

# LBC 3011/x1 Panel Loudspeakers



The Bosch panel loudspeakers and matching mounting boxes are ideal for built-in sound installations in shops, department stores, schools, offices, hotels and restaurants. They are manufactured and finished to the same exacting standards as all Bosch public address systems and components, guaranteeing high-quality and compatibility throughout the range.

## Features

- High-quality speech and music reproduction
- Two-way system
- Simple power setting
- Flush-mounting in walls, ceilings or furniture
- Surface-mounting and flush mounting boxes
- Available with or without integral volume control
- Comply with international installation and safety regulations
- BS5839 Part 8 Compliant

## Functions

The 9 W (max. power) panel is equipped with a woofer and tweeter, enabling excellent quality speech- and music reproduction. They are available with or without an integral volume control (LBC 3011/51 and LBC 3011/41 respectively).

Nominal output power can be preset to full, half or quarter-power radiation (i.e. in 3 dB steps) by connecting the 100 V line to the appropriate primary taps on the matching transformer. Connections are made via a 2-pole screw connector.

The off-white (RAL 9010) panels are injection-moulded from self-extinguishing, high-impact ABS material (according to UL 94V0). They are finished with an attractive perforated metal grille.

The panel loudspeakers flush-mount into rectangular cut-outs in cavity walls, ceilings, furniture or custom-made cabinets. The panels have provision on the rear side for mounting an optional line/loudspeaker supervision board.

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 ceramic terminal blocks, thermal fuse and heat-resistant, high-temperature wiring.

## Parts Included

Quantity	Component
1	LBC 3011/x1 Panel loudspeaker

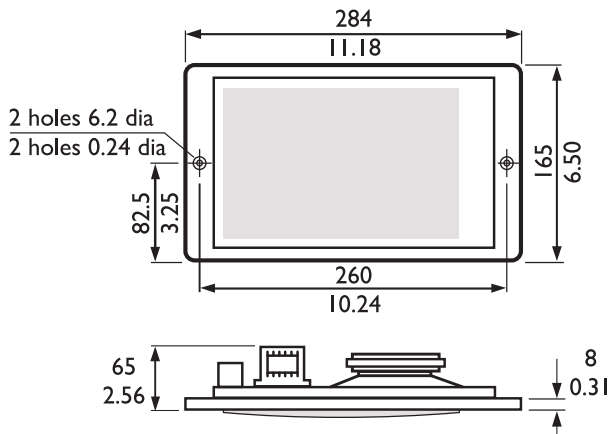
## Certifications and Approvals

Voice alarm loudspeakers are specifically designed for use in buildings where performance of systems for verbal evacuation announcements is governed by regulations. The LBC 3011/x1 is designed for use in voice alarm systems and is compliant with British Standard BS5839 part 8.

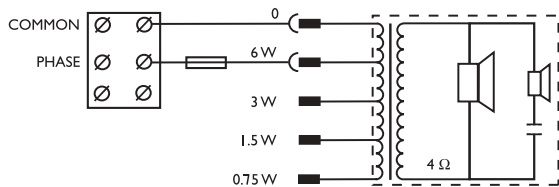
Safety	acc. to EN 60065
Self-Extinguishing	acc. to UL 94V0
EVAC Compliant	acc. to BS 5839 part 8

## Installation/Configuration Notes

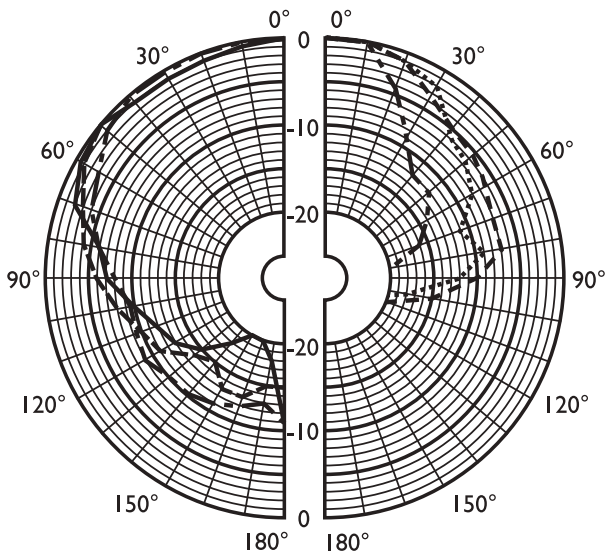
LBC 3011/41



Dimensions (in mm and inch)

