

# LBC 3011/x1 Panel Loudspeakers

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**BOSCH**  
Invented for life



- ▶ 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

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.

## Functions

The 6 W 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, quarter or eighth-power radiation (in 3 dB steps) by connecting the 100 V line to the appropriate primary taps on the matching transformer via a 2-pole screw connector. The white (RAL 9010) panels are injection-molded from self-extinguishing, high-impact ABS material (according to UL 94V0). They are finished with an attractive perforated metal grill.

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

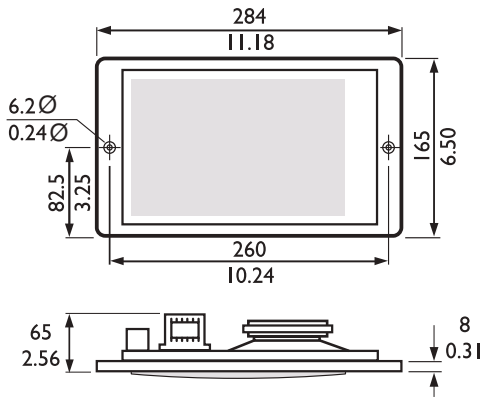
## Certifications and approvals

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.

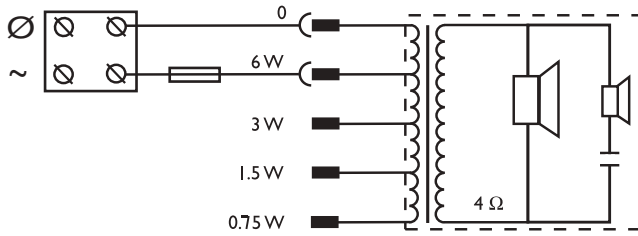
Safety	acc. to EN 60065
Emergency	acc. to BS 5839-8
Self-extinguishing	acc. to UL 94 V0

Installation/configuration notes

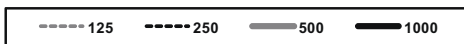
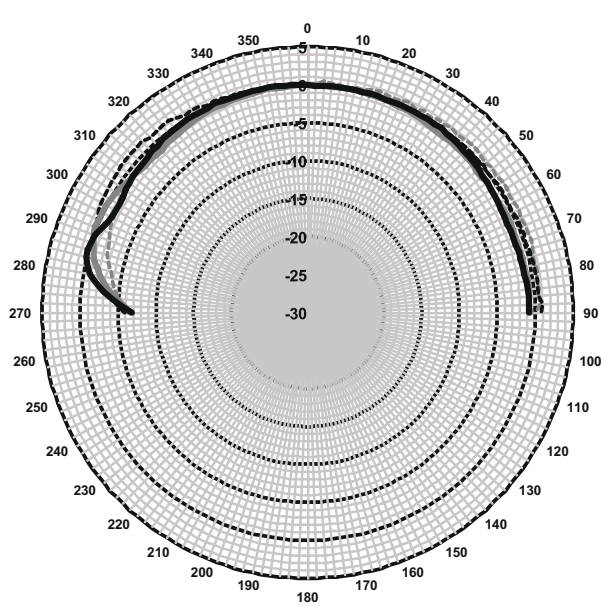
LBC 3011/41



Dimensions in mm (in)

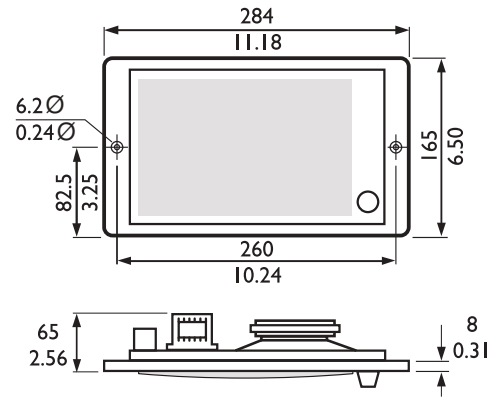


Circuit diagram

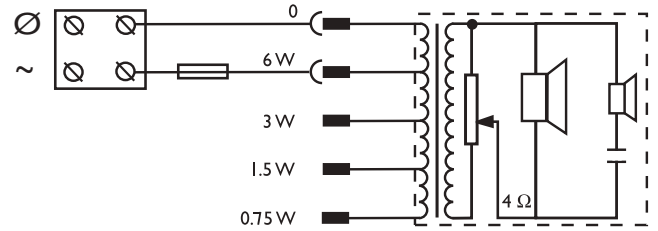


Polar diagram horizontal (measured with pink noise)

