

D1xC4 Explosion Proof Alarm Bar

The D1xC4 is an integrated alarm bar assembly comprised of either high output LED or Xenon strobe beacons with a choice of a high output alarm horn sounder from the D1x family of globally approved Class I Div 1 and Zone 1/21 warning signals.

The compact D1xC4 alarm bar assembly is ideal for applications where combined audible and visual signals are required to provide multiple warnings. The D1xC4 features a preinstalled cable loom with a large termination area in the integrated junction box. The multi-stage alarm horn sounder can be configured to activate a separate alarm tone with each visual signal.

Features

- Private mode fire use & General signaling UL464/UL1638
- Globally approved to UL, cUL, IECEx and ATEX
- Available with LED and/or Xenon strobe beacons
- Integrated high output alarm horn sounder up to 127dB(A)
- 4 remotely selectable alarm stages/channels
- Choice of 64 alarm tone frequencies
- Automatic synchronisation on multi-sounder system
- Mounted on a stainless steel back plate
- Factory assembled with integrated cable loom
- Junction box
- Close coupled assembly
- LM6 marine grade aluminium enclosure
- Optional stainless steel duty labels
- Ingress protection Type 4/4X/3R/13, IP66/67
- High impact resistant glass lenses
- Stainless steel lens guards as standard
- Field replaceable lens colour filters
- Dual cable entries
- Supplied with Ex rated stopping plugs

Approvals

- Certification:
 - UL/cUL/ULC File ref: E230764, E245313
 - IECEx Certificate: IECEx ULD 19.0008X, ULD 19.0006X
 - ATEX Certificate: DEMKO 19 ATEX 2141X, 19 ATEX 2009X
 - CSFM listing: 7136-2279:0506, 7300-2279:0508
 - UKCA certificate: UL21UKEX2132X, UL21UKEX2130X
- SIL 1 & SIL2 compliant to IEC61508 (2010)
- Coding:
 - NEC / CEC: Class I Division 1 ABCD
 - NEC: Class I Zone 1 AEx db IIIC, Zone 21 AEx tc IIIC
 - CEC: Class I Zone 1 Ex db IIIC, Zone 21 Ex tc IIIC
 - IECEx & ATEX: Zone 1 II 2G Ex db IIIC, Zone 21 II 2D Ex tb IIIC
- See component web pages and data sheets for full coding.



Specification

Beacon Option: D1xB2X05/10/15/21 Xenon Strobe Beacons

Product data:	D1xB2X05: www.e2s.com/1-21-202 D1xB2X10: www.e2s.com/1-21-203 D1xB2X15: www.e2s.com/1-21-204 D1xB2X21: www.e2s.com/1-21-205
Flash rate:	DC: 1Hz (60fpm), 1.5Hz (90fpm) & double flash AC: 1Hz (60fpm)
Eff. Intensity cd:	D1xB2X05: 156.65cd D1xB2X10: 645.21cd D1xB2X15: 731.71cd D1xB2X21: 1250.66cd [Measured ref to I.E.S]

Beacon Option: D1xB2LD2 LED Beacon

Product data:	D1xB2LD2: www.e2s.com/1-21-206
Source:	Array of 4 x High Power Cree® LED's
Modes:	1Hz flash (60 fpm), 1.5Hz (90 fpm), 2Hz (120 fpm) Double strike flash, Triple strike flash High Power Steady, Low Power Steady
Eff. Intensity cd:	174 cd – High Power Steady
Eff. Intensity cd:	338 cd – 1Hz flash

Alarm Horn: D1xS1F/S1R/S2F/S2H Alarm Horn Sounders

Product data:	D1xS1F: www.e2s.com/1-22-140 D1xS1R: www.e2s.com/1-22-145 D1xS2F: www.e2s.com/1-22-150 D1xS2H: www.e2s.com/1-22-155
Max. SPL:	D1xS1F: 115dB(A) @ 1m [106dB(A) @ 10ft] D1xS1R: 110dB(A) @ 1m [101dB(A) @ 10ft] D1xS2F: 123dB(A) @ 1m [114dB(A) @ 10ft] D1xS2H: 128dB(A) @ 1m [119dB(A) @ 10ft]
Nom. SPL +/- 3dB:	D1xS1F: 110dB(A) @ 1m [101dB(A) @ 10ft] D1xS1R: 105dB(A) @ 1m [96dB(A) @ 10ft] D1xS2F: 118dB(A) @ 1m [109dB(A) @ 10ft] D1xS2H: 126dB(A) @ 1m [117dB(A) @ 10ft]
No. of tones:	64 (UK00A / PFEER compliant)
No. of stages:	4 – Positive or Negative stage switching
Volume control:	Full range