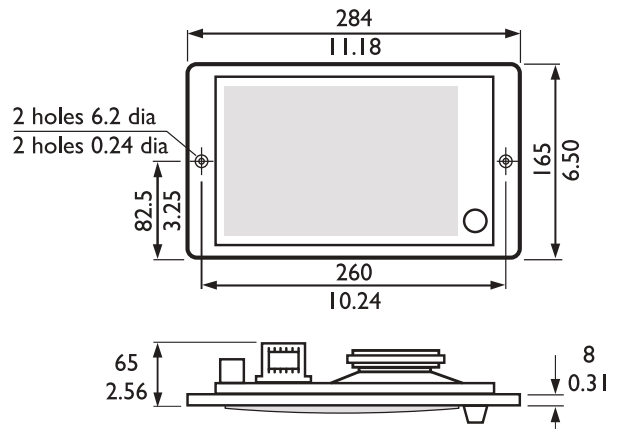


Circuit diagram

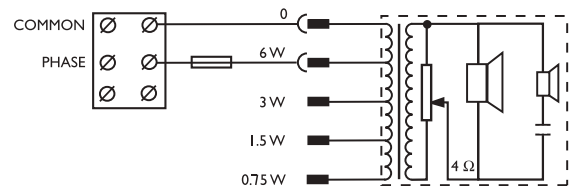


Polar diagram horizontal (measured with pink noise)

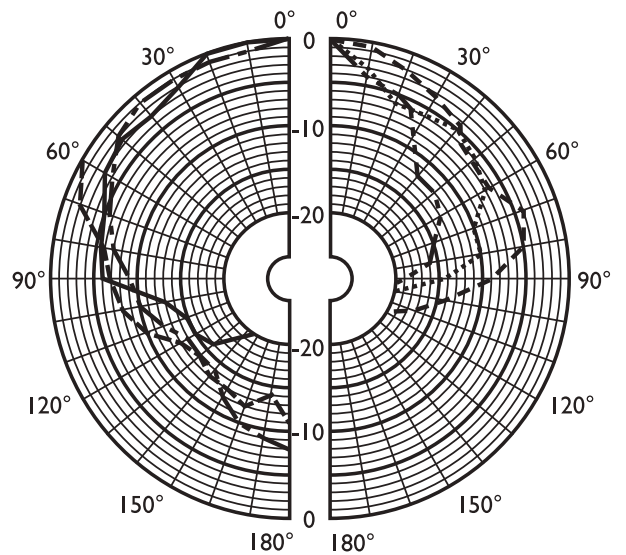
LBC 3011/51



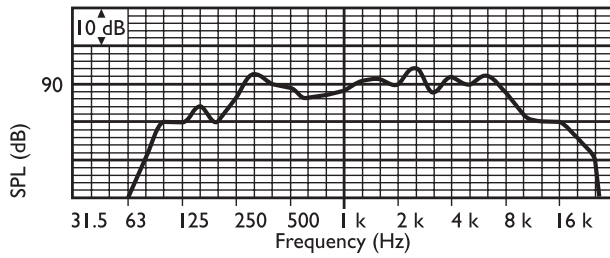
Dimensions (in mm and inch)



