

SOUNDERS 105/110 dB(A) DS 5 | DS 10 3G/3D ATEX



Gas and dust protection

- The industrial sounder for tough applications. Proven 100,000 times over in shipping. "When nothing else works, this still does!" "Heavy duty" but still light!
- For use as an acoustic alarm in potentially explosive workplaces of category 3G (Zone 2) and 3D (Zone 22).
- Category for gas and dust protection.
- IP 67 for safe operation under extreme environmental conditions.
- Individual selection of 32 different tones.

optionally:

- 4-stage external tone selection (options: TAS, TAV).
- All tones can be individually combined with one another when externally controlled (programming function, tone 32).

IP 66
IP 67

protection
system

+55 °C
-25 °C

operating
temperature

EN
54-3

VdS
G28609

10
Years

warranty

EAC

PRODUCT	DS 5 3G/3D				
Rated voltage	230 V	115 V	24 V ¹	24 V	12 V
	AC 50 60 Hz			DC	
Operating range	195–253 V	95–127 V	19–29 V	19–29 V	10–15 V
Nominal current consumption	0.03 A	0.06 A	0.28 A	0.28 A	0.28 A
PRODUCT	DS 10 3G/3D				
Rated voltage	230 V	115 V	24 V ¹	24 V	12 V
	AC 50 60 Hz			DC	
Operating range	195–253 V	95–127 V	19–29 V	19–29 V	10–15 V
Nominal current consumption	0.06 A	0.12 A	0.42 A	0.42 A	0.3 A
PRODUCT	DS 5 3G/3D			DS 10 3G/3D	
Explosion protection	II 3G Ex nA II T4 (all voltages except 24 V AC) II 3G Ex nA II T3 (24 V AC only) II 3D Ex tD A22 IP 67 T135°C				
Category (area of use)	3G (Zone 2), 3D (Zone 22)				
Testing body	Pfannenberg				
Sound pressure level	105 dB(A) ±3 dB(A)			110 dB(A) ±3 dB(A)	
Alarm tones	32 / 4 tones are externally selectable				
Temperature class	T4 / T3 @ –25 °C ... +55 °C				
Storage temperature	–40 °C ... +70 °C				
Protection system (EN 60529)	IP 66 IP 67				
Duty cycle	100 %				
Material	die-cast aluminium GD-Al Si12 Cu				
Surface coating	epoxy resin paint RAL 3000, fl ame red				
Cable bushing	2x M20 x 1.5 (1x plastic cable gland, 1 x plug)				
Clamping range of the cable fitting	6–13 mm				
Connecting terminal cross-section	mind. 0.08 mm² ... max. 2.5 mm² AWG 28 – 12 (AWG12 THHN, THWN)				
Weight	AC: 2.15 kg DC: 1.95 kg				

¹Temperature class T3

OPTIONS/ACCESSORIES

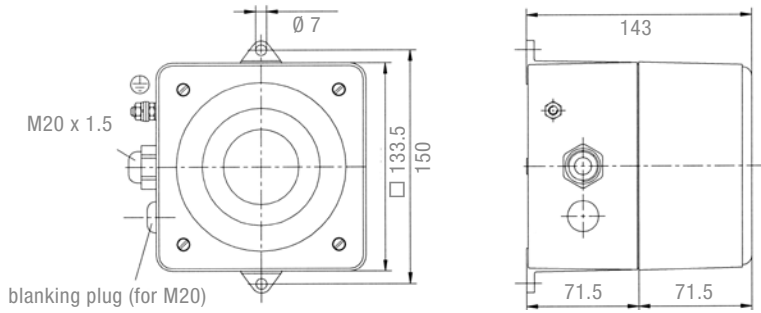


External tone selection control / 4-stage external tone selection
TAV: control by means of external voltage input
(12 V and 24 V DC only)
TAS: control by means of control voltage



