

LBC3018/01 Cabinet loudspeaker, metal, rectangular



- ▶ Suitable for speech and music reproduction
- ▶ Robust metal enclosure
- ▶ Surface and/or recessed mounting
- ▶ Provision for internal mounting of the optional line/loudspeaker supervision boards
- ▶ EN 54-24 certified

The LBC 3018/01 cabinet loudspeaker delivers professional performance from a robust, yet aesthetically designed metal enclosure. It is an ideal loudspeaker for indoor use in offices, schools, car parking, shopping centers and in areas where vandalism is a potential hazard.

The cabinets are equipped with a high efficiency, dual-cone loudspeaker offering a wide frequency range suitable for both speech and music reproduction.

Functions

Voice alarm loudspeakers are specifically designed for use in buildings, where the performance of PA-systems is subject to official regulations. The LBC 3018/01 is designed for voice alarm systems, and is compliant with the EN 54-24 standard.

The loudspeaker has built-in protection to ensure that, in the event of a fire, damage to the loudspeaker does not result in failure of the circuit to which it is connected. In this way, system integrity is maintained, ensuring loudspeakers in other areas can still be used to inform people of the situation. The loudspeaker has a ceramic terminal block, thermal fuse, and heat-resistant, high-temperature wiring.

The cabinet has a provision for internally mounting the optional line/loudspeaker supervision board.

Regulatory information

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 continuous hours in accordance with IEC 268-5 Power Handling

Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that they can withstand two times their rated power for short durations. This ensures improved reliability under extreme conditions, leading to higher customer satisfaction, longer operating life, and lessens the chance of failure or performance deterioration.

Safety	According to IEC/EN 62368-1
Emergency	According to EN 54-24 According to BS 5839-8
Water and dust protection	According to IEC/EN 60529, IP21C

Installation/configuration notes

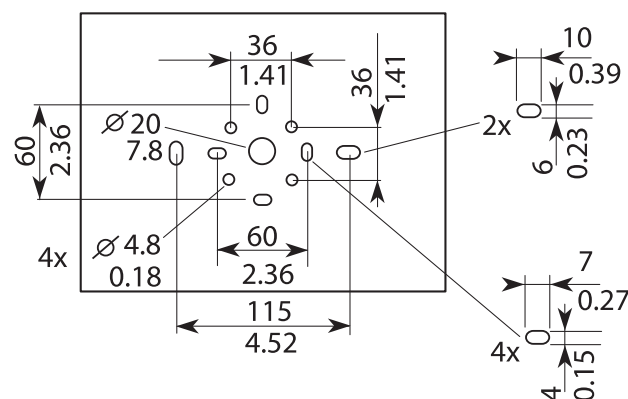


Fig. 1: Mounting dimensions in mm (in)

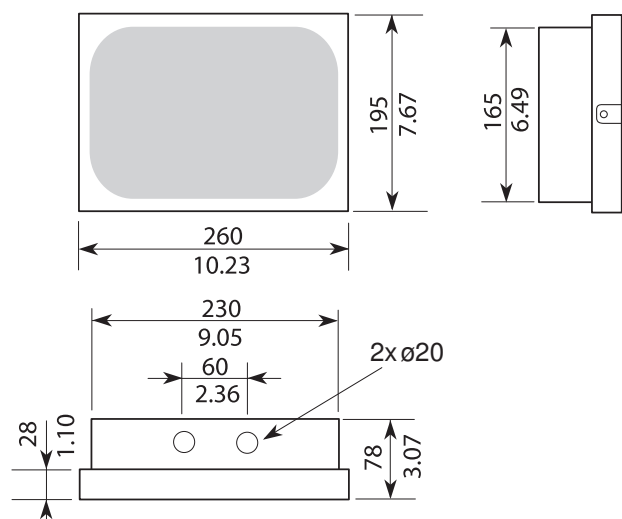


Fig. 2: Dimensions in mm (in)

The cabinet is designed for both surface mounting on walls and recessed mounting into brick or concrete walls. The back-box of the cabinet provides a selection of mounting holes, even for mounting onto U40 and MK installation boxes. The back-box has two knockout holes on the topside for two cable glands for loop-through connection. For extra convenience, a safety cord from the back-box lets the installer temporarily hang the front grille unit during installation.

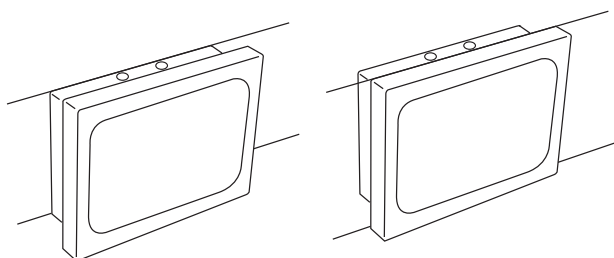


Fig. 3: Surface mounted (left) and recessed (right) mounted

The cabinet has a three-way terminal block with screw connections suitable for loop-through wiring (including earth). Four primary taps are provided on the matching transformer to allow selection of nominal full-power, half-power, quarter-power or eighth power radiation (in 3 dB steps).