Junction Box: D1xJ2 Ex d Junction Box

Product data:	D1xJ2: www.e2s.com/1-25-025
Terminals:	DIN Rail 12 x AKZ 2.5, Earth 4 x AKE 2.5

General information: Common component features:

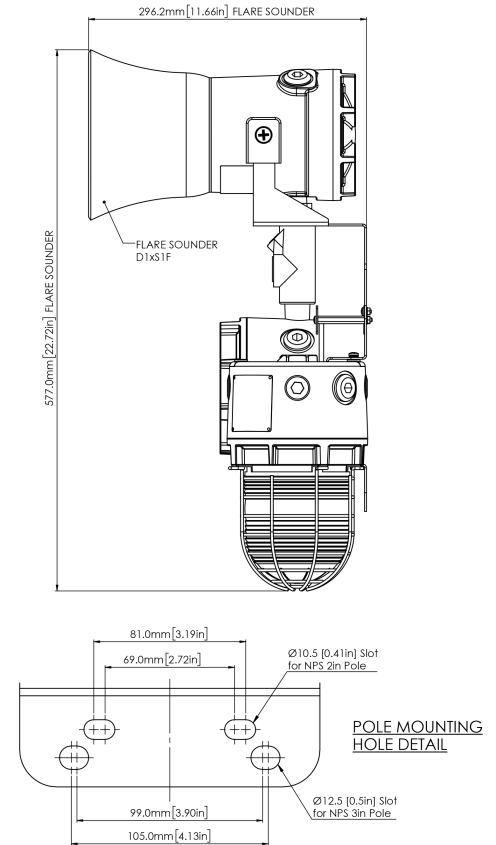
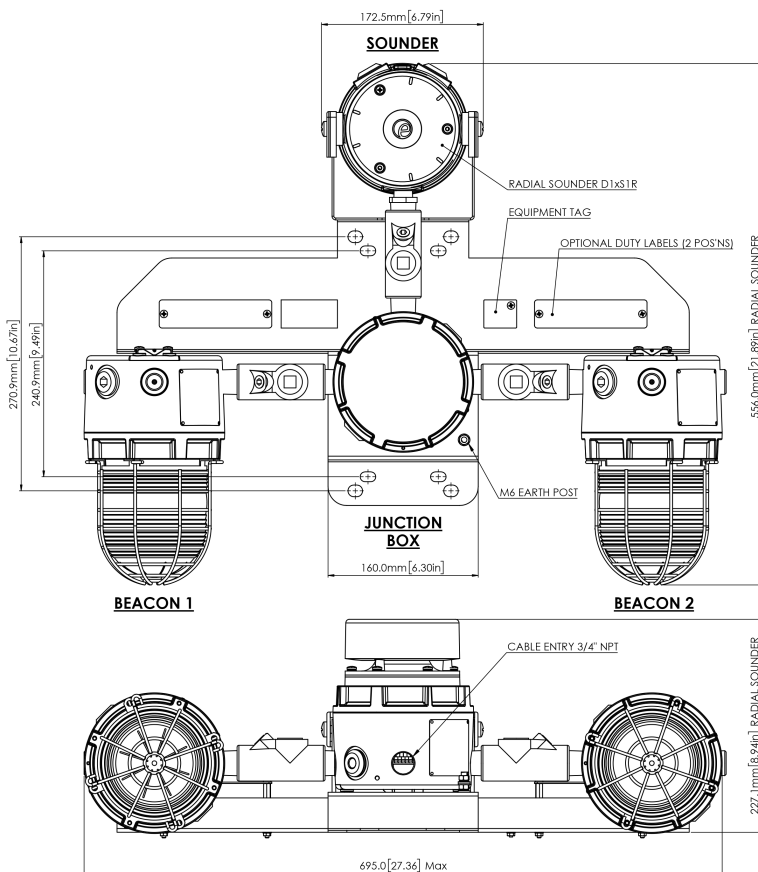
Mounting:	Pole mount kit included
Ingress protection:	EN60529: IP66/67, UL50E / NEMA250: 4 / 4X / 3R / 13
Enclosure material:	Marine grade aluminium LM6 – copper free Chromated & powder coated – corrosion proof
Enclosure colour:	Red or Grey, custom colours available on request
Lens material:	Borosilicate glass dome & PC colour filter
Lens guard:	316 (A4) Stainless Steel dome guard as standard
Cable entries:	1 x M20x1.5 and 1 x 3/4"NPT – thread adaptors available
Stopping plugs:	Brass/Nickel Plated/Stainless Steel plugs included
Line monitoring:	Blocking diode included. EOL can be factory fitted
Installation temp:	-55 to +75/80/85°C [-67° to +167/176/185°F]
Storage temp:	-55 to +85°C [-67° to +185°F]
Relative humidity:	95% – Additional tropicalisation is recommended for applications where both high relative humidity and high

