

D2xS1 Alarm Horn Sounder

The D2xS1 is a high output, 116dB(A) alarm horn sounder. Low current consumption and high SPL in a robust Type 4/4X, IP66 enclosure ensure the D2xS1 is suitable for all haz loc general signalling applications.

The corrosion proof, marine grade aluminium die cast enclosure is phosphated and powder coated providing resilience in the harshest of environments.

One device, globally certified: ATEX, IECEx Zone 2 & 22; NEC/CEC CI D2 and CII D2; NEC CI Zone 2 and Zone 22; CEC Zone 2 & 22 and CII D2.

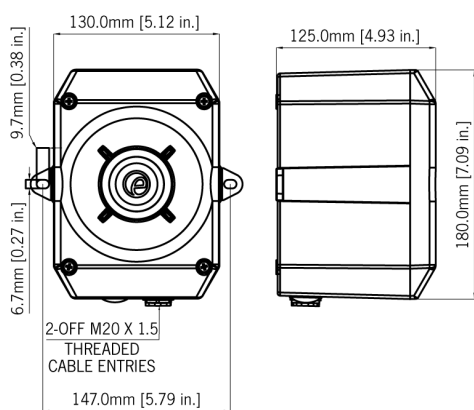
Features

- High output, up to 116dB(A)
- 4 remotely selectable alarm stages/channels
- Positive or negative line stage/channel switching (DC units)
- Choice of 64 alarm tone frequencies
- Automatic synchronisation on multi-sounder system
- Continuously rated
- Compact form factor
- Robust corrosion proof aluminium enclosure
- Stainless steel fixings
- Dual cable entries
- Duplicate cable terminations (in & out for daisy-chain installations)
- Available with custom tone configurations and frequencies.

Approvals

- UL File ref: E230764
ANSI/ISA 12.12.01 - 2013
CSA C22.2 No. 213-M1987
ANSI/UL60079-0-13
ANSI/UL60079-15-2013
ISA60079-31-2009
CAN/CSA C22.2 No. 60079-0-11
CAN/CSA C22.2 No. 60079-15-12
CAN/CSA C22.2 No. 60079-31-12
- IECEx cert: IECEx ULD 14.0004X
Standards:
IEC60079-0: ed. 6.0 (2011-06)
IEC60079-15: ed. 4.0 (2010-01)
IEC60031-31: ed. 2.0 (2013-11)
- ATEX cert: DEMKO 14 ATEX 4786493904X
Standards:
EN60079-0:2012
EN60079-15:2010
EN60079-31:2009





Specification

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 -12 dB(A) [Tone 2]
Effective range:	125m/410ft @ 1KHz
Voltages DC:	24V dc (10-30V dc); 48V dc (38-58V dc)
Voltages AC:	115V ac 50/60Hz; 230V ac 50/60Hz
Stage switching:	DC units: negative or positive AC units: common supply line
Ingress protection:	EN60529: IP66 UL50E / NEMA250: 4 / 4X / 3R / 13
Housing material:	Marine grade aluminium Al Si12 Cu
Colour:	Red (RAL3000), Grey (RAL7038)
Cable entries:	2 x M20 x 1.5mm threaded gland entries.
Terminals:	0.5 - 2.5mm ² (20-14 AWG)
Grounding stud:	M5
Operating temp:	-40 to +70°C [-40° to +158°F] - Class I Div 2 -40 to +50°C [-40° to +122°F] - All other markings
Relative humidity:	90% at 20°C [68°F]
Weight:	DC: 2.48kg/4.96lbs AC:2.73kg/5.46lbs

Part Codes

Version:	Part code:
24V dc	D2xS1DC024A1[x]
48V dc	D2xS1DC048A1[x]
115V ac	D2xS1AC115A1[x]
230V ac	D2xS1AC230A1[x]
[x] =	G: Grey, R: Red [Enclosure colours]

Ratings:

NEC / CEC:	Class I Div 2 ABCD T3C Ta -40°C to +70°C
	Class I Div 2 ABCD T4 Ta -40°C to +65°C
	Class I Div 2 ABCD T4A Ta -40°C to +50°C
	Class II Div 2 FG T5 Ta -40°C to +50°C
	Class II Div 2 FG T6 Ta -40°C to +45°C
	Class III Div 1&2 Ta -40°C to +50°C
NEC:	Class I Zone 2 AEx nA IIC T4 Gc (Ta -40°C to +50°C)
	Zone 22 AEx tc IIIC 90°C Dc (Ta -40°C to +50°C)
CEC:	Class I Zone 2 Ex nA IIC T4A Gc X (Ta -40°C to +50°C)
	Zone 22 Ex tc IIIC 90°C Dc (Ta -40°C to +50°C)
	Class II Div 2 EFG T5 Ta -40°C to +50°C
IECEX & ATEX	II 3G Ex nA IIC T4 Gc (Ta -40°C to +50°C)
	II 3D Ex tc IIIC 90°C Dc (Ta -40°C to +50°C)

Alarm Sounder

Version:		Voltage:	Current:
24V dc	□	10-30V dc	313mA [at nominal voltage]
48V dc	□	38-58V dc	181mA [at nominal voltage]
115V ac	50/60Hz	+/-10%	90mA
230V ac	50/60Hz	+/-10%	52mA

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