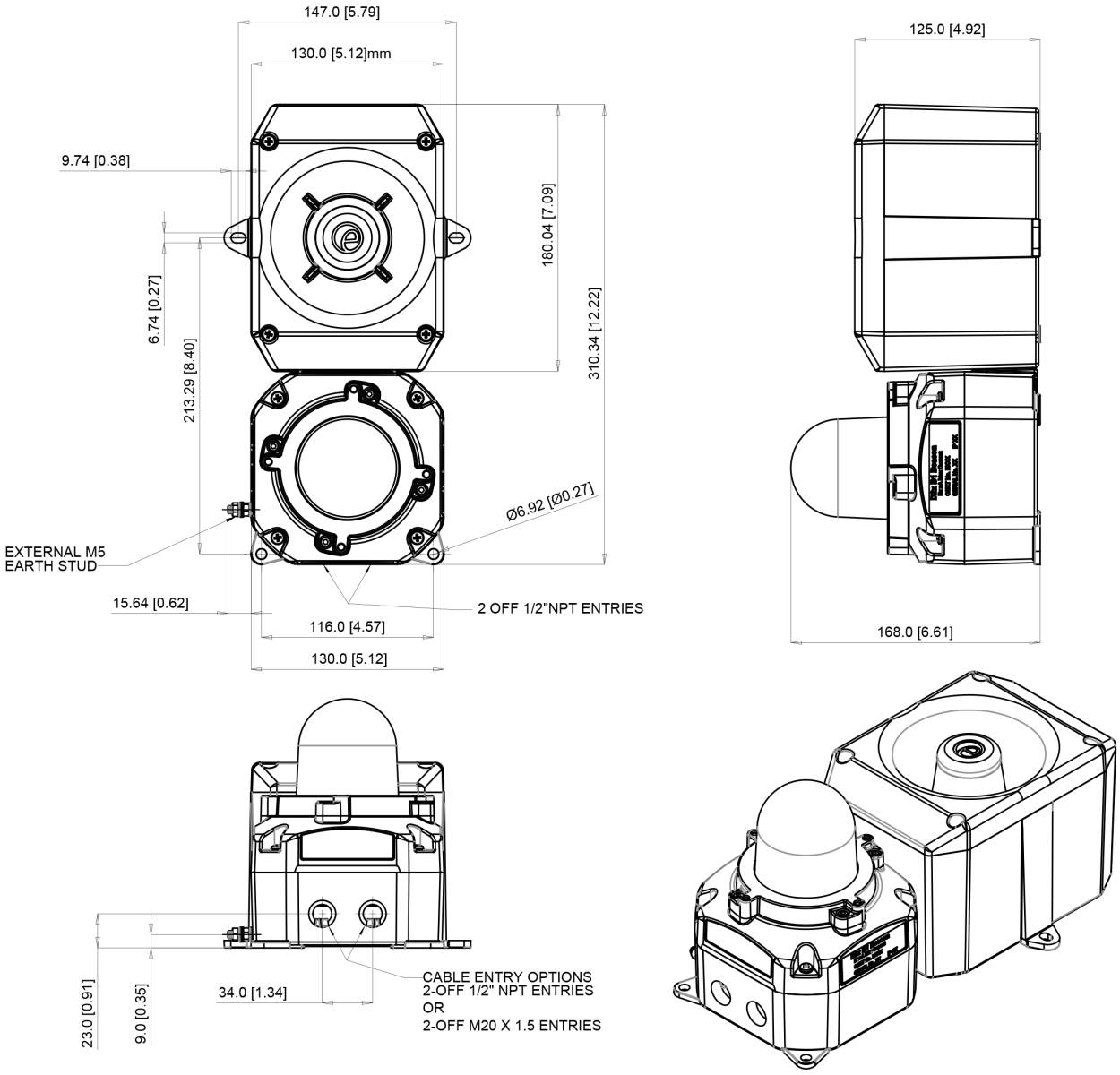
Alarm Horn Sounder:	
Maximum output:	116dB(A) @ 1 metre [107dB(A) @ 10ft/3m]
Nominal output:	112dB(A) @ 1m +/- 3dB – Tone 2 [103dB(A) @ 10ft/3m]
No. of tones:	64 (UKOOA / PFEER compliant)
No. of stages:	4
Volume control:	Adjustable -12dB(A) [Tone 2]
Effective range:	125m/410ft @ 1KHz
Synchronisation:	Automatic synchronisation
LED Beacon/Light:	
Source:	Array of 3 x High Power Cree® LED's
Pulse width:	20ms – high intensity 'strobe' flash
Modes:	1Hz flash (60 fpm) 1.3Hz flash (80 fpm) 1.5Hz flash (90 fpm) 2Hz flash (120 fpm
Eff. Intensity cd:	79.3 cd UL1971 Public mode fire
Eff. Intensity cd:	107.5 cd UL1638 Private mode fire
Eff. Intensity cd:	252.0 cd UL1638 General signaling
LED life:	>60,000 hours
Synchronisation:	Flash rates synchronise for a minimum of 2 hours per UL1971
General:	
Voltage:	24V dc [16-33V dc]
In rush:	2.3A for <10ms
Ingress protection:	IP rating per EN60529:IP66 Type rating per UL50E/NEMA250:4/4X/3R/13
Enclosure material:	Marine grade LM6 aluminum alloy
Enclosure finish:	Chromate & powder coated finish ISO 12944-6 CX, C5VH & C5H
Enclosure colour:	Red
Lens material:	Borosilicate glass
Cable entries:	2 × 1/2"NPT
Stopping plugs:	Nickel Plated Brass plugs included
Ground/Earth stud:	M5
Terminals:	0.5 – 2.5mm² (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:	99% – tropicalised/conformal coated electronics
Weight:	4.00kg/8.82lbs

Part Codes

Part Code:	Identifier:	Description:
Product type:	D2xC2LD3	Combination Alarm Horn & LED Beacon / Warning Light
Voltage:	DC024	24V dc (16-33Vdc)
Cable entries: [e]	B	2 × 1/2" NPT
Stopping plug material: [m]	N S	Nickel plated brass Stainless Steel
Guard material & tag: [s]	0 3 5	No lens Guard No lens guard with Equip. Tag No lens guard with Equip. Tag & Duty Label
Product version: [v]	H	UL, cUL, ULC, IECEx, ATEX, CSFM – UL1971
Product option: [o]	1 X	Standard product Custom configuration – contact E2S
Enclosure colour: [x]	R	Red
Lens colour: [y]	C	Clear
Accessories:		
SP65-0001-A4		Pole Mount Bracket Kit St/St A4 (316)
SP65-0003-A4		Sunshade – St/St A4 (316)

Current Consumption

Nominal Voltage:	In rush:	Voltage range:	Flash Rate setting:	Nominal current [Beacon]:	Nominal current [Alarm Horn]:
24V dc	2300mA <9.0ms	Regulated 16-33V dc	1Hz (60fpm) 1.3Hz (80 fpm) 1.5Hz (90fpm) 2Hz (120fpm)	153mA 189mA 203mA 248mA	250mA



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
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

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