30457-83-HH

DIMENSIONS



1 TONE TABLE

NO.	DESCRIPTION – BASIC TONE (PRESET: TONE 2)		STAGE			NO.	DESCRIPTION – BASIC TONE (PRESET: TONE 2)		STAGE		
			2	3	4				2	3	4
0	no tone		2	88	57	92	Interrupted tone	800 Hz	131	146	57
2 ¹	Sawtooth, DIN tone 33404-3 Germany (emergency signal), PFEER PTAP	1200 Hz 1 s EN 54-3	128	112	57	93	Interrupted tone (fast), horn	800 Hz	2	128	57
15	Slow whoop, NEN 2575 evacuation alarm Netherlands	500 Hz 3,5 s 0,5 s	131	54	112	97	Interrupted tone	725 Hz	2	63	93
23	Siren	2400 Hz 3 s const.	24	60	112	98	Interrupted tone, Sweden SS031711 (emergency signal)	700 Hz	112	128	57
24	Siren	1200 Hz 3 s const.	55	23	131	100	Interrupted tone, industrial alarm Germany	680 Hz	2	57	125
26	Pulsating tone, industrial alarm Germany	1000 Hz 10 s 40 s 10 s	2	100	93	108	Interrupted tone	500 Hz	2	127	60
31	Sweeping, France NFC48-265	1600 Hz 1 s 0,5 s	128	54	57	112	Interrupted tone, ISO8201 (emergency evacuation signal)	950 Hz	2	57	128
32	Selection of available tone combinations in stages 2, 3 and 4					116	Interrupted tone, IMO (leave ship)	950 Hz	117	93	125
36	Sweeping	1500 Hz 1,5 s 700 Hz 1,5 s	146	67	57	117	Interrupted tone, IMO SOLAS III/50 + SOLAS III/6.4 (general alarm)	825 Hz 2,5 s 7 s	93	116	125
45	Sweeping	1200 Hz 3 s 500 Hz 3 s	2	57	93	125	Alternating tone	1400 Hz 20 ms 1200 Hz 20 ms	57	93	24
54	Continuous tone, Finland (all-clear signal)	1500 Hz	2	57	67	127	Alternating tone	1075 Hz 0,5 s 825 Hz 0,5 s	2	90	60
55	Continuous tone, PFEER gas alarm	1200 Hz	2	88	128	128	Alternating tone	1025 Hz 0,25 s 825 Hz 0,25 s EN 54-3	2	112	57
57	Continuous tone, UK BS5839-1	950 Hz EN 54-3	2	128	88	131	Alternating tone, UK BS5839-1 (fire alarm, railway crossing)	1000 Hz 0,25 s 800 Hz 0,25 s EN 54-3	24	55	23
60	Continuous tone	825 Hz	24	93	125	142	Alternating tone	900 Hz 0,25 s 500 Hz 0,25 s	2	54	88
63	Continuous tone	725 Hz	2	97	93	146	Alternating tone, France NFS 32-001 (fire alarm)	554 Hz 0,1 s 440 Hz 0,4 s	128	67	57
67	Continuous tone, Germany KTA3901 (all-clear signal)	500 Hz	24	93	125						
88	Interrupted tone	950 Hz 1 s 1 s	2	57	128						
90	Interrupted tone	825 Hz 0,5 s 0,5 s	2	127	108						