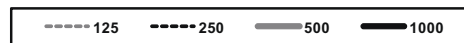
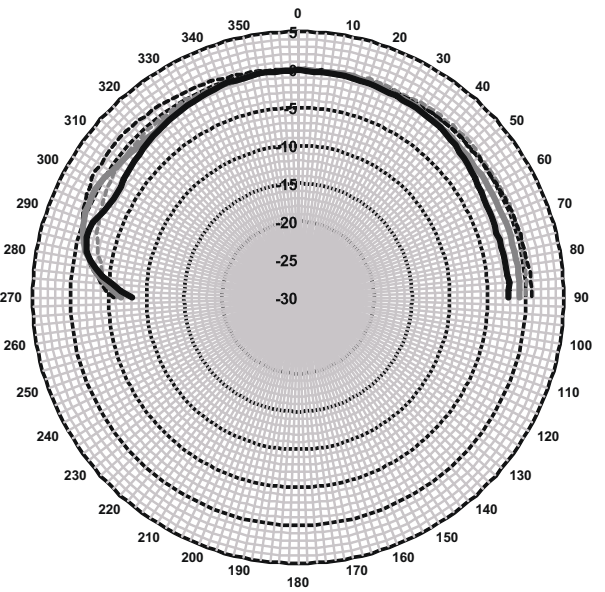
LBC 3011/51



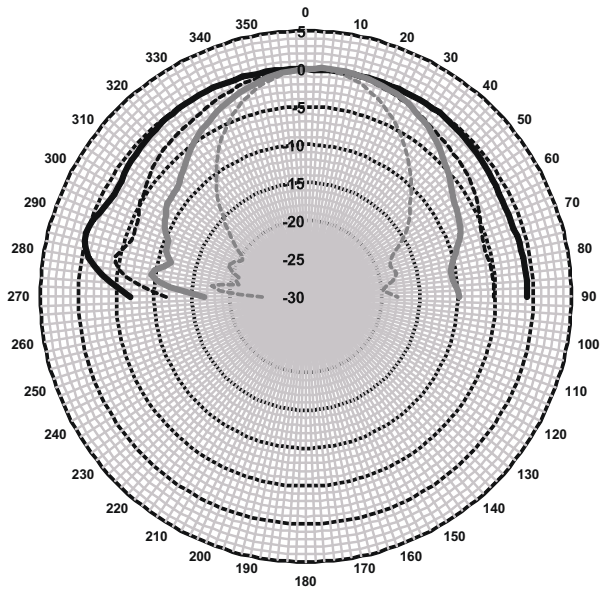
Dimensions in mm (inch)



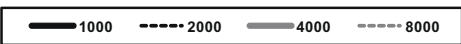
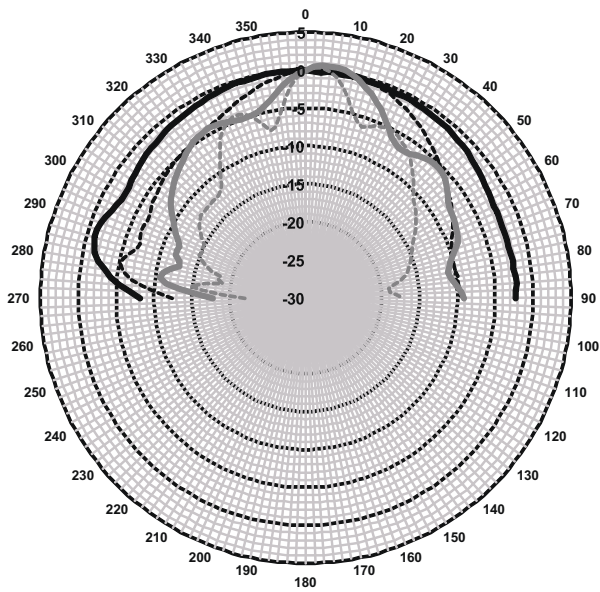
Circuit diagram



