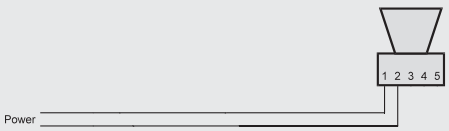
FUNKE+HUSTER·FERNSIG

ExII-Sounder dEV 21

Signalling device with 31 different signalling tones

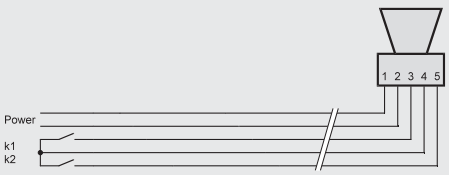
- Protection degree IP 66
- CE 0158 Ⓔx II 2 G Ex dem IIC T6
- 31 different signalling tones
- 8 volume levels
- In black or red available
- Synchronisation of tone-control

Single sounder with a fixed signalling tone:



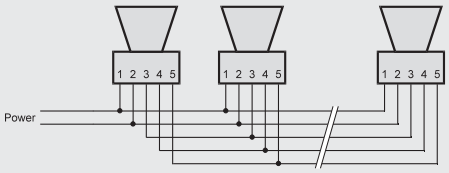
S1 = 7 S2 = 0 X1 = LS		Max. Volume Group 0 selected
3-4	4-5	Selected Stage
open	open	Stage 0 (Mute)
⌣	open	Stage 1 (Tone 0)
open	⌣	Stage 2 (Tone 1E)
⌣	⌣	Stage 3 (Tone 9)

Single sounder with variable signalling tone:



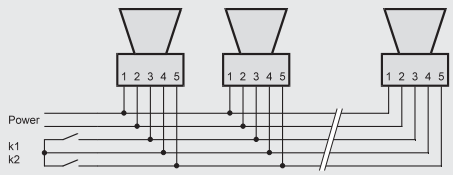
S1 = 7 S2 = 0 X1 = LS		Max. Volume Group 0 selected
k1	k2	Selected Stage
break	break	Stage 0 (Mute)
make	break	Stage 1 (Tone 0)
break	make	Stage 2 (Tone 1E)
make	make	Stage 3 (Tone 9)

Multi-sounder with a fixed signalling tone:



S1 = 7 S2 = 0 X1 = LS		Max. Volume Group 0 selected
3-4	4-5	Selected Stage
open	open	Stage 0 (Mute)
⌣	open	Stage 1 (Tone 0)
open	⌣	Stage 2 (Tone 1E)
⌣	⌣	Stage 3 (Tone 9)

Multi-sounder with variable signalling tone:



S1 = 7 S2 = 0 X1 = LS		Max. Volume Group 0 selected
k1	k2	Selected Stage
break	break	Stage 0 (Mute)
make	break	Stage 1 (Tone 0)
break	make	Stage 2 (Tone 1E)
make	make	Stage 3 (Tone 9)

Ex ATEX

Application

The ExII-Sounder dEV 21 is a signalling device that generates various signalling tones and signalling tone sequences and emits them at a high sound pressure level. The user may choose between 31 preset signalling tone groups and one programmable one. Every signalling tone group contains 4 different signalling tones. Wire the control inputs with floating contacts or jumpers in order to chose any one of these 4 signalling tones. The sounder has 8 volume levels. All outer fastening parts are made of non-corrosive materials.
The stable, all-plastic housing conforms to protection degree IP 66, which means the sounder can be installed both indoors and outdoors. Explosion category II 2 G Ex dem IIC T6 allows the sounder to be operated in hazardous areas of zones 1 and 2.

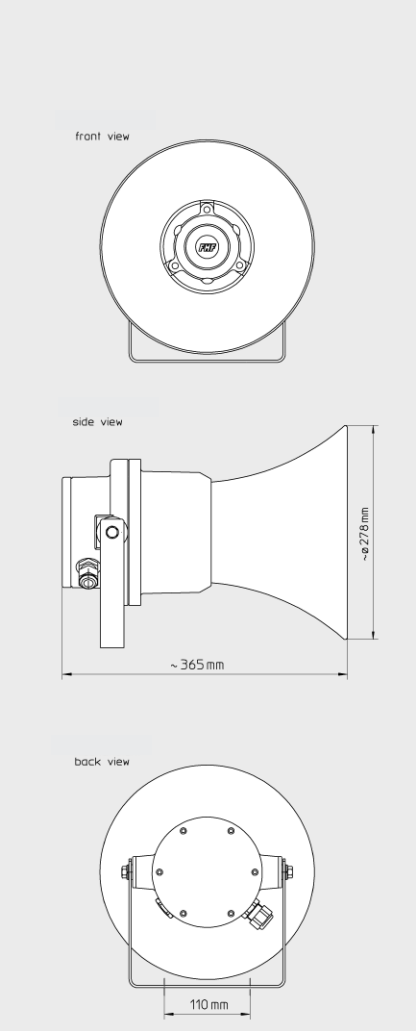
Design

The explosion protection is given through the flameproof chamber and the chamber "increased safety". The flameproof chamber contains the electromagnetic drive system. The housing is made of GRP thus guaranteeing protection against corrosion.