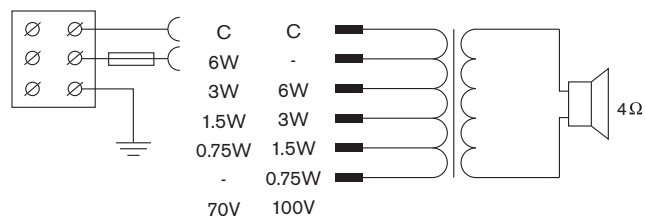


Fig. 4: Circuit diagram

Parts included

Quantity	Component
1	LBC3018/01 Cabinet loudspeaker, metal, rectangular
1	Installation instruction

Technical specifications

Electrical*

Maximum power (W)	9 W
Rated power (W)	6 W
Transformer taps (W)	6 W; 0.75 W; 1.5 W; 3 W
Sensitivity (1 W, 1 m, 1 kHz octave) (dB)	94 dB
Sensitivity (1 W, 4 m, 100 Hz - 10 kHz) (dB), acc. EN54-24	81 dB
Sound pressure level (rated power, 1 m, 1 kHz octave) (dB)	102 dB
Sound pressure level (rated power, 4 m, 100 Hz - 10 kHz) (dB), acc. EN54-24	88 dB
Frequency range (-10 dB) (Hz)	180 Hz – 13,000 Hz
Coverage angle HxV (-6 dB, 500 Hz) (°)	180° x 180°
Coverage angle HxV (-6 dB, 1 kHz) (°)	125° x 120°
Coverage angle HxV (-6 dB, 2 kHz) (°)	90° x 90°
Coverage angle HxV (-6 dB, 4 kHz) (°)	50° x 50°
Rated impedance 70 V line (Ω)	835 Ω @6 W
	1667 Ω @3 W
	3333 Ω @1.5 W
	6667 Ω @0.75 W
Rated impedance 100 V line (Ω)	1,667 Ω @6 W

	3333 Ω @3 W
	6667 Ω @1.5 W
	13333 Ω @0.75 W

*Technical performance data acc. to IEC 60268-5

Note:

- The specification data was measured in an anechoic chamber, mounted in an IEC-baffle.
- The reference plane is on the grille surface and perpendicular to the reference axis.
- The reference axis is perpendicular to the center point of the front grille surface.
- The horizontal plane contains the reference axis and is perpendicular to the reference plane.

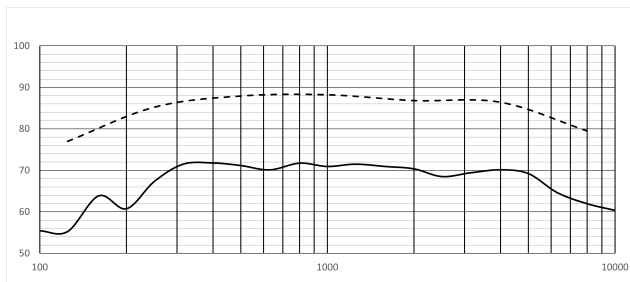


Fig. 5: Frequency response graph (— 1/3rd octave dB SPL @1 W(100 Hz – 10 kHz), 4 m; -- 1/1th octave dB SPL @1 W(100 Hz – 10 kHz), 1 m)

(1/3) rd octave band	dB SPL at 4 m
100	55.4
125	55.3
160	63.8
200	60.7
250	67.3
315	71.5
400	71.8
500	71.1
630	70.1
800	71.7
1000	70.9
1250	71.5
1600	70.9

(1/3) rd octave band	dB SPL at 4 m
2000	70.3
2500	68.5
3150	69.4
4000	70.1
5000	69.2
6300	64.6
8000	61.9
10000	60.3

(1/1) th octave band	dB SPL at 1 m
125	77
250	85.2
500	87.9
1000	88.2
2000	86.8
4000	86.4
8000	79.5

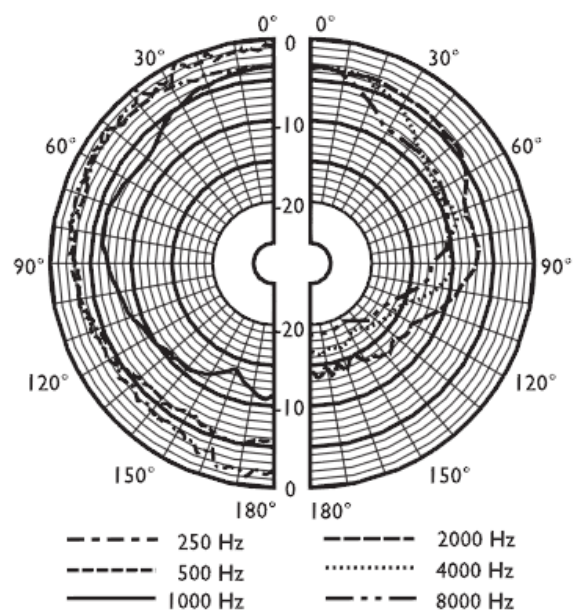


Fig. 6: Polar diagram (measured with pink noise)

Mechanical

Dimensions (H x W x D) (mm)	195 mm x 260 mm x 80 mm
Dimensions (H x W x D) (in)	7.68 in x 10.24 in x 3.15 in
Weight (kg)	2.60 kg
Weight (lb)	5.78 lb
Color (RAL)	RAL 9010 Pure white
Speaker size (mm)	152.4 mm
Speaker size (in)	6 in
Magnet weight (g)	150 g
Magnet weight (oz)	5.3 oz

Environmental

Operating temperature (°C)	-10 °C – 55 °C
Operating temperature (°F)	14 °F – 131 °F
Storage temperature (°C)	-40 °C – 70 °C
Storage temperature (°F)	-40 °F – 158 °F
Operating relative humidity, non-condensing (%)	< 95%



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EN 54-24:2008
Loudspeaker for voice alarm systems
for fire detection and fire alarm systems for buildings
Metal Cabinet Loudspeaker 6 W
LBC3018/01
Type A
DoP: LP032920

Ordering information

LBC3018/01 Cabinet loudspeaker, metal, rectangular
Cabinet loudspeaker 6 W, metal, rectangular, EN54-24
certified, white RAL 9010.
Order number **LBC3018/01 | F.01U.167.947**
F.01U.396.089

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