Part Codes

Part Code:	Identifier:	Description:
Product type:	D1xC4	Integrated Alarm Bar of LED and/or Xenon Strobe Beacons with Alarm Horn Sounder
Junction box & back plate:	J2	Junction box with 12 x SAK 2.5 DIN rail terminals
Beacon 1 Beacon 2		For each beacon select the numeric identifier plus colour character as follows: 1 = D1xB2X05 5J Xenon Beacon 2 = D1xB2X10 10J Xenon Beacon 3 = D1xB2X15 15J Xenon Beacon 4 = D1xB2X21 21J Xenon Beacon 5 = D2xB1LD2 LED Beacon A=Amber, B=Blue, C=Clear, G=Green, M=Magenta, R=Red, Y=Yellow e.g. 5R = D1xB2LD2 LED Beacon with Red lens
Alarm horn:	S1R S1F S2F S2H	D1xS1R 110dB(A) Radial Horn Alarm Sounder D1xS1F 115dB(A) Flare Horn Alarm Sounder D1xS2F 123dB(A) Flare Horn Alarm Sounder D1xS2H 128dB(A) Flare Horn Alarm Sounder
Voltage:	AC115 AC230 DC024	115-120Vac 50/60Hz 220-230Vac 50/60Hz 24Vdc (20-28Vdc)
Cable entries: [e]	A B C D	1 x M20x1.5mm – adaptor 1 x 1/2" NPT – adaptor 1 x 3/4" NPT – default 1 x M25x1.5mm – adaptor
Stopping plug/ adaptor material: [m]	B N S	Brass Nickel Plated Stainless Steel
Guard material: [s]	1 3	A4 316 Stainless Steel with Equip. Tag A4 316 St/St with Equip. Tag & Duty Labels
Product version: [v]	A C S	IECEX/ATEX/UL/cUL Class I Zone 1 UL/cUL Class Div 1 SIL2/IECEX/ATEX/UL/cUL Class I Zone 1
Product option: [o]	1 T Z W X V	Standard product Tropicalised Custom alarm tone software – contact E2S Custom wiring – contact E2S Custom configuration – contact E2S Alarm horn stage ctrl Config. 6 Independent Stage Activation with Line Monitoring for 3 or 4 Alarm Stages
Enclosure colour: [x]	G R	Grey Red
Example:	D1xC4 J2 5G 5A 5R S1R DC024 B N 1 A 1 G	D1xC4 alarm bar with a junction box with DIN rail terminals and 2 x D1xB2LD2 LED beacons with Blue and Yellow lenses, D1xS1R alarm horn sounder, 1 x 3/4" NPT entries with nickel plated brass stopping plugs in a grey enclosure

Current Consumption

Voltage:	D1xB2LD2 LED Beacon Component Nominal/Max. Current:	D1xB2X05 5J Xenon Beacon Component Nominal/Max. Current:	D1xB2X10 10J Xenon Beacon Component Nominal/Max. Current:	D1xB2X15 15J Xenon Beacon Component Nominal/Max. Current:	D1xB2X21 21J Xenon Beacon Component Nominal/Max. Current:	D1xS1R or F Alarm Horn Sounder Component Nominal/Max. Current:	D1xS2F Alarm Horn Sounder Component Nominal/Max. Current:	D1xS2H Alarm Horn Sounder Component Nominal/Max. Current:
24V dc (20-28Vdc)	110mA/500mA	295mA/350mA	605mA/710mA	853mA/920mA	1130mA/1240mA	185mA/221mA	324mA/324mA	740mA/740mA
115-120Vac 50/60Hz	90mA/180mA	140mA/200mA	220mA/300mA	310mA/420mA	500mA/530mA	73mA/80mA	125mA/138mA	282mA/325mA
220-230Vac 50/60Hz	45mA/100mA	70mA/100mA	130mA/180mA	170mA/230mA	195mA/270mA	48mA/80mA	78mA/138mA	167mA/325mA



