

STExC1X05F Alarm Horn & Xenon Strobe Beacon

The STExC1X05F is a 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 at optimum operating current. The threaded flameproof joint, multiple cable entries and duplicated, pluggable termination simplifies both installation and routine maintenance. SIL1 & SIL2 Route 2H compliant to IEC61508 (2010) as standard.

Features

- Maximum sound pressure level output of 115dB(A)
- Choice of 64 alarm tone frequencies
- 4 remotely selectable alarm stages/channels
- Positive or negative line stage/channel switching
- Automatic synchronisation on multi-beacon & sounder systems
- User selectable strobe flash rates
- Field replaceable lens colour filter
- 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

Coding

- NEC / Class / Zone (24Vdc & 230Vac only)
 - Class I Zone 1 AEx db IIC T4 Ta -50°C to +70°C
 - Class I Zone 1 AEx db IIC T5 Ta -50°C to +50°C (AC: 48°C)
- CEC / Class / Zone (24Vdc & 230Vac only)
 - Class I Zone 1 Ex db IIC T4 Ta -50°C to +70°C
 - Class I Zone 1 Ex db IIC T5 Ta -50°C to +50°C (AC: 45°C)
- NEC / CEC Class / Div (24Vdc & 230Vac only)
 - Class I Div 2 ABCD T4 Ta -50°C to +70°C
 - Class I Div 2 ABCD T5 Ta -50°C to +50°C (AC: 45°C)
- IECEx / ATEX
 - II 2G Ex db IIC Gb T4 Ta -50°C to +70°C
 - II 2G Ex db IIC Gb T5 Ta -50°C to +50°C (AC: 45°C)
 - II 2D Ex tb IIIC Db T114°C Ta -50°C to +70°C (AC: T117°C)



Specification

Alarm Horn:

Maximum output: 115dB(A) @ 1 m +/- 3dB [109dB(A) @ 10ft/3m +/- 3dB]

Nominal output: 110dB(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: 125m/410ft @ 1KHz

Voltages DC: 12Vdc (11.5-14Vdc), 24Vdc (20-28Vdc), 48Vdc (42-54Vdc)

Voltages AC: 230vac (220-240vac)

Stage switching: DC units: negative or positive
AC units: common supply line

Strobe Beacon:

Energy: 5 Joules (5Ws)

Flash rates: 1Hz flash (60 fpm)
1.5Hz flash (90 fpm)
Double flash (120 fpm)

Eff. Intensity: 143 cd* - measured ref. to I.E.S.

Peak Candela: 46,976 cd* - measured ref. to I.E.S.

Eff. Intensity: 250 cd - calculated from energy (J)

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

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

Tube life : Emissions are reduced to 70% after 5 million flashes

General:

Safety Integrity Level: SIL1 and SIL2 Route 2H IEC61508 (2010)

Ingress protection: EN60529: IP66

Enclosure material: 316L Stainless Steel

Enclosure colour: Red

Enclosure finish: Chromate & powder coated finish

Cable entries: 3 x M20x1.5mm
Stopping plugs included

Stopping plugs: Stainless Steel

Terminals: 0.5 - 2.5mm² (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: 95% - Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist

Weight: 7.45kg/16.42lbs

Part Codes

Part Code: **Identifier:** **Description:**

Product type: STEXC1X05 STEXC1 Combined Alarm

Horn type: F Flare re-entrant horn

Voltage: DC012 11.5-14Vdc
 DC024 20-284Vdc
 DC048 42-54Vdc
 AC230 220-240Vac

Cable entries:[e] A 3 x M20x1.5mm
 B 2 x 1/2" NPT - adaptors
 C 2 x 3/4" NPT - adaptors
 D 2 x M25x1.5mm - adaptors
 E 1 x 1/2" NPT - adaptor
 F 1 x 3/4" NPT - adaptor
 G 1 x M25x1.5mm - adaptor

Stopping plug/
adaptor material: B Brass
 N Nickel Plated
 [m] S Stainless Steel (standard)

Bracket / Guard 1 A4 316 Stainless Steel
material: [s] 3 A4 316 St/St with Equip. Tag

Product version: [v]A UL, cUL, IECEx, ATEX, Ex EAC, INMETRO - SIL1 & SIL2
Note: UL, cUL approval not applicable to 12Vdc or 115Vac variants

Product option: 1 Standard product
[o] Z Custom alarm tone software - contact E2S
 X Custom configuration - contact E2S
 Y Stage control Config. 4 or 8

Enclosure colour: G Grey
[x] R Red
 S Special colour - contact E2S

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

Accessories:

SP65-0001-A4 Pole Mount Bracket Kit St/St A4 (316)
SP65-0003-A4 Sunshade - St/St A4 (316)

