

Intrinsically Safe LED Audible Visual Status Indicator

Model WAV-IS

Model WAV-IS is a compact combined 100dB(A) alarm sounder and LED beacon - only one Zener barrier or galvanic isolator required to run both sounder & beacon or alternatively the unit can be operated as individual signals.

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.

FEATURES:

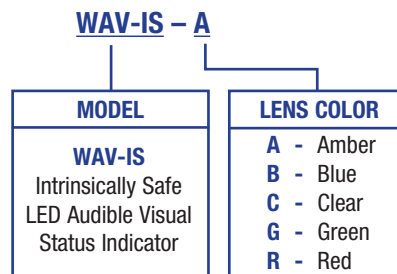
- **Input overload and reverse current protection**
- **End of line resistor certified**
- **Auto synchronised sound output**
- **Fresnal lens optimizes LED effectiveness**
- **Available with custom tone configurations and frequencies**

APPROVALS:

- ATEX certificate: Sira10ATEX2102X
EN 60079-0 : 2006 EN 60079-11 : 2007
EN 60079-26 : 2007
- IECEx certificate: IECEx SIR 06.0046X
IEC 60079-0 : 2007 IEC 60079-11 : 2006
IEC 60079-26 : 2006
- FM approved:
Class 3600 1998 Class 3610 1999
Class 3810 2005

Model	Voltage	Voltage Range	Operating Current
WAV-IS	24VDC	16-28VDC	30mA

HOW TO ORDER



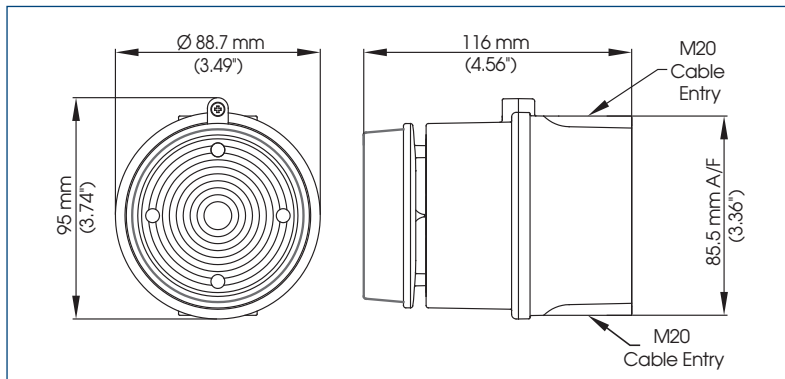
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FEDERAL SIGNAL
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INTRINSICALLY SAFE LED AUDIBLE VISUAL STATUS INDICATOR (WAV-IS)



Installation (Combined or Sounder only): Zener barrier or galvanic isolator with output parameters not exceeding: Uo: 28vdc Io: 93mA Po: 660mW

Installation (Beacon only): Zener barrier or galvanic isolator with output parameters not exceeding: Uo: 28vdc Io: 660mA Po: 1.2W

SPECIFICATIONS

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

ALARM SOUNDER:

Nominal output: 100dB(A) @ 1m +/- 3dB - Tone 2*
 No. of tones: 49 (UK00A/PFEER compliant)
 No. of stages: 3
 Volume control: Max. 100dB(A);
 Min. 90dB(A) - Tone 2

LED BEACON:

Light source: Array of 6 high intensity LEDs
 LED colors: Amber, Blue, Clear, Green & Red
 Flash modes: Double flash at 2Hz and 1Hz

GENERAL:

Voltage: 16-28VDC via Zener barrier or galvanic isolator
 Combined current: Approx: 30mA typical when powered from 24v supply via 28v 300 Ohm Zener barrier.
 Ingress protection: IP65
 Rating: Continuous
 Housing material: UL94V0 & 5VA FR ABS & PC
 Housing color: RAL3000 Red
 Fixings: Stainless Steel
 Cable entries: 2 x M20 clearance gland knockouts. Custom configurations also available.
 Terminals: 0.001 to 0.098" 0.5 to 2.5mm²
 Operating temp: -104°F to +140°F -40°C to +60°C
 Storage temp: -104°F to +158°F -40°C to +70°C
 Relative humidity: 90% at 68°F 90% at 20°C
 Product weight: 0.30Kg
 Shipping weight: 0.45Kg

