

IS-mA1 IS-minialarm

The IS-mA1 is a compact, 100dB(A) alarm sounder. Approvals include ATEX, IECEx and EAC Ex 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
- EAC Ex certificate: POCC GB.JB05.B03365



Specification

- **Nominal output:** 100dB(A) @ 1m +/- 3dB – Tone 2*[91dB(A) @ 10ft/3m]
- **No. of tones:** 49 (UKOOA/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
- **Enclosure material:** UL94V0 & 5VA FR ABS
- **Enclosure colour:** RAL3000 Red
- **Fixings:** Stainless Steel
- **Cable entries:** 2 x M20 clearance gland knockouts. Custom configurations also available.
- **MTBF:** 273.1 years / 2,392,344 hours – MIL 217
- **Terminals:** 0.5 to 2.5mm²
- **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]
- **Weight:** 0.36Kg / 0.79lbs

Part Codes

IS-mA1-RIS-m A1-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

EAC Ex

0ExialICT4 IP65 -40° to +60°C

IS-mA1M-RIS-mA1M-R

IECEx & ATEX

Group 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:

U_o: 28VDC I_o: 93mA P_o: 660Mw

Tone table

| S 1 | Description | S2 | S3 |
|------|---|------|------|
| T 1 | 340 Hz Continuous | T 2 | T 5 |
| T 2 | 800/1000Hz @ 0.25 sec Alternating | T 17 | T 5 |
| T 3 | 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop | T 2 | T 5 |
| T 4 | 800/1000Hz @ 1Hz Sweeping | T 6 | T 5 |
| T 5 | 2400Hz Continuous | T 3 | T 20 |
| T 6 | 2400/2900Hz @ 7Hz Sweeping | T 7 | T 5 |
| T 7 | 2400/2900Hz @ 1Hz Sweeping | T 10 | T 5 |
| T 8 | 500/1200/500Hz @ 0.3Hz Sweeping | T 2 | T 5 |
| T 9 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | T 15 | T 2 |
| T 10 | 2400/2900Hz @ 2Hz Alternating | T 7 | T 5 |
| T 11 | 1000Hz @ 1Hz Intermittent | T 2 | T 5 |
| T 12 | 800/1000Hz @ 0.875Hz Alternating | T 4 | T 5 |
| T 13 | 2400Hz @ 1Hz Intermittent | T 15 | T 5 |
| T 14 | 800Hz 0.25sec on, 1 sec off Intermittent | T 4 | T 5 |
| T 15 | 800Hz Continuous | T 2 | T 5 |
| T 16 | 660Hz 150mS on, 150mS off Intermittent | T 18 | T 5 |
| T 17 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | T 2 | T 27 |
| 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 |
| T 33 | 745Hz @ 1Hz Intermittent | T 2 | T 5 |
| T 34 | 1000 & 2000Hz @ 0.5 sec Alternating - Singapore | T 38 | T 45 |
| T 35 | 420Hz @ 0.625 sec Australian Alert | T 36 | T 5 |
| T 36 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | T 35 | T 5 |
| T 37 | 1000Hz Continuous - PFEER Toxic Gas | T 9 | T 45 |
| T 38 | 2000Hz Continuous | T 34 | T 45 |

| S 1 | Description | S2 | S3 |
|------|--|------|------|
| T 39 | 800Hz 0.25sec on, 1 sec off Intermittent | T 23 | T 17 |
| T 40 | 544Hz (100mS)/440Hz (400mS) - NF S 32-001 | T 31 | T 27 |
| T 41 | Motor Siren - slow rise to 1200 Hz | T 2 | T 5 |
| T 42 | Motor Siren - slow rise to 800 Hz | T 2 | T 5 |
| T 43 | 1200 Hz Continuous | T 2 | T 5 |
| T 44 | Motor Siren - slow rise to 2400 Hz | T 2 | T 5 |
| T 45 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. ... | T 38 | T 34 |
| T 46 | 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P. | T 47 | T 37 |
| T 47 | 1KHz 1s on, 1s off Intermittent - PFEER Gen. ... | T 46 | T 37 |
| T 48 | 420Hz @ 0.625 sec Australian Alert | T 49 | T 5 |
| T 49 | 500-1200Hz 3.75sec /0.25sec. Australian Evac. | T 26 | T 37 |

For more information on these products, please contact us:



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