

# A105N Alarm Horn Sounder

The A105N is the industry standard for signalling. The high output 113dB(A) alarm horn sounder is globally approved for fire, marine and general applications. Featuring 64 alarm tone frequencies and 4 remotely activated stages/channels.

Low current consumption and high SPL in a robust fire retardant enclosure ensure the A105N is suitable for all signalling applications including fire, security and process control. The A105N is a member of the versatile AlertAlarm family of industrial alarm horn sounders – also available with Xenon, AL105NX or LED beacons, AL105NH.

## Features

- Automatic synchronisation
- Continuously rated
- Dual M20x1.5mm threaded cable entries – adaptors available
- Duplicate pluggable cable terminations – Class A
- Ingress protection IP66 Type 4/4X/13/3R
- Conformal coated (tropicalised) electronics
- 64 alarm tone frequencies and 4 remotely activated alarm stages
- Available with custom tone configurations and frequencies
- Diode polarized for use in supervised circuits

## Approvals

- UL: UL464
- cUL: CSA C22.2 No 205-17
- ULC: CAN/ULC-S525
- UL EU: (EN54-3) UL-EU-01163-CPR
- CPR 305/2011: 2821-CPR-0107
- MED 2020/1170: MEDB000074G
- DNV GL-CG-0339: TAA00002ZU
- EAC CU TR 043/2017: B.00291/21
- EAC: RU D-GB.GA05.B.12595-20
- RMRS Marine: No. 19.00193.278
- CE, UKCA