TONES

Stage	Frequency Description	Stage 2	Stage 3
Tone 1	340 Hz Continuous	Tone 2	Tone 5
Tone 2	800/1000Hz @ 0.25 sec Alternating - BS5839 Alarm tone	Tone 17	Tone 5
Tone 3	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop - NEN 2575:2000	Tone 2	Tone 5
Tone 4	800/1000Hz @ 1Hz Sweeping	Tone 6	Tone 5
Tone 5	2400Hz Continuous	Tone 3	Tone 20
Tone 6	2400/2900Hz @ 7Hz Sweeping	Tone 7	Tone 5
Tone 7	2400/2900Hz @ 1Hz Sweeping	Tone 10	Tone 5
Tone 8	500/1200/500Hz @ 0.3Hz Sweeping	Tone 2	Tone 5
Tone 9	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	Tone 15	Tone 2
Tone 10	2400/2900Hz @ 2Hz Alternating	Tone 7	Tone 5
Tone 11	1000Hz @ 1Hz Intermittent	Tone 2	Tone 5
Tone 12	800/1000Hz @ 0.875Hz Alternating	Tone 4	Tone 5
Tone 13	2400Hz @ 1Hz Intermittent	Tone 15	Tone 5
Tone 14	800Hz 0.25sec on, 1 sec off Intermittent	Tone 4	Tone 5
Tone 15	800Hz Continuous	Tone 2	Tone 5
Tone 16	660Hz 150mS on, 150mS off Intermittent	Tone 18	Tone 5
Tone 17	544Hz (100mS)/440Hz (400mS) - AFNOR NF S 32-001	Tone 2	Tone 27
Tone 18	660Hz 1.8sec on, 1.8sec off Intermittent	Tone 2	Tone 5
Tone 19	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - AFNOR NFC48-265	Tone 2	Tone 5
Tone 20	660Hz Continuous	Tone 2	Tone 5
Tone 21	554Hz/440Hz @ 1Hz Alternating	Tone 2	Tone 5
Tone 22	544Hz @ 0.875 sec. Intermittent	Tone 2	Tone 5
Tone 23	800Hz @ 2Hz Intermittent	Tone 6	Tone 5
Tone 24	800/1000Hz @ 50Hz Sweeping	Tone 29	Tone 5
Tone 25	2400/2900Hz @ 50Hz Sweeping	Tone 29	Tone 5
Tone 26	Bell	Tone 2	Tone 15
Tone 27	554Hz Continuous	Tone 26	Tone 5
Tone 28	440Hz Continuous	Tone 2	Tone 5
Tone 29	800/1000Hz @ 7Hz Sweeping	Tone 7	Tone 5
Tone 30	300Hz Continuous	Tone 2	Tone 5
Tone 31	660/1200Hz @ 1Hz Sweeping	Tone 26	Tone 5
Tone 32	Two tone chime.	Tone 26	Tone 15
Tone 33	745Hz @ 1Hz Intermittent	Tone 2	Tone 5
Tone 34	1000 & 2000Hz @ 0.5 sec Alternating - Singapore	Tone 38	Tone 45
Tone 35	420Hz @ 0.625 sec Australian Alert	Tone 36	Tone 5
Tone 36	500-1200Hz 3.75sec /0.25sec. Australian Evac.	Tone 35	Tone 5
Tone 37	1000Hz Continuous - PFEER Toxic Gas	Tone 9	Tone 45
Tone 38	2000Hz Continuous	Tone 34	Tone 45
Tone 39	800Hz 0.25sec on, 1 sec off Intermittent	Tone 23	Tone 17
Tone 40	544Hz (100mS)/440Hz (400mS) - NF S 32-001	Tone 31	Tone 17
Tone 41	Motor Siren - slow rise to 1200 Hz	Tone 2	Tone 5
Tone 42	Motor Siren - slow rise to 800 Hz	Tone 2	Tone 5
Tone 43	1200 Hz Continuous	Tone 2	Tone 5
Tone 44	Motor Siren - slow rise to 2400 Hz	Tone 2	Tone 5
Tone 45	1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm	Tone 38	Tone 34
Tone 46	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	Tone 47	Tone 37
Tone 47	1KHz 1s on, 1s off Intermittent - PFEER Gen. Alarm	Tone 46	Tone 37
Tone 48	420Hz @ 0.625 sec Australian Alert	Tone 49	Tone 5
Tone 49	500-1200Hz 3.75sec /0.25sec. Australian Evac.	Tone 26	Tone 37

#259368A Rev A

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