Circuit diagram



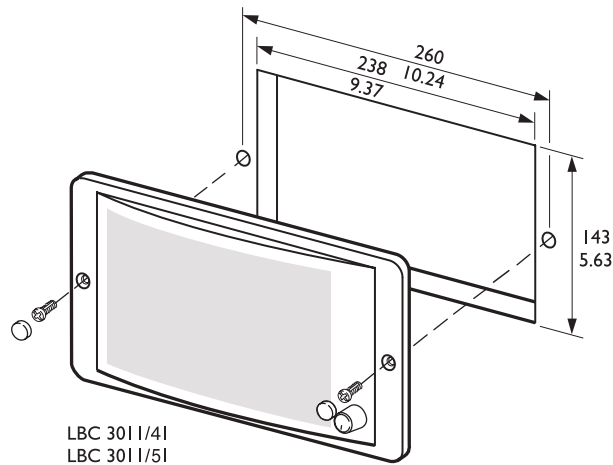
Polar diagram vertical (measured with pink noise)



Frequency response

Octave band (Hz)	125	250	500	1k	2k	4k	8k
SPL 1.1	85	90	88	88	92	90	89
SPL max.	93	98	96	96	100	98	97
Q-factor	5.1	3.9	2.1	3.7	7.4	9.1	31.6
Efficiency	0.08	0.32	0.37	0.21	0.27	0.14	0.03
Hor. angle	180	180	160	160	115	85	45
Vert. angle	180	180	160	180	85	100	50

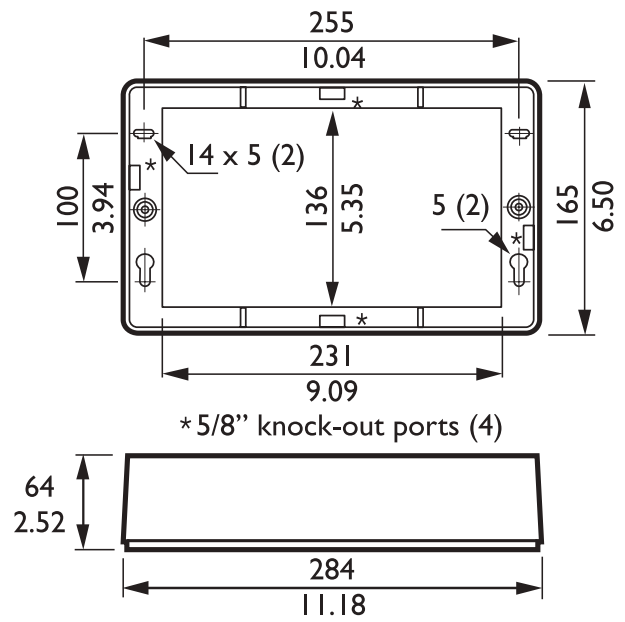
Quick reference table



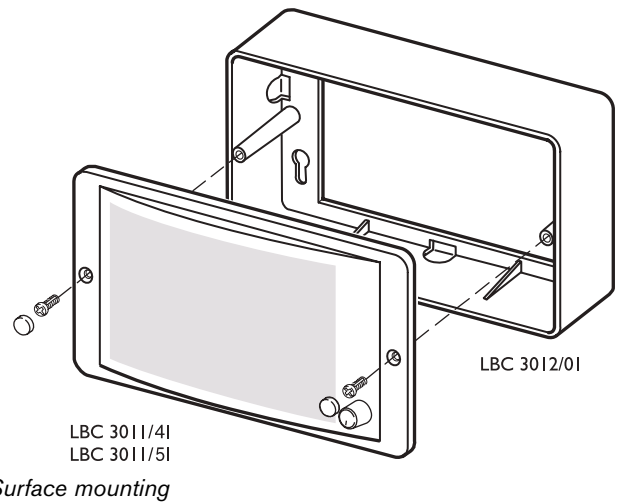
Recessed mounting in walls an ceilings

Two mounting boxes are available for surface mounting onto hard surfaces or flush-mounting into non-cavity walls. The LBC 3012/01 accommodates the panel loudspeaker for a self-contained unit for surface mounting.