## Specification

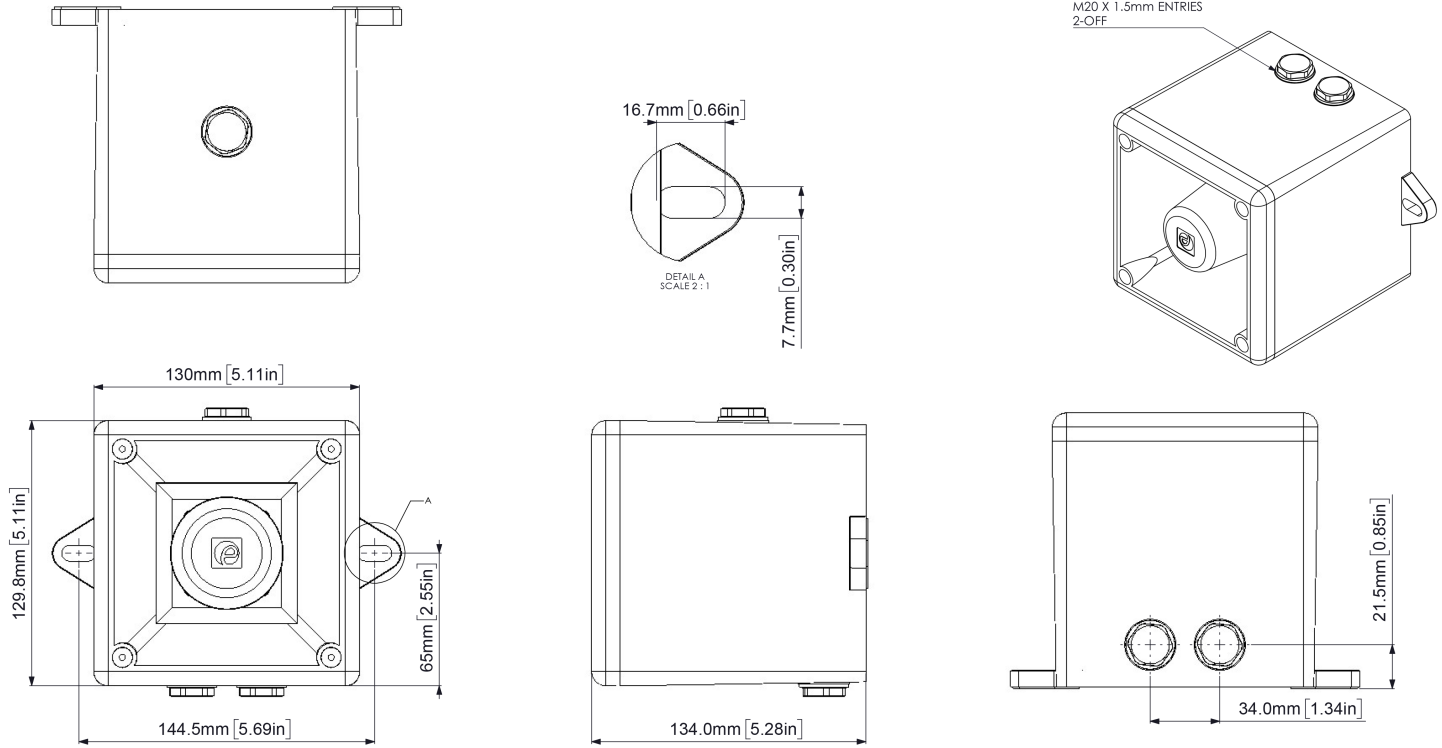
|                     |  |
|---------------------|--|
| Maximum output:     | 113dB(A) @ 1 m ±3dB<br>[104dB(A) @ 10ft/3m ±3dB] |
| Nominal output:     | 106dB(A) @ 1m ±3dB<br>[97dB(A) @ 10ft/3m ±3dB]   |
| No. of tones:       | 64 (UK00A / PFEER compliant)                     |
| No. of stages:      | 4  |
| Volume control:     | -12dB(A) tone dependent                          |
| Effective range:    | 58m/190ft @ 1KHz                                 |
| Voltages DC:        | 10-60V dc  |
| Voltages AC:        | 24-260V ac 50/60Hz                               |
| In rush:            | 636mA within 4.0ms @ 24Vdc                       |
| Stage switching:    | Negative (common positive)                       |
| Ingress protection: | IP66 Type 4/4X/13/3R                             |
| Enclosure:          | High impact UL94 V0 & 5VA FR ABS                 |
| Terminals:          | 0.5 - 2.5mm <sup>2</sup> (20-14 AWG)             |
| Line monitoring:    | Diode polarized for use in supervised circuits   |
| Operating:          | -40 to +66°C [-40° to +151°F]                    |
| Storage:            | -40 to +70°C [-40° to +158°F]                    |
| Relative humidity:  | 95% at 20°C [68°F]                               |
| Vibration test:     | 35Hz for a duration 4Hr (UL464)                  |
| Jarring test:       | 3ft/lb Energy (UL464)                            |
| Impact test:        | 3x 5lb (UL464)                                   |
| MTBF DC:            | 225.16 years / 1,972,386 hours - MIL 217         |
| MTBF AC:            | 138.96 years / 1,217,285 hours - MIL 217         |
| Weight DC:          | 0.75kg / 1.65lbs                                 |
| Weight AC:          | 1.00kg / 2.20lbs                                 |

## Part Codes

| Variable:                   | Identifier:    | Description:   |
|-----------------------------|----------------|--|
| Product type:               | A105N          | Alarm horn sounder   |
| Voltage:                    | DC024<br>AC230 | 10-60Vdc<br>24-260Vac 50/60Hz  |
| Back box/cable entries: [e] | A<br>B         | Back box with mounting lugs - 2 x M20x1.5mm entries<br>Back box with mounting lugs - 2 x 1/2"NPT (adaptors)      |
| Stopping plug material: [m] | A              | ABS  |
| Equip. tag/Duty label: [s]  | 0<br>1<br>2    | No equip. tag or Duty label<br>316 (A4) St/St Equip. tag/Duty label<br>Metalised Polyester Equip. tag/Duty label |
| Product version:            | A              | UL/cUL, ULC, CPR, MED, DNV, RMRS, EAC, CE, UKCA  |
| Product option: [o]         | 1<br>X<br>Z    | Standard product<br>Custom configuration - contact E2S<br>Custom alarm tone software - contact E2S               |
| Enclosure: [x]              | R<br>G         | Red (RAL 3000)<br>Grey (RAL7038)   |

