

# SOUNDERS 108/114 DB(A) DS 5-SIL / DS 10-SIL



Integrated safety tough demands under industrial conditions.

- To signal dangerous situations in safety-relevant application such as process and plant safety, e. g.
    - leaks/gas warning, high-pressure/overfilling and machine safety, e. g. as
    - start-up warning, excess rotation speed warning, machine stop delay warning
  - By means of integrated self-monitoring of the devices the normative required, regular inspection of warning devices is ensured.
  - The warning devices can be implemented in Safety Instrumented Systems (SIS) up to SIL 2/PLd.
- We would be more than happy to provide all safety-technical key data.



protection system



operating temperature



acoustic penetration



warranty



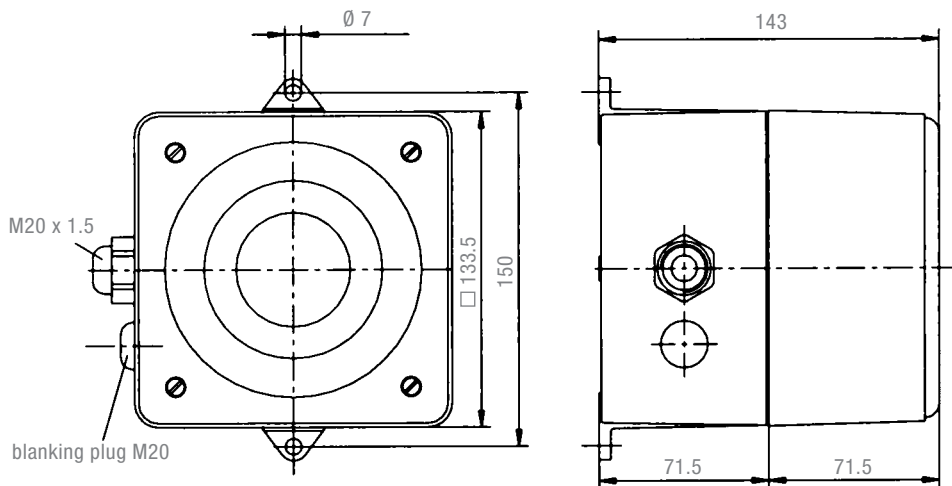
PRODUCT	DS 5-SIL		DS 10-SIL	
<b>DATA</b>				
Operating range	95–253 V	95–127 V	95–253 V V	19–29 V
	AC 50   60 Hz	DC	AC 50   60 Hz	DC
Nominal current consumption	40 mA @ 230 V	280 mA	60 mA @ 230 V	420 mA
Diagnostics channel	current consumption	30 mA @ 230 V	20 mA	30 mA @ 230 V
	switching power	230 V / 80 mA		
Sound pressure level	108 dB(A)		114 dB(A)	
Sound pressure level @DIN-tone	107 dB(A)		112 dB(A)	
Alarm tones	32 / 4 tones are externally selectable			
Operating temperature	–25 °C ... +55 °C			
Storage temperature	–40 °C ... +70 °C			
Relative humidity	90 %			
Protection system according to EN 6052	IP 66   IP 67			
Duty cycle	100 %			
Material	die-cast aluminium GD-Al Si12 Cu			
Surface coating	epoxy resin paint RAL 3000, flame red			
Cable bushing	2x M20 (1x chrome-plated brass cable fitting, 1x chrome-plated brass blanking plug)			
Clamping range of the cable fitting	8–12 mm			
Connecting terminals	max. 2.5 mm <sup>2</sup>			
Weight	2.15 kg	1.95 kg	2.15 kg	1.95 kg

## OPTIONS/ACCESSORIES



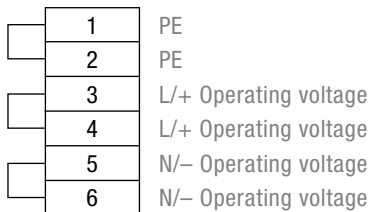
TAS: External tone selection for controlling several tones over great distances.

## DIMENSIONS

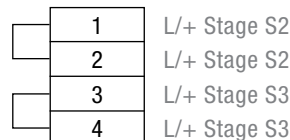


## CONNECTION DIAGRAM

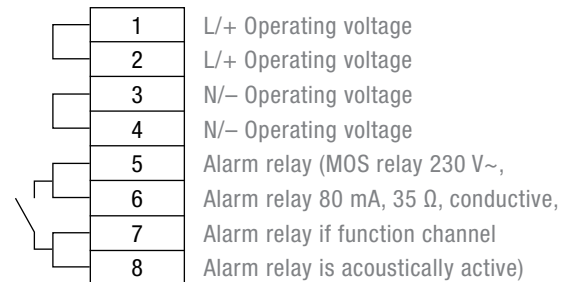
### X1 Sounder channel



### X2 optional external tone selection (option -TAS or -TAV)



### X3 Monitoring channel



ARTICLE NO.	DS 5-SIL		DS 10-SIL	
	95-253 V AC	24 V DC	95-253 V AC	24 V DC
Standard	23106100601	23106800601	23111100601	23111800601
TAS	23106100603	23106800603	23111100603	23111800603

Article numbers for other voltages and versions on request.

## CONFORMITY TO STANDARDS

The sounders fulfil the requirements to the functional safety according to:

EN 61508 Functional safety of electrical/electronic/programmable electronic safety-related systems  
EN 61511 Functional safety – Safety instrumented systems for the process industry sector

The devices can be used in safety related control systems in accordance with the following standards:

EN ISO 13849-1 Safety of machinery – Safety related parts of control systems – part 1  
EN 62061 Safety of machinery – Functional safety of electrical/electronic/programmable electronic safety-related systems

The devices conform to the following standards:

EN 61310-1 Safety of machinery – Indication, marking and actuation – part 1: Requirements for visual, acoustic and tactile signals  
EN ISO 7731 Ergonomic - alarms for public areas and workplaces – acoustic alarms  
EN 981 Safety of machinery – System of acoustic and visual alarm signals and information signals  
DIN 33404-1 Alarms for workplaces; acoustic alarms; unified emergency signal  
ISO 8201 Acoustics; Audible emergency evacuation signal