

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 (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
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 2.5mm 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

EAC Ex
0ExialICT4 IP65 -40° to +60°C

IS-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:

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				

E2S Warning Signals

No liability is accepted for any consequence of the use of this document. The technical specification of this unit is subject to change without notice due to our policy of continual product development. All dimensions are approximate. This unit is sold subject to our standard conditions of sale, a copy of which is available on request.

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