## Current Consumption

| Product Version: | Nominal Voltage: | Voltage Range: | Current Consumption: |
|------------------|------------------|----------------|----------------------|
| DC024            | 12Vdc            | 10-60Vdc       | 17mA                 |
|                  | 24Vdc            |                | 33.5mA               |
|                  | 48Vdc            |                | 113mA                |
| AC230            | 115Vac 50/60Hz   | 24-260Vac      | 25mA                 |
|                  | 230Vac 50/60Hz   |                | 17mA                 |



## Tone table

| S 1  | Description                                       | S 2 | S 3  | S 4  |
|------|---|-----|------|------|
| T 1  | 1000 Continuous - PFEER Toxic Gas                 | Any | T 2  | T 44 |
| T 2  | 1200/500 @ 1Hz Sweeping - DIN / PFEER P.T.A.P.    | Any | T 3  | T 44 |
| T 3  | 1000 @ 0.5Hz (1s on, 1s off) Intermittent - P...  | Any | T 2  | T 44 |
| T 4  | 1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NF C 48...  | Any | T 24 | T 1  |
| T 5  | 544(100mS)/440 (400mS) - NF S 32-001              | Any | T 19 | T 1  |
| T 6  | 1500/500 - (0.5s on , 0.5s off) x3 + 1s gap - ... | Any | T 44 | T 1  |
| T 7  | 500-1500Hz Sweeping 2 sec on 1 sec off - AS4428   | Any | T 44 | T 1  |
| T 8  | 500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) - NEN ...  | Any | T 24 | T 35 |
| T 9  | 1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...  | Any | T 34 | T 1  |
| T 10 | 1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...  | Any | T 34 | T 1  |
| T 11 | 420(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201 ...  | Any | T 1  | T 8  |
| T 12 | 1000(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201...  | Any | T 1  | T 8  |
| T 13 | 422/775 - (0.85 on, 0.5 off) x3 + 1s gap - ...    | Any | T 1  | T 8  |
| T 14 | 1000/2000 @ 1Hz - Singapore                       | Any | T 3  | T 35 |
| T 15 | 300 Continuous                                    | Any | T 24 | T 35 |
| T 16 | 440 Continuous                                    | Any | T 24 | T 35 |
| T 17 | 470 Continuous                                    | Any | T 24 | T 35 |
| T 18 | 500 Continuous - IMO code 2 (Low)                 | Any | T 24 | T 35 |
| T 19 | 554 Continuous                                    | Any | T 24 | T 35 |
| T 20 | 660 Continuous                                    | Any | T 24 | T 35 |
| T 21 | 800 Continuous - IMO code 2 (High)                | Any | T 24 | T 35 |
| T 22 | 1200 Continuous                                   | Any | T 24 | T 35 |
| T 23 | 2000 Continuous                                   | Any | T 3  | T 35 |
| T 24 | 2400 Continuous                                   | Any | T 20 | T 35 |
| T 25 | 440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent   | Any | T 44 | T 8  |
| T 26 | 470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent    | Any | T 44 | T 8  |
| T 27 | 470 @ 5Hz (0.10s on, 0.10s off) Intermittent      | Any | T 44 | T 8  |
| T 28 | 544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent   | Any | T 24 | T 8  |
| T 29 | 655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent  | Any | T 44 | T 8  |
| T 30 | 660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent   | Any | T 24 | T 8  |
| T 31 | 660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent    | Any | T 24 | T 8  |
| T 32 | 745 @ 1Hz (0.50s on, 0.50s off) Intermittent      | Any | T 24 | T 8  |