Furthermore the construction is low weight and highly robust.

Technical specifications

Type	dEV 21	
Explosion category	CE 0158 Ⓔx II 2 G Ex dem IIC T6	
EC type examination certificate	PTB 03 ATEX 1121	
Housing degree of protection	IP 66 IEC 60529	
Insulation class	II	
Housing material	Plastic	
Metal components	Stainless steel V4A (ASTM 316)	
Dimensions	~ Ø 278 x 365 mm	
Weight	~ 5.9 kg	
Electrical connections:	AC-version	DC-version
Operating voltage UB	85 - 265 VAC	21.6 - 75 VDC
Operating frequency	50 - 60 Hz	–
Max. Current consumption	230 VAC	100 mA
	120 VAC	160 mA
	115 VAC	165 mA
	24 VDC	520 mA
Number of sounders connected in parallel	≤ 32	
Signal tones	31 tones	
Sound pressure	≤ 119 dB(A) at 1 m distance (at approx. 1.5 KHz)	
Operating position	any, although preferably such that the horn is protected from intrusion of dust and rain water.	
Operating	-20° C to +40° C	



Signalling tone description

	Parameter	Type	Standard	Sync	Timing diagram
Tone 0	1000Hz	Continuous	PFEER Toxic Gas		
Tone 1	800/1000Hz@ 0.25s	Alternating			
Tone 2	500/1200Hz@ 0.3Hz 0.5s	Slow Whoop		✓	
Tone 3	800/1000Hz@ 1Hz	Sweeping		✓	
Tone 4	2400/2900@ 7Hz	Sweeping			
Tone 5	2400/2900@ 1Hz	Sweeping		✓	
Tone 6	500/1200Hz@ 0.3Hz	Sweeping		✓	
Tone 7	1200/500Hz@ 1Hz	Sweeping	DIN / PFEER P.T.A.P.	✓	
Tone 8	2400/2900@ 2Hz	Alternating		✓	
Tone 9	1000Hz@ 1Hz	Intermittent		✓	
Tone A	800/1000Hz@ 0.875Hz	Alternating		✓	
Tone B	544Hz(100ms)/440Hz(400ms)	Alternating	NF S-32-001	✓	
Tone C	1400Hz(1s)/1600Hz(0.5s)	Sweeping	NFC48-265	✓	
Tone D	660Hz@ 3.33Hz	Intermittent			
Tone E	660Hz/(1.8s),1.8s off	Intermittent		✓	
Tone F	660Hz	Continuous			

Jumper in position LS of jumper field X1

	Parameter	Type	Standard	Sync	Timing diagram
Tone 10	2400Hz@ 1Hz	Intermittent		✓	
Tone 11	800Hz(0.25s), 1s off	Intermittent		✓	
Tone 12	800Hz	Continuous			
Tone 13	2400Hz	Continuous			
Tone 14	554/440Hz@ 1Hz	Alternating		✓	
Tone 15	544Hz@ 0.875Hz	Intermittent		✓	
Tone 16	800Hz@ 2Hz	Intermittent		✓	
Tone 17	800/1000Hz@ 50Hz	Sweeping			
Tone 18	2400/2900Hz@ 50Hz	Sweeping			
Tone 19	Mute				
Tone 1A	554Hz	Continuous			
Tone 1B	440Hz	Continuous			
Tone 1C	800/1000Hz@ 7Hz	Sweeping			
Tone 1D	420Hz 1.6Hz	Intermittent	Australian Alert	✓	
Tone 1E	1200/500Hz@ 1Hz	Sweeping	DIN / PFEER P.T.A.P.	✓	
Tone 1F	500/1200Hz@ 3.75s 0.25s	Slow Whoop	Australian Evac.	✓	

Jumper in position US of jumper field X1

Order information

Type	Name	Operating voltage range V	Volume dB(A)	Article no.
	Housing black			
dEV 21	ExII-Sounder	85-265 VAC	ca. 119 dB(A)	96 265 112
dEV 21	ExII-Sounder	21,6-75 VDC	ca. 119 dB(A)	96 075 212
	Housing red			
dEV 21	ExII-Sounder	85-265 VAC	ca. 119 dB(A)	96 265 11010
dEV 21	ExII-Sounder	21,6-75 VDC	ca. 119 dB(A)	96 075 21010

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