

Ex Sounder 105 dB (A) IS-A105N



These sounders are used in workplaces where dangerous, explosive atmospheres are to be expected

- free selection of 49 different tones UKOOA/PFEER conformant
- high sound pressure level of 105 dB (A), can be reduced by up to 15 dB (A) via a potentiometer
- up to 2 tones can be selected externally in order to signal different alarms
- works on DC voltages between 10 and 28 Volt DC, rated voltage 24 V DC
- an input protector prevents damage due to incorrect connection without a Zener barrier or galvanic isolation
- can also be used outdoors thanks to housing made of self-extinguishing ABS and IP 66 protection system
- categories 1G, 2G and 3G (Zones 0, 1 and 2)

See pages 250 and 251 for suitable zener barriers

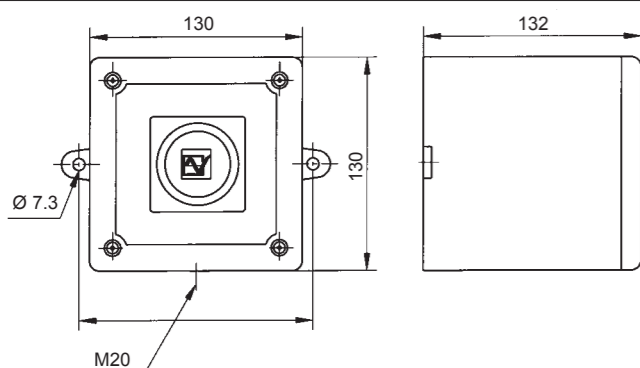
max. signal reception range	Protection system	Operating temperature

Electrical data	IS-A105N
Rated voltage	24 V DC
Operating range	10 V DC – 28 V DC
Nominal current consumption	25 mA (typical for connection to 24 V DC via 28 V / 300 Ω zener barrier)

Power must be connected via a zener barrier (max. 28 V DC, 93 mA DC, 0.66 W) or a galvanic isolator, specified by the system certificate (see page 251)

Mechanical data	IS-A105N
Type of protection	'ia' inherently safe
Explosion protection	II 1G Ex ia IIC T4 - 40 °C ... + 60 °C Ta
Category (area of use)	1G (Zone 0) / 2G (Zone 1) / 3G (Zone 2)
Certificate of conformity	SIRA 04 ATEX 2301X
Testing body	SIRA
Sound pressure level	microphone distance 1 m up to 105 dB (A) ± 3 dB (A) can be reduced by up to 15 dB (A) via an internal potentiometer
Tones	49 different tones can be set via DIP switch, of which 2 tones are externally selectable
Storage temperature	- 40 °C ... + 70 °C
Relative humidity	90% @ + 50 °C
Duty cycle	100%
Material	ABS self-extinguishing, similar to UL 94 VO
Colour	similar RAL 3000 (flame red), optionally in grey RAL 7038 or white RAL 9010
Connecting terminals	0.5 – 2.5 mm ²
Cable entry	20 mm
Weight	0.75 kg

