

IS-mA1 IS-minialarm

The IS-mA1 is a compact, 100dB(A) alarm sounder. Approvals include ATEX, IECEx and GOST-R for Zone 0 applications and FM approval for Class I Division 1 and Class I Zone 0 applications.

The IS-mA1 is suitable for all intrinsically safe signalling applications including fire, security and process control.

The IS-mA1M version is also available for Group I mining environments.

Features

- Input overload and reverse current protection
- End of line resistor certified
- Auto synchronised sound output
- Available with custom tone configurations

Approvals

- ATEX certificate: SIRA 05ATEX2084X
- IECEx certificate: IECEx SIR 06.0045X
- FM approved
- GOST-R certificate: POCC GB.JB05.B03365



Specification

| | |
|---------------------|--|
| Nominal output: | 100dB(A) @ 1m +/- 3dB - Tone 2* [91dB(A) @ 10ft/3m] |
| No. of tones: | 49 (UK00A/PFEER compliant) |
| No. of stages: | 3 |
| Volume control: | Max. 100dB(A); Min. 90dB(A) - Tone 2 |
| Effective range: | 40m/131ft @ 1KHz |
| Voltage: | 16-28vdc via Zener barrier or galvanic isolator |
| Current: | 25mA typical when powered from 24v supply via 28v 300 Ohm Zener barrier |
| Ingress protection: | IP65 |
| Rating: | Continuous |
| Housing material: | UL94V0 & 5VA FR ABS |
| Housing colour: | RAL3000 Red |
| Fixings: | Stainless Steel |
| Cable entries: | 2 x M20 clearance gland knockouts. Custom configurations also available. |
| Terminals: | 0.5 to 2.5mm ² |
| Operating temp: | -40° to +60°C [-40 to +140°F] |
| Storage temp: | -40° to +70°C [-40 to +158°F] |
| Relative humidity: | 90% at 20°C [68°F] |

Part Codes

IS-mA1-R

ATEX / IECEx / FM
II 1G Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +60°C)
IS Class I, Zone 0, AEx ia IIC T4
IS Class I, Division 1, Groups A, B, C, D

GOST-R
0ExialICT4 IP65 -40° to +60°C

IS-mA1M-R

ATEX [Group I
I M1 Ex ia I Ma (-40°C ≤ Ta ≤ +60°C)

May be powered from any certified Zener barrier or galvanic isolator whose output parameters do not exceed:
Uo: 28VDC Io: 93mA Po: 660mW

Tone table

| S 1 | Description | S 2 | S 3 | S 1 | Description | S 2 | S 3 |
|------------|---|------------|------------|------------|--|------------|------------|
| T 1 | 340 Hz Continuous | T 2 | T 5 | T 33 | 745Hz @ 1Hz Intermittent | T 2 | T 5 |
| T 2 | 800/1000Hz @ 0.25 sec Alternating | T 17 | T 5 | T 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | T 38 | T 45 |
| T 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | T 2 | T 5 | T 35 | 420Hz @ 0.625 sec Australian Alert | T 36 | T 5 |
| T 4 | 800/1000Hz @ 1Hz Sweeping | T 6 | T 5 | T 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | T 35 | T 5 |
| T 5 | 2400Hz Continuous | T 3 | T 20 | T 37 | 1000Hz Continuous - PFEER Toxic Gas | T 9 | T 45 |
| T 6 | 2400/2900Hz @ 7Hz Sweeping | T 7 | T 5 | T 38 | 2000Hz Continuous | T 34 | T 45 |
| T 7 | 2400/2900Hz @ 1Hz Sweeping | T 10 | T 5 | T 39 | 800Hz 0.25sec on, 1 sec off Intermittent | T 23 | T 17 |
| T 8 | 500/1200/500Hz @ 0.3Hz Sweeping | T 2 | T 5 | T 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | T 31 | T 27 |
| T 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | T 15 | T 2 | T 41 | Motor Siren - slow rise to 1200 Hz | T 2 | T 5 |
| T 10 | 2400/2900Hz @ 2Hz Alternating | T 7 | T 5 | T 42 | Motor Siren - slow rise to 800 Hz | T 2 | T 5 |
| T 11 | 1000Hz @ 1Hz Intermittent | T 2 | T 5 | T 43 | 1200 Hz Continuous | T 2 | T 5 |
| T 12 | 800/1000Hz @ 0.875Hz Alternating | T 4 | T 5 | T 44 | Motor Siren - slow rise to 2400 Hz | T 2 | T 5 |
| T 13 | 2400Hz @ 1Hz Intermittent | T 15 | T 5 | T 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. ... | T 38 | T 34 |
| T 14 | 800Hz 0.25sec on, 1 sec off Intermittent | T 4 | T 5 | T 46 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | T 47 | T 37 |
| T 15 | 800Hz Continuous | T 2 | T 5 | T 47 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. ... | T 46 | T 37 |
| T 16 | 660Hz 150mS on, 150mS off Intermittent | T 18 | T 5 | T 48 | 420Hz @ 0.625 sec Australian Alert | T 49 | T 5 |
| T 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | T 2 | T 27 | T 49 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | T 26 | T 37 |
| T 18 | 660Hz 1.8sec on, 1.8sec off Intermittent | T 2 | T 5 | | | | |
| T 19 | 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265 | T 2 | T 5 | | | | |
| T 20 | 660Hz Continuous | T 2 | T 5 | | | | |
| T 21 | 554Hz/440Hz @ 1Hz Alternating | T 2 | T 5 | | | | |
| T 22 | 544Hz @ 0.875 sec. Intermittent | T 2 | T 5 | | | | |
| T 23 | 800Hz @ 2Hz Intermittent | T 6 | T 5 | | | | |
| T 24 | 800/1000Hz @ 50Hz Sweeping | T 29 | T 5 | | | | |
| T 25 | 2400/2900Hz @ 50Hz Sweeping | T 29 | T 5 | | | | |
| T 26 | Bell | T 2 | T 15 | | | | |
| T 27 | 554Hz Continuous | T 26 | T 5 | | | | |
| T 28 | 440Hz Continuous | T 2 | T 5 | | | | |
| T 29 | 800/1000Hz @ 7Hz Sweeping | T 7 | T 5 | | | | |
| T 30 | 300Hz Continuous | T 2 | T 5 | | | | |
| T 31 | 660/1200Hz @ 1Hz Sweeping | T 26 | T 5 | | | | |
| T 32 | Two T chime. | T 26 | T 15 | | | | |