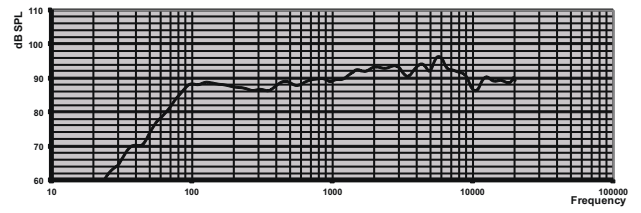
Polar diagram vertical (measured with pink noise)



Polar diagram horizontal (measured with pink noise)



Polar diagram vertical (measured with pink noise)



Frequency response

Octave band sensitivity\*

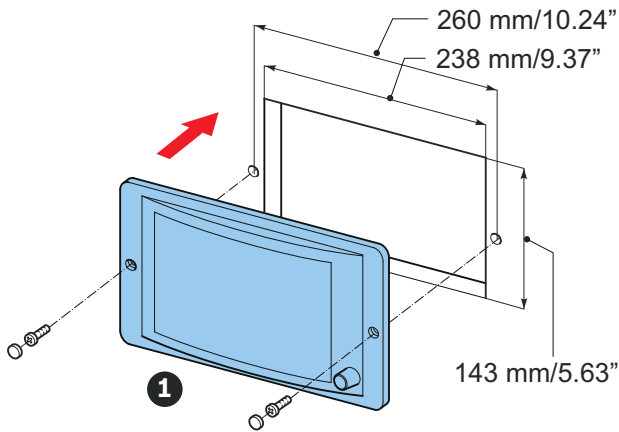
	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	89	-	-
250 Hz	87.3	-	-
500 Hz	88.2	-	-
1000 Hz	90	-	-
2000 Hz	93	-	-
4000 Hz	93.6	-	-
8000 Hz	92	-	-
A-weighted	-	89.3	96.6
Lin-weighted	-	89.9	97.3

Octave band opening angles

	Horizontal	Vertical
125 Hz	180	180
250 Hz	180	180
500 Hz	180	180
1000 Hz	180	180
2000 Hz	174	130
4000 Hz	92	82
8000 Hz	62	64

Acoustical performance specified per octave

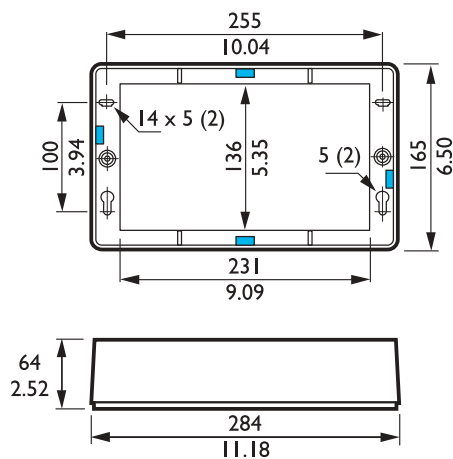
\* (all measurements are done with a pink noise signal; the values are in dB SPL)



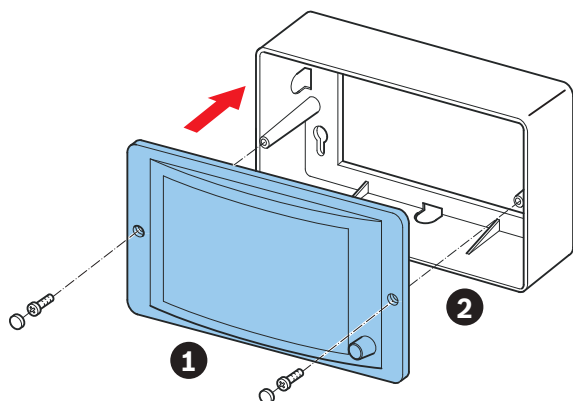
Recessed mounting in walls and ceilings. Dimensions in mm/in. (1) LBC 3011/41 or LBC 3011/51

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.