¹ factory setting

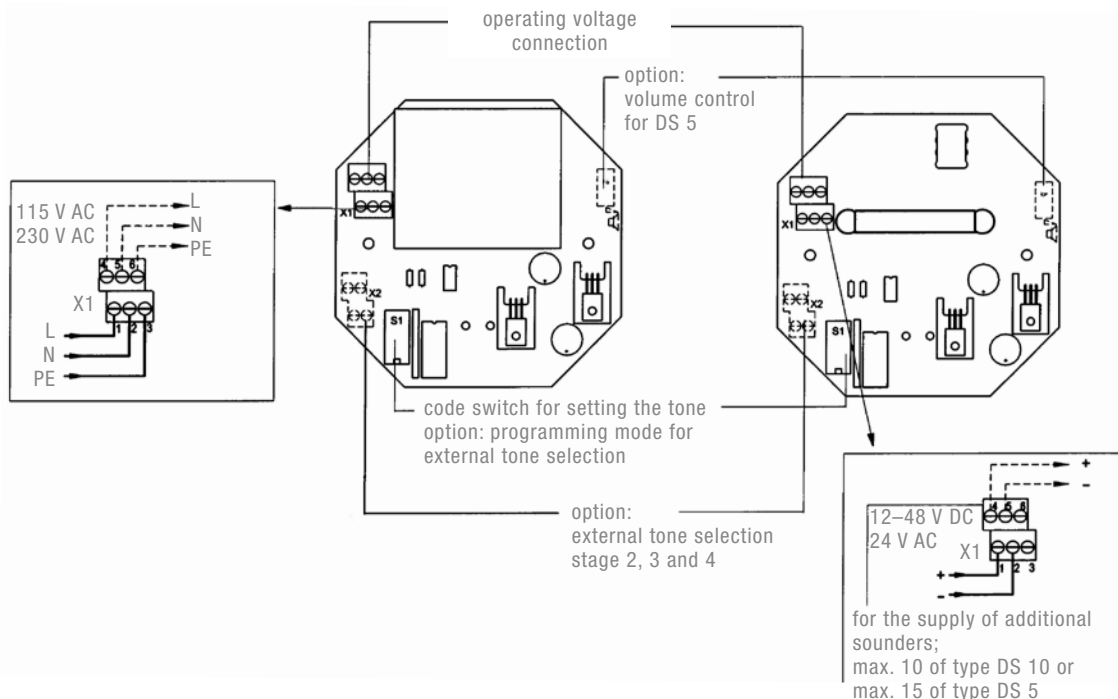
ARTICLE NO.	DS 10 3G/3D			DS 5 3G/3D		
Version	230 V AC	115 V AC	24 V DC	230 V AC	115 V AC	24 V DC
Standard	231111100007	231111500007	231118000007	231061000007	231061500007	231068000007
TAS	231111100155	23111150155	23111800155	23106100155	23106150155	23106800155

Article numbers for other voltages and versions on request.

CONNECTION DIAGRAMS

AC

DC



MANUFACTURER'S DECLARATION

We hereby declare that the explosion-protected means of alarm with the type designation **DS 10 3G/3D, DS 5 3G/3D** fulfills the requirements of the EN 60079-0, EN 60079-15, EN 61241-0 and EN 61241-1 standards in their latest editions.

This declaration is based on compliance with the following regulations and standards:

DIN EN 60079-0	Electrical equipment for areas at risk of gas explosions – General requirements
DIN EN 60079-15	Electrical equipment for areas at risk of explosions – type of protection type "n"
DIN EN 61241-0	Electrical equipment for use in areas with combustible dust – General requirements
DIN EN 61241-1	Electrical equipment for use in areas with combustible dust – Part 1: protection by enclosure "tD"
DIN EN 61000-6-2	Generic standard, interference immunity for industrial areas
DIN EN 61000-6-3	Generic standard, interference emission for residential areas
DIN EN 50130-4	Electromagnetic compatibility; product family standard: requirements for the interference immunity of system components for fire and burglar alarms and well as social alarm systems
DIN 33404/3	Alarm signals for workplaces; acoustic alarm signals; uniform emergency signal; technical safety requirements, tests
DIN EN ISO7731	Ergonomic – alarms for public areas and workplaces – acoustic alarms
DIN EN 54-3	Fire alarm systems – Part 3: fire alarm devices; Acoustic alarms
DIN EN 981	Machine safety – System of acoustic and visual alarm signals and information signals
DIN EN 50262	Metric cable glands for electrical installations
DIN IEC 60038	IIEC standard voltages
DIN EN 60947-1	Low-voltage switchgear – Part 1: General specifications
DIN EN 60950-1	Safety of information technology equipment
DIN EN 60529	Types of protection by enclosure (IP code)
9. GPSG	Appliance and product safety act
UVV-BGV A3 (VBG4)	Electrical plants and equipment
Guideline 94/9/EG (ATEX 100a)	
DIN EN 60079-0 / DIN EN 60079-15 / DIN EN 61241-0 / DIN EN 61241-1	

The DS 10 3G/3D, DS 5 3G/3D sounders are approved for use in potentially explosive areas in Zones 2 and 22 as per 94/9/EU.