Alarm stage control:

Please review the installation manual and wiring schematics for remote stage control and EOL resistor monitoring configuration options:

Config. 1 or 5 [DC]: Factory default. Common negative, positive switching. Up to 4 Alarm Stages. EOL monitoring Alarm Stage 1 only

Config. 2 or 6 [DC]: User setting. Common positive, negative switching. Up to 4 Alarm Stages. EOL monitoring Alarm Stage 1 only

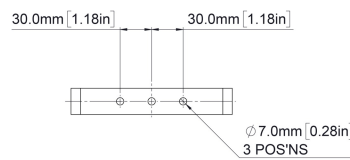
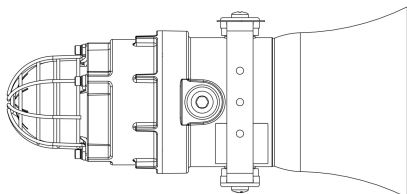
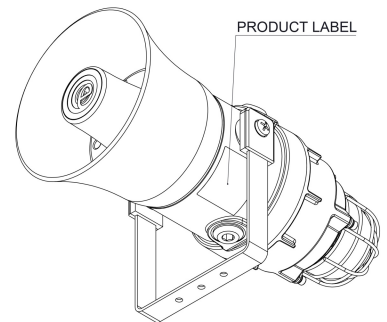
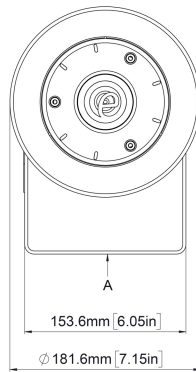
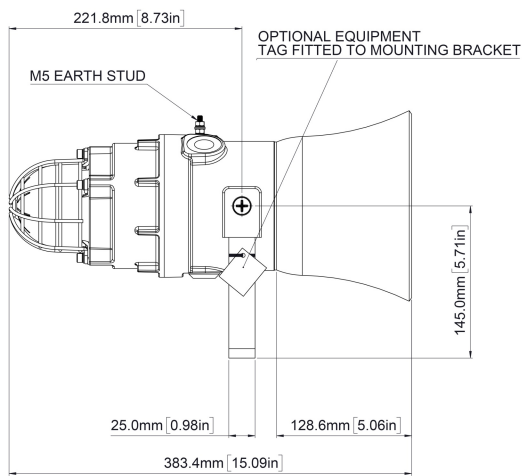
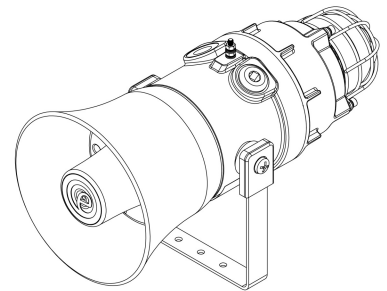
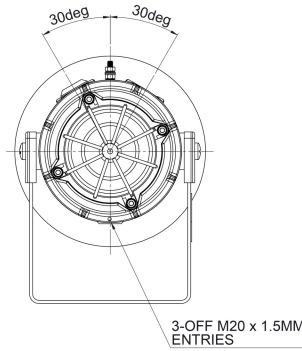
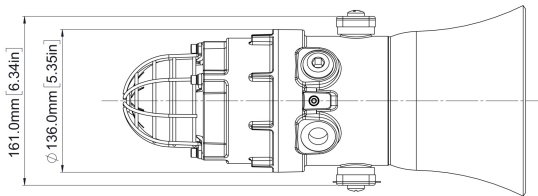
Config. 3 or 7 [DC]: User setting. Common negative, positive switching activation of Alarm Stages 1 & 2 with EOL on both stages. Reverse polarity monitoring

Config. 4 or 8 [DC]: Product option 'Y'. Independent activation of Alarm Stages 1 & 2 with EOL on both stages. Forward polarity monitoring

Config. 1 or 2 [AC]: Factory default. Up to 4 Alarm Stages. Stage 1 activated at power on. Stages 2, 3 and 4 via volt free contacts

Current Consumption

Nominal Voltage:	Voltage range:	Alarm Horn Nominal current:	Xenon Strobe Nominal current:	Combined Nominal current:	Combined Max. current:	In Rush
12Vdc	11.5-14Vdc	221mA	678mA	885mA	920mA	
24Vdc	20-28Vdc	185mA	323mA	508mA	555mA	786mA <5us
48Vdc	42-54Vdc	115mA	198mA	325mA	420mA	
230Vac	220-240Vac 50/60Hz	48mA	79mA	127mA	149mA	



SCRAP VIEW IN DIRECTION A

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