**LBC 3012/01 Mounting box for surface mounting**

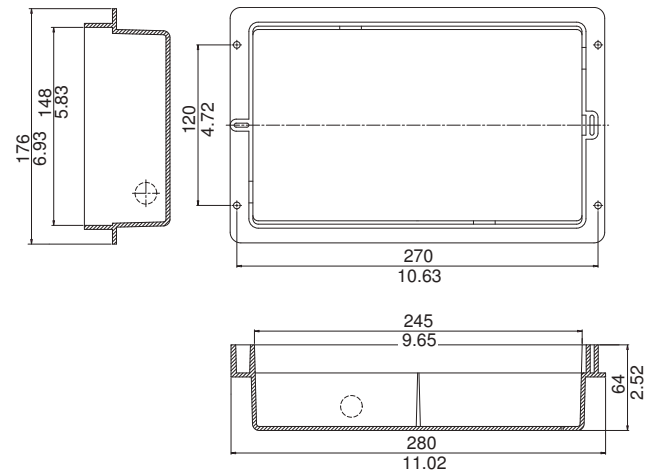


Dimensions in mm (in) with knockout holes

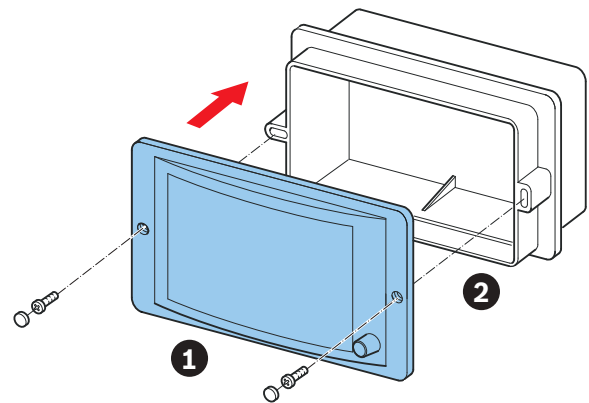


Surface mounting. (1) LBC 3011/41 or LBC 3011/51. (2) LBC 3012/01

**LBC 3013/01 Mounting box for flush mounting**



Dimensions in mm (in)



Flush mounting. (1) LBC 3011/41 or LBC 3011/51. (2) LBC 3013/01

**Technical specifications**

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

Max power	9 W
Rated power (PHC)	6 / 3 / 1.5 / 0.75 W
Sound pressure level at 6 W / 1 W (1 kHz, 1 m)	98 dB / 90 dB (SPL)
Effective frequency range (-10 dB)	65 Hz to 18 kHz
Opening angle	1 kHz / 4 kHz (-6 dB)
horizontal	180° / 92°
vertical	180° / 82°
Rated voltage	100 V
Rated impedance	1667 ohm

Connector	2-pole screw terminal block
Acceptable wire gauge	0.5 - 2.6 mm

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

#### Mechanical

Dimensions (HxWxD)	165 x 284 x 59.5 mm 6.49 x 11.18 x 2.34 in
Mounting cut-out (HxW)	143 x 238 mm 5.63 x 9.37 in
Weight	1.2 kg (2.64 lb)
Color	White (RAL 9010)
Speaker size	2" / 4"
Magnet weight	48 g / 150 g (1.7 oz / 5.3 oz)

#### Mechanical LBC 3012/01

Dimensions (HxWxD)	165 x 284 x 64 mm 6.49 x 11.18 x 2.52 in
Weight	238 g (8.40 oz)
Color	White (RAL 9010)

#### Mechanical LBC 3013/01

Dimensions (HxWxD)	176 x 280 x 64 mm 6.93 x 11.03 x 2.52 in
Weight	307 g (10.83 oz)
Color	White (RAL 9010)

#### Environmental

Operating temperature	-25 °C to +55 °C (-13 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%

### Ordering information

#### LBC 3011/41 Panel Loudspeaker without Volume Control

Panel loudspeaker 6 W, rectangular ABS front with metal grille, two-way system, without volume control, white RAL 9010.

Order number **LBC3011/41**

#### LBC 3011/51 Panel Loudspeaker with Volume Control

Panel loudspeaker 6 W, rectangular ABS front with metal grille, two-way system, with volume control, white RAL 9010.

Order number **LBC3011/51**

#### Accessories

##### LBC 3012/01 Surface Mounting Box

Surface mounting box for LBC3011/41 or LBC3011/51 panel loudspeaker, rectangular, ABS material, white RAL 9010.

Order number **LBC3012/01**

##### LBC 3013/01 Flush Mounting Box

Flush mounting box for LBC3011/41 or LBC3011/51 panel loudspeaker, rectangular, ABS material, white RAL 9010.

Order number **LBC3013/01**

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