

BEXS110D-24 DC Ex-proof sounder, performance



This high performant Ex-proof sounder is certified to EN60079-0:2006 and EN60079-1:2007, for acoustic signaling in fire alarm systems, EN 54-3 compliant. The sounder meets the requirements of the ATEX directive 94/9/EC, and can be used in hazardous areas where potentially flammable atmospheres may be present.

System overview

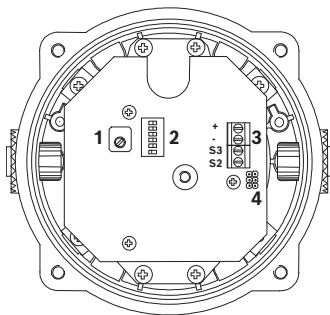


Fig. 1: System Overview Ex-proof sounder, high performance

- | | |
|-------------------|----------------|
| 1 Volume control | 2 DIP switch |
| 3 Stage terminals | 4 AC terminals |

Regulatory information

Region	Regulatory compliance/quality marks	
Europe	CE	BEXS110D-24 DC
	DoP	02CPR2013-06-28 CE DoP BEX-S110D-24DC
Germany	VdS	G 209081 BEXS110D-24 DC



- ▶ ATEX approved, categories 2G (zones 1 and 2), 2D (zones 21 and 22)
- ▶ 32 different different tones adjustable
- ▶ Maximum sound pressure level 113 dB(A)
- ▶ Quartz-stabilized sound synchronization
- ▶ Housing made of die-cast aluminum LM6, horn made of ABS

Installation/configuration notes

- Bosch recommends the HSK-M-Ex-d cable gland of Hummel AG, refer to: www.hummel.com

Parts included

Quantity	Component
1	Ex-proof sounder

Technical specifications

Electrical

Operating voltage (VDC)	18 VDC – 30 VDC
Current consumption on NAC line (mA)	0 mA – 281 mA

The operating voltage of 18 VDC – 30 VDC and the operating temperature of -50 °C – 70 °C result in the operating current of 203 mA – 281 mA when the DIN tone (tone 9) is set.

The nominal current according to the manufacturer is 265 mA at 24 VDC, measured with continuous tone 440 Hz (tone 28).

Mechanical

Color	Red
Dimensions (Ø x H) (cm)	181 cm x 263 cm
Material	Cast solid aluminum

The device has a stainless steel mounting bracket for 360° positioning.

Environmental

Operating temperature (°C)	-50 °C – 70 °C
Operating relative humidity, non-condensing (%)	0% – 90%
IP rating	IP66
Impact protection	IK08

Audio

Maximum sound pressure level at a distance of 1 m (dB)	113 dB
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The maximum sound pressure level at a distance of 1 m result in 113 dB when the DIN tone is set.

Tone table

No.	Tone type	Sound pattern	Frequency/modulation
1	Continuous tone		1000 Hz
2	Alternating tone, UK BS5839-1, EN 54-3		800-1000 Hz/0,25 s
3	Slow whoop		500-1200 Hz/3 s on, 0,5 s off
4	Sweeping tone (fast)		800-1000 Hz/10 ms
5	Continuous tone		2400 Hz
6	Sweeping tone		2400-2900 Hz/70 ms
7	Sweeping tone (fast)		2400-2900 Hz/10 ms
8	Sweeping tone		500-1200 Hz/3 s
9	Sawtooth, DIN tone 33404-3 Germany (emergency signal), EN 54-3		1200-500 Hz/1 s
10	Alternating tone		2400-2900 Hz/0,25 s
11	Interrupted tone		1000 Hz/0,25 s
12	Alternating tone		800-1000 Hz/1,14 s
13	Interrupted tone		2400 Hz/10 ms
14	Interrupted tone		800 Hz/0,25 s on/1 s off

No.	Tone type	Sound pattern	Frequency/modulation
15	Continuous tone		800 Hz
16	Interrupted tone, EN 54-3		660 Hz/0,15 s
17	Alternating tone, France NFS 32-001 (fire alarm), EN 54-3		544-440 Hz/0,1 s/0,4 s
18	Interrupted tone, Sweden SS031711 (air raid alarm)		660 Hz/1,8 s
19	Sweeping tone, France NFC48-265		1400-1600 Hz/1 s/0,5 s
20	Continuous tone, Sweden SS031711 (all-clear signal)		660 Hz
21	Alternating tone, Sweden SS031711		554-440 Hz/0,5 s
22	Interrupted tone, Sweden SS031711		554 Hz/0,875 s
23	Interrupted tone		800 Hz/0,25 s
24	Sweeping tone (medium), UK BS5839-1		800-1000 Hz/0,5 s
25	Sweeping tone		2400-2900 Hz/0,5 s
26	Interrupted tone (fast variable), bell		1450 Hz/0,69 s on and off
27	Continuous tone		554 Hz
28	Continuous tone		440 Hz
29	Sweeping tone (fast), UK BS5839-1		800-2900 Hz/
30	Interrupted tone, Australia AS2220, AS1610, AS1670		420 Hz/0,625 s
31	Sawtooth, DIN tone 33404-3 Germany (emergency signal)		1200-500 Hz/1 s
32	Slow whoop, Australia AS 2220 (evacuation alarm)		500-1200 Hz/3,75 s on, 0,25 s off

Control of the tones

3 tones are externally selectable. Positive and negative control is possible with DC devices.

No.	Tone type	DIP switch settings	Second stage alarm tone	Third stage alarm tone
1	Continuous tone	00000	31	11
2	Alternating tone, UK BS5839-1, EN 54-3	10000	17	5
3	Slow whoop	01000	2	5
4	Sweeping tone (fast)	11000	6	5
5	Continuous tone	00100	3	27
6	Sweeping tone	10100	7	5
7	Sweeping tone (fast)	01100	10	5
8	Sweeping tone	11100	2	5
9	Sawtooth, DIN tone 33404-3 Germany (emergency signal), EN 54-3	00010	15	2
10	Alternating tone	10010	7	5
11	Interrupted tone	01010	31	1
12	Alternating tone	11010	4	5
13	Interrupted tone	00110	15	5
14	Interrupted tone	10110	4	5
15	Continuous tone	01110	2	5
16	Interrupted tone, EN 54-3	11110	18	5
17	Alternating tone, France NFS 32-001 (fire alarm), EN 54-3	00001	2	27
18	Interrupted tone, Sweden SS031711 (air raid alarm)	10001	2	5
19	Sweeping tone, France NFC48-265	01001	2	5
20	Continuous tone, Sweden SS031711 (all-clear signal)	11001	2	5

No.	Tone type	DIP switch settings	Second stage alarm tone	Third stage alarm tone
21	Alternating tone, Sweden SS031711	00101	2	5
22	Interrupted tone, Sweden SS031711	10101	2	5
23	Interrupted tone	01101	6	5
24	Sweeping tone (medium), UK BS5839-1	11101	29	5
25	Sweeping tone	00011	29	5
26	Interrupted tone (fast variable), bell	10011	2	1
27	Continuous tone	01011	26	5
28	Continuous tone	11011	2	5
29	Sweeping tone (fast), UK BS5839-1	00111	7	5
30	Interrupted tone, Australia AS2220, AS1610, AS1670	10111	32	5
31	Sawtooth, DIN tone 33404-3 Germany (emergency signal)	01111	11	1
32	Slow whoop, Australia AS 2220 (evacuation alarm)	11111	26	1

Ordering information**BEXS110D-24 DC Ex-proof sounder, performance**

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