

STExS2F Alarm Horn Sounder

The STExS2F is a high output UL, cUL, IECEx and ATEX certified alarm horn sounder featuring a re-entrant flare horn. The robust 316L stainless steel enclosure is approved for 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 with a choice of two power modes. The threaded flameproof joint, multiple cable entries and duplicated, pluggable termination simplifies both installation and routine maintenance. SIL1 compliant to IEC 61508 (2010).

Features

- Maximum sound pressure level output of 123dB(A)
- Choice of 64 alarm tone frequencies
- 4 remotely selectable alarm stages/channels
- Positive or negative line stage/channel switching
- Automatic synchronisation on multi-sounder system
- Ratchet adjustable 316 stainless steel bracket
- Triple cable entries
- Available with custom tone configurations and frequencies
- Robust corrosion proof 316L stainless steel enclosure

Approvals

- UL/cUL – File ref: E230764
- IECEx ULD 16.0017X
- ATEX DEMKO 16 ATEX 1466X
- TR-CU Ex EAC certificate: RU C-GB.HA65.B.01252_21
- INMETRO IEx 20.0156X
- SIL1 compliant to IEC 61508 (2010)

Coding

- NEC / Class / Zone
Class I Zone 1 AEx db IIC T5 Ta -50°C to +70°C
Class I Zone 1 AEx db IIC T6 Ta -50°C to +55°C (AC: 65°C)
- CEC / Class / Zone
Class I Zone 1 Ex db IIC T5 Ta -50°C to +70°C
Class I Zone 1 Ex db IIC T6 Ta -50°C to +55°C (AC: 65°C)
- NEC / CEC Class / Div
Class I Div 2 ABCD T5 Ta -50°C to +70°C
Class I Div 2 ABCD T6 Ta -50°C to +55°C (AC: 65°C)
- IECEx / ATEX
II 2G Ex db IIC Gb T5 Ta -50°C to +70°C
II 2G Ex db IIC Gb T6 Ta -50°C to +55°C (AC: 65°C)
II 2D Ex tb IIIC Db T94°C Ta -50°C to +70°C (AC: T84°C)