### 3012/01 Mounting Box for Surface Mounting



Dimensions (in mm and inch)

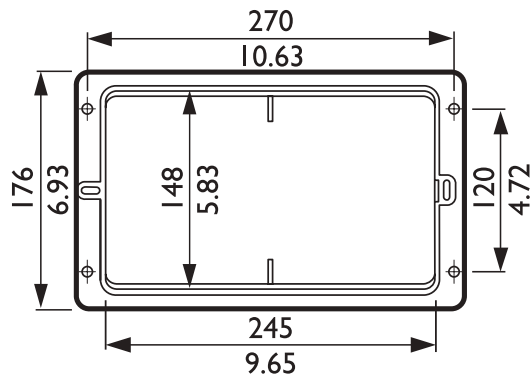


Surface mounting

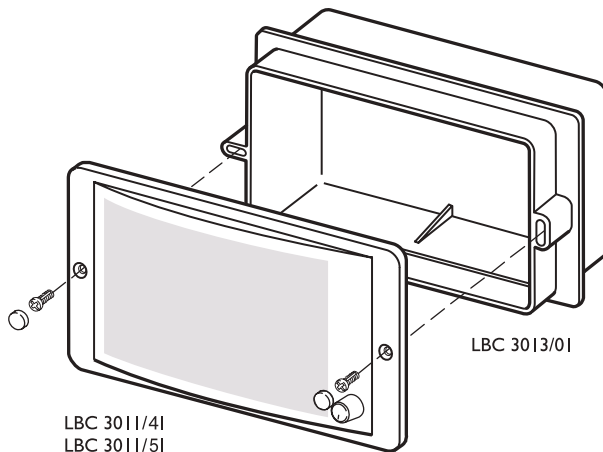


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### 3013/01 Mounting Box for Flush Mounting



Dimensions (in mm and inch)



Flush mounting

#### Technical Specifications

##### Electrical\* LBC 3011/41 and LBC 3011/51

Max. Power	9 W
Rated Power (PHC)	6 W (6 – 3 – 1.5 – 0.75 W)
Sound Pressure Level at 6 W/1 W (at 1 kHz, 1 m)	96 dB/88 dB (SPL)
Effective Frequency Range (-10 dB)	75 Hz to 18 kHz
Opening Angle (at 1 kHz/4 kHz, -6 dB)	
Horizontal	160° / 85°
Vertical	180° / 100°
Rated Voltage	100 V
Rated Impedance	1667 ohm
Speaker Size	2" / 4"
Magnet Weight	48 g/150 g (1.7 oz/5.3 oz)

##### Mechanical

Connection	2-pole screw connector
Dimensions (H x W x D)	165 x 284 x 59.5 mm (6.49 x 11.18 x 2.34 inch)
Mounting Cut-Out (H x W)	143 x 238 mm (5.63 x 9.37 inch)
Color	white (RAL 9010)
Weight	1.2 kg (2.64 lb)

##### Environmental

Ambient Temperature	-25 to +55 °C
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##### Mechanical LBC 3012/01

Dimensions (H x W x D)	165 x 284 x 64 mm (6.49 x 11.18 x 2.52 inch)
Color	white (RAL 9010)
Weight	238 g (8.40 oz)

##### Mechanical LBC 3013/01

Dimensions (H x W x D)	176 x 280 x 64 mm (6.49 x 11.18 x 2.52 inch)
Color	white (RAL 9010)
Weight	307 g (10.83 oz)

\*) Technical performance data acc. to IEC 60268-5

#### Ordering Information

##### Model & Description

LBC 3011/41 Panel Loudspeaker without Volume Control

LBC 3011/51 Panel Loudspeaker with Volume Control

##### Hardware Accessories

LBC 3012/01 Surface Mounting Box

LBC 3013/01 Flush Mounting Box