Tone table

S 1	Description	S 2	S 3	S 4	S 1	Description	S 2	S 3	S 4
T 1	1000 Continuous - PFEER Toxic Gas	Any	T 2	T 44	T 33	800 (0.25s on, 1.00s off) Intermittent	Any	T 24	T 8
T 2	1200/500 @ 1Hz Sweeping - DIN / PFEER P.T.A.P.	Any	T 3	T 44	T 34	800 @ 2Hz (0.25s on, 0.25s off) - IMO code 3...	Any	T 24	T 8
T 3	1000 @ 0.5Hz (1s on, 1s off) Intermittent - P...	Any	T 2	T 44	T 35	1000 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8
T 4	1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NF C 48...	Any	T 24	T 1	T 36	2400 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8
T 5	544(100mS)/440 (400mS) - NF S 32-001	Any	T 19	T 1	T 37	2900 @ 5Hz (0.10s on, 0.10s off) Intermittent	Any	T 24	T 8
T 6	1500/500 - (0.5s on , 0.5s off) x3 + 1s gap - ...	Any	T 44	T 1	T 38	363/518 @ 1Hz (0.50s / 0.50s) Alternating	Any	T 8	T 19
T 7	500-1500Hz Sweeping 2 sec on 1 sec off - AS4428	Any	T 44	T 1	T 39	450/500 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 8	T 19
T 8	500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) - NEN ...	Any	T 24	T 35	T 40	554/440 @ 1Hz (0.50s / 0.50s) Alternating	Any	T 24	T 19
T 9	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	Any	T 34	T 1	T 41	554/440 @ 0.65Hz (0.76s / 0.76s) Alternating	Any	T 8	T 19
T 10	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	Any	T 34	T 1	T 42	561/760 @ 0.83Hz (0.60s / 0.60s) Alternating	Any	T 8	T 19
T 11	420(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201 ...	Any	T 1	T 8	T 43	780/600 @ 0.96Hz (0.52s / 0.52s) Alternating	Any	T 8	T 19
T 12	1000(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201...	Any	T 1	T 8	T 44	800/1000 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 24	T 19
T 13	422/775 - (0.85 on, 0.5 off) x3 + 1s gap - ...	Any	T 1	T 8	T 45	970/800 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 8	T 19
T 14	1000/2000 @ 1Hz - Singapore	Any	T 3	T 35	T 46	800/1000 @ 0.875Hz (0.57s / 0.57s) Alternating	Any	T 24	T 19
T 15	300 Continuous	Any	T 24	T 35	T 47	2400/2900 @ 2Hz (0.25s / 0.25s) Alternating	Any	T 24	T 19
T 16	440 Continuous	Any	T 24	T 35	T 48	500/1200 @ 0.3Hz (1.67s / 1.67s) Sweeping	Any	T 24	T 12
T 17	470 Continuous	Any	T 24	T 35	T 49	560/1055 @ 0.18Hz (2.73s / 2.73s) Sweeping	Any	T 24	T 12
T 18	500 Continuous - IMO code 2 (Low)	Any	T 24	T 35	T 50	560/1055 @ 3.3Hz (0.15s / 0.15s) Sweeping	Any	T 24	T 12
T 19	554 Continuous	Any	T 24	T 35	T 51	600/1250 @ 0.125Hz (4s / 4s) Sweeping	Any	T 24	T 12
T 20	660 Continuous	Any	T 24	T 35	T 52	660/1200 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 21	800 Continuous - IMO code 2 (High)	Any	T 24	T 35	T 53	800/1000 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 22	1200 Continuous	Any	T 24	T 35	T 54	800/1000 @ 7Hz (0.07s / 0.07s) Sweeping	Any	T 24	T 12
T 23	2000 Continuous	Any	T 3	T 35	T 55	800/1000 @ 50Hz (0.01s / 0.01s) Sweeping	Any	T 24	T 12
T 24	2400 Continuous	Any	T 20	T 35	T 56	2400/2900 @ 7Hz (0.07s / 0.07s) Sweeping	Any	T 24	T 12
T 25	440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent	Any	T 44	T 8	T 57	2400/2900 @ 1Hz (0.50s / 0.50s) Sweeping	Any	T 24	T 12
T 26	470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent	Any	T 44	T 8	T 58	2400/2900 @ 50Hz (0.01s / 0.01s) Sweeping	Any	T 24	T 12
T 27	470 @ 5Hz (0.10s on, 0.10s off) Intermittent	Any	T 44	T 8	T 59	2500/3000 @ 2Hz (0.25s / 0.25s) Sweeping	Any	T 24	T 12
T 28	544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent	Any	T 24	T 8	T 60	2500/3000 @ 7.7Hz (0.65s / 0.65s) Sweeping	Any	T 24	T 12
T 29	655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent	Any	T 44	T 8	T 61	800Hz Motor Siren	Any	T 24	T 12
T 30	660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent	Any	T 24	T 8	T 62	1200Hz Motor Siren	Any	T 24	T 12
T 31	660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent	Any	T 24	T 8	T 63	2400Hz Motor Siren	Any	T 24	T 12
T 32	745 @ 1Hz (0.50s on, 0.50s off) Intermittent	Any	T 24	T 8	T 64	Simulated Bell	Any	T 21	T 12