Specification

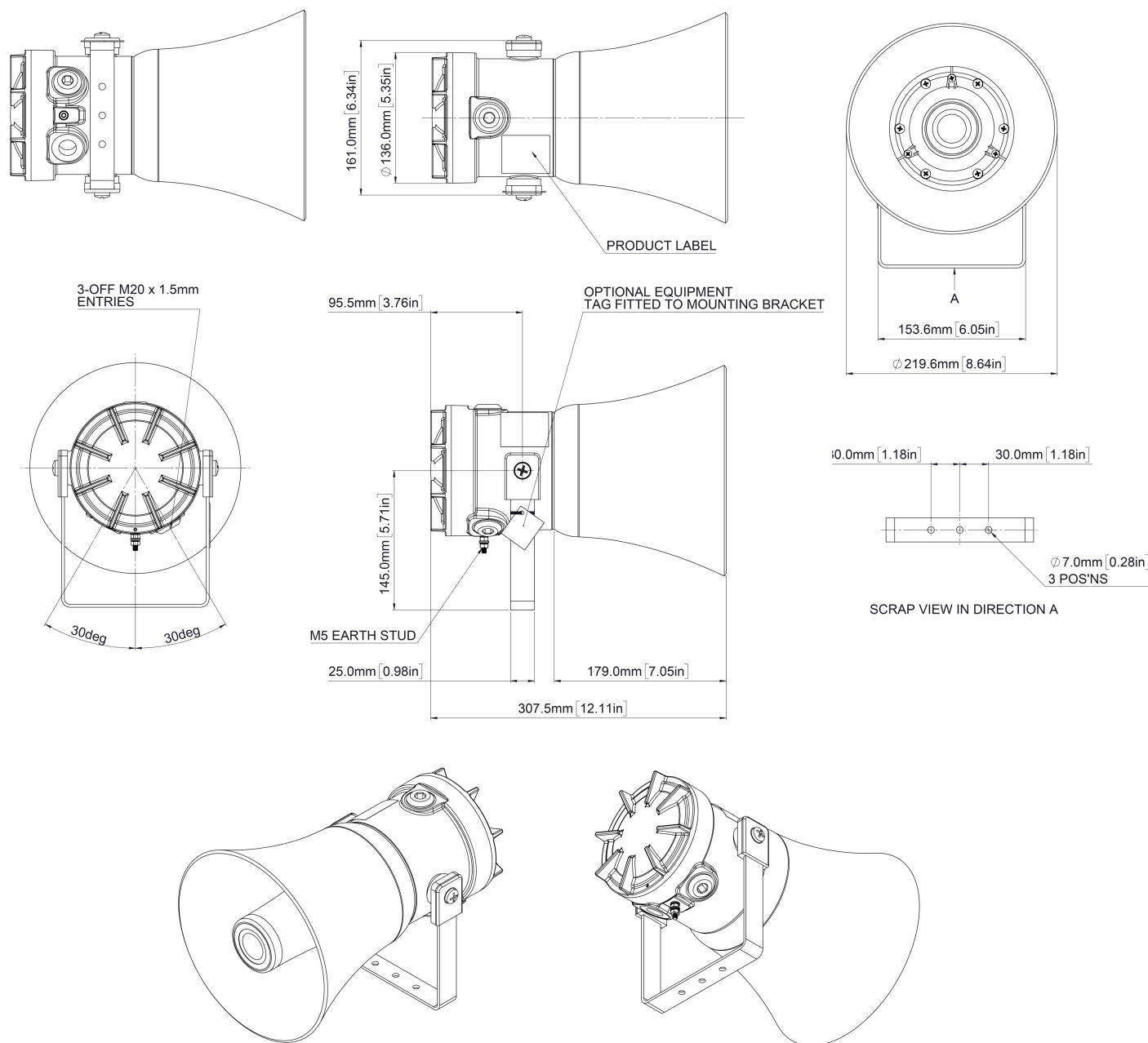
Maximum output:	High power level: 123dB(A) @ 1 m +/- 3dB [114dB(A) @ 10ft/3m +/- 3dB] Default power level: 118dB(A) @ 1 m +/- 3dB [109dB(A) @ 10ft/3m +/- 3dB]
Nominal output:	High power level: 120dB(A) @ 1m +/- 3dB [111dB(A) @ 10ft/3m] +/- 3dB Default power level: 115dB(A) @ 1m +/- 3dB [106dB(A) @ 10ft/3m] +/- 3dB
No. of tones:	64 (UK00A / PFEER compliant)
No. of stages:	4
Volume control:	Full range
Effective range:	200m/656ft @ 1KHz
Voltages DC:	24V dc (11.5-54V dc)
Voltages AC:	230vac (100-240vac)
In-rush:	815mA within 4ms @ 24Vdc
Stage switching:	DC units: postive or negative AC units: common supply line
Ingress protection:	EN60529: IP66
Enclosure material:	316L Stainless Steel
Enclosure colour:	Red (RAL3000)
Enclosure finish:	Chromate & powder coated finish
Cable entries:	3 x M20x1.5mm Stopping plugs included
Stopping plugs:	Stainless Steel
Terminals:	0.5 – 2.5mm ² (20-14 AWG) Pluggable & duplicated terminals
Line monitoring:	Diode polarized for use in supervised circuits Blocking diode for reverse polarity monitoring
Ground/Earth 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:	-50° to +70°C (-58°F to +158°F)
Storage temp:	-50° to +70°C (-58°F to +158°F)
Relative humidity:	99%
MTBF DC:	93.92 years / 822,706 hours – MIL 217
MTBF AC:	46.66 years / 408,508 hours – MIL 217
Weight:	6.25kg/13.75lbs

Part Codes

Part Code:	Identifier: Description:	
Product type:	STExS2	STExS2 alarm horn sounder
Horn type:	F	Flare re-entrant horn
Voltage:	DC024 AC230	11.5-54Vdc 100-240Vac
Cable entries:[e]	A B C D E F G	3 x M20x1.5mm 2 x 1/2" NPT – adaptors 2 x 3/4" NPT – adaptors 2 x M25x1.5mm – adaptors 1 x 1/2" NPT – adaptor 1 x 3/4" NPT – adaptor 1 x M25x1.5mm – adaptor
Stopping plug/ adaptor material: [m]	S	Stainless steel
Bracket material: [s]	1 3	A4 316 Stainless Steel A4 316 St/St with Equip. Tag
Product version:	[v]A	UL, cUL, IECEx, ATEX, Ex EAC, INMETRO
Product option:	[o] 1 Z X Y K V	Standard product Custom alarm tone software – contact E2S Custom configuration – contact E2S Stage control Config. 4 Stage control Config. 5 (DC) and Config. 2 (AC) Stage control Config. 6
Enclosure colour: [x]	R S	Red Special – contact E2S for alternative enclosure colours
Accessories:		
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:	Default Power current:	Default Power Max. current:	High power current:	High Power Max. current:	In-rush:
12Vdc	11.5-54Vdc	289mA	324mA	356mA	740mA	-
24Vdc	11.5-54Vdc	324mA	324mA	740mA	740mA	815mA <4ms
48Vdc	11.5-54Vdc	195mA	324mA	391mA	740mA	-
115Vac 50/60Hz	100-240V ac	125mA	138mA	282mA	325mA	-
230Vac 50/60Hz	100-240V ac	78mA	138mA	167mA	325mA	-



Assemblies

The STExS2F is available as a plated assembly configured with Xenon strobe or LED beacons with or without a STExJ2 Ex d junction box. Contact E2S for further information.

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