Dimensions



Alarm tone table			Stage 2	Stage 3
Stage 1	Description - Frequency			
tone 1	continuous tone 340 Hz		tone 2	tone 5
tone 2	alternating tone 800 Hz / 1000 Hz, alternation every 0.25 s		tone 17	tone 5
tone 3	slow whoop 500-1200 Hz, switching frequency 0.3 Hz, 0.5 s		tone 2	tone 5
tone 4	sweeping 800 Hz / 1000 Hz, switching frequency 1 Hz		tone 6	tone 5
tone 5	continuous tone 2400 Hz		tone 3	tone 20
tone 6	sweeping 2400 Hz / 2900 Hz, switching frequency 7 Hz		tone 7	tone 5
tone 7	sweeping 2400 Hz / 2900 Hz, switching frequency 1 Hz		tone 10	tone 5
tone 8	siren 500 Hz / 1200 Hz / 500 Hz, duration 3 s		tone 2	tone 5
tone 9	sawtooth 1200 Hz / 500 Hz within 1 s		tone 15	tone 2
tone 10	alternating tone 2400 Hz / 2900 Hz, switching frequency 2 Hz		tone 7	tone 5
tone 11	interrupted tone 1000 Hz, switching frequency 1 Hz		tone 2	tone 5
tone 12	alternating tone 800 Hz / 1000 Hz, switching frequency 0.875 Hz		tone 4	tone 5
tone 13	interrupted tone 2400 Hz, switching frequency 1 Hz		tone 15	tone 5
tone 14	interrupted tone 800 Hz, 0.25 s signal, 1 s gap		tone 4	tone 5
tone 15	continuous tone 800 Hz		tone 2	tone 5
tone 16	interrupted tone 660 Hz, 150 ms signal, 150 ms gap		tone 18	tone 5
tone 17	alternating tone 544 Hz (100 ms) / 440 Hz (400 ms) – NF S 32-001		tone 2	tone 27
tone 18	interrupted tone 660 Hz, 1.8 s signal, 1.8 s gap		tone 2	tone 5
tone 19	sweeping 1400 Hz – 1600 Hz rising 1 s, falling 0.5 s – NF C 48-265		tone 2	tone 5
tone 20	continuous tone 660 Hz		tone 2	tone 5
tone 21	alternating tone 554 Hz / 440 Hz, switching frequency 1 Hz		tone 2	tone 5
tone 22	interrupted tone 544 Hz, 0.875 s signal, 0.875 s gap		tone 2	tone 5
tone 23	interrupted tone 800 Hz, switching frequency 2 Hz		tone 6	tone 5
tone 24	sweeping 800 Hz / 1000 Hz, switching frequency 50 Hz		tone 29	tone 5
tone 25	sweeping 2400 Hz / 2900 Hz, switching frequency 50 Hz		tone 29	tone 5
tone 26	simulated bell		tone 2	tone 15
tone 27	continuous tone 554 Hz		tone 26	tone 5
tone 28	continuous tone 440 Hz		tone 2	tone 5
tone 29	sweeping 800 Hz / 1000 Hz, switching frequency 7 Hz		tone 7	tone 5
tone 30	continuous tone 300 Hz		tone 2	tone 5
tone 31	siren 660 Hz / 1200 Hz, switching frequency 1 Hz		tone 26	tone 5
tone 32	2-tone bell sound		tone 26	tone 15
tone 33	interrupted tone 745 Hz, switching frequency 1 Hz		tone 2	tone 5
tone 34	alternating tone 1000 Hz / 2000 Hz, alternation every 0.5 s		tone 38	tone 45
tone 35	interrupted tone 420 Hz, every 0.625 s – Australian alert		tone 36	tone 5
tone 36	slow whoop 500-1200 Hz within 1 s – Australian evacuation alarm		tone 35	tone 5
tone 37	continuous tone 1000 Hz		tone 9	tone 45
tone 38	continuous tone 2000 Hz		tone 34	tone 45
tone 39	interrupted tone 800 Hz, 0.25 s signal, 1 s gap		tone 23	tone 17
tone 40	alternating tone 544 Hz (100 ms) / 440 Hz (400 ms) – NF S 32-001		tone 31	tone 27
tone 41	motor siren, slowly rising to 1200 Hz		tone 2	tone 5
tone 42	motor siren, slowly rising to 800 Hz		tone 2	tone 5
tone 43	continuous tone 1200 Hz		tone 2	tone 5
tone 44	motor siren, slowly rising to 2400 Hz		tone 2	tone 5
tone 45	interrupted tone 1000 Hz, 1 s signal, 1 s gap – general alarm		tone 38	tone 34
tone 46	sawtooth 1200 Hz / 500 Hz within 1 s		tone 47	tone 37
tone 47	interrupted tone 1000 Hz, 1 s signal, 1 s gap – general alarm		tone 46	tone 37
tone 48	interrupted tone 420 Hz, every 0.625 s – Australian alert		tone 49	tone 5
tone 49	slow whoop 500-1200 Hz within 1s – Australian evacuation alarm		tone 26	tone 37

Ordering details	
Article number	IS-A105N
Rated voltage	24 V DC
	320 33 80 0 000

Manufacturer's declaration

Developed and manufactured in accordance with EN 50014 (general requirements), EN 50020 (intrinsically safety), EMC Directive 89/336/EEC.