| S 1  | Description                                     | S 2 | S 3  | S 4  |
|------|---|-----|------|------|
| T 33 | 800 (0.25s on, 1.00s off) Intermittent          | Any | T 24 | T 8  |
| T 34 | 800 @ 2Hz (0.25s on, 0.25s off) - IMO code 3... | Any | T 24 | T 8  |
| T 35 | 1000 @ 1Hz (0.50s on, 0.50s off) Intermittent   | Any | T 24 | T 8  |
| T 36 | 2400 @ 1Hz (0.50s on, 0.50s off) Intermittent   | Any | T 24 | T 8  |
| T 37 | 2900 @ 5Hz (0.10s on, 0.10s off) Intermittent   | Any | T 24 | T 8  |
| T 38 | 363/518 @ 1Hz (0.50s / 0.50s) Alternating       | Any | T 8  | T 19 |
| T 39 | 450/500 @ 2Hz (0.25s / 0.25s) Alternating       | Any | T 8  | T 19 |
| T 40 | 554/440 @ 1Hz (0.50s / 0.50s) Alternating       | Any | T 24 | T 19 |
| T 41 | 554/440 @ 0.65Hz (0.76s / 0.76s) Alternating    | Any | T 8  | T 19 |
| T 42 | 561/760 @ 0.83Hz (0.60s / 0.60s) Alternating    | Any | T 8  | T 19 |
| T 43 | 780/600 @ 0.96Hz (0.52s / 0.52s) Alternating    | Any | T 8  | T 19 |
| T 44 | 800/1000 @ 2Hz (0.25s / 0.25s) Alternating      | Any | T 24 | T 19 |
| T 45 | 970/800 @ 2Hz (0.25s / 0.25s) Alternating       | Any | T 8  | T 19 |
| T 46 | 800/1000 @ 0.875Hz (0.57s / 0.57s) Alternating  | Any | T 24 | T 19 |
| T 47 | 2400/2900 @ 2Hz (0.25s / 0.25s) Alternating     | Any | T 24 | T 19 |
| T 48 | 500/1200 @ 0.3Hz (1.67s / 1.67s) Sweeping       | Any | T 24 | T 12 |
| T 49 | 560/1055 @ 0.18Hz (2.73s / 2.73s) Sweeping      | Any | T 24 | T 12 |
| T 50 | 560/1055 @ 3.3Hz (0.15s / 0.15s) Sweeping       | Any | T 24 | T 12 |
| T 51 | 600/1250 @ 0.125Hz (4s / 4s) Sweeping           | Any | T 24 | T 12 |
| T 52 | 660/1200 @ 1Hz (0.50s / 0.50s) Sweeping         | Any | T 24 | T 12 |
| T 53 | 800/1000 @ 1Hz (0.50s / 0.50s) Sweeping         | Any | T 24 | T 12 |
| T 54 | 800/1000 @ 7Hz (0.07s / 0.07s) Sweeping         | Any | T 24 | T 12 |
| T 55 | 800/1000 @ 50Hz (0.01s / 0.01s) Sweeping        | Any | T 24 | T 12 |
| T 56 | 2400/2900 @ 7Hz (0.07s / 0.07s) Sweeping        | Any | T 24 | T 12 |
| T 57 | 2400/2900 @ 1Hz (0.50s / 0.50s) Sweeping        | Any | T 24 | T 12 |
| T 58 | 2400/2900 @ 50Hz (0.01s / 0.01s) Sweeping       | Any | T 24 | T 12 |
| T 59 | 2500/3000 @ 2Hz (0.25s / 0.25s) Sweeping        | Any | T 24 | T 12 |
| T 60 | 2500/3000 @ 7.7Hz (0.65s / 0.65s) Sweeping      | Any | T 24 | T 12 |
| T 61 | 800Hz Motor Siren                               | Any | T 24 | T 12 |
| T 62 | 1200Hz Motor Siren                              | Any | T 24 | T 12 |
| T 63 | 2400Hz Motor Siren                              | Any | T 24 | T 12 |
| T 64 | Simulated Bell                                  | Any | T 21 | T 12 |