

# LC7-UM06E3-AB A/B Ceiling Loudspeaker 6W

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**BOSCH**  
Invented for life



- ▶ High efficiency
- ▶ Two independent loudspeaker systems in one housing
- ▶ Standard supplied with metal fire-dome
- ▶ Easy to install with safety cord
- ▶ EN 54-24 certified

This A/B Ceiling loudspeaker with fire-dome has two independent 6 W loudspeaker systems and is suitable for sound systems where redundancy is requested. In normal situations, both loudspeakers are powered with the same audio signal from independent amplifiers. In case the A-line fails, the other connected loudspeaker receives the signal from line B and the other way around.

In mainly small areas, A/B loudspeakers provide an economic and efficient solution compared to installing two separate ceiling loudspeakers.

## Certifications and approvals

### Quality assurance

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 60268-5 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.

Emergency	According to EN 54-24
Safety	According to EN 60065
Self-extinguishing	According to UL 94 V 0
Water and dust protected	According EN 60529, IP21

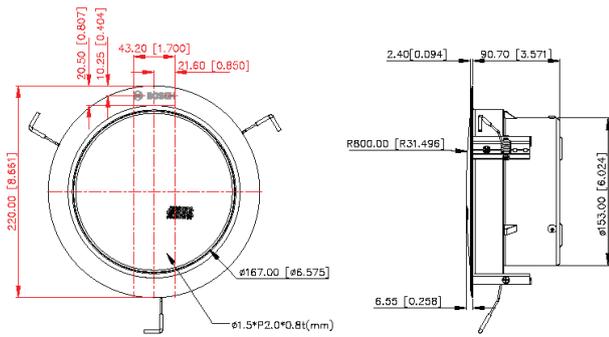
## Installation/configuration notes

The assembly is quickly installed into a hole in the ceiling cavity. A separate mounting ring, secured by three integral spring-loaded ceiling locking clamps (for ceilings from 9 to 25 mm thick) holds it in place. The metal fire-dome is clicked into the mounting ring with three leaf springs, before the loudspeaker unit is inserted and held with a bayonet fitting. For extra convenience, a safety cord from the fire dome allows the installer to temporarily hang the loudspeaker unit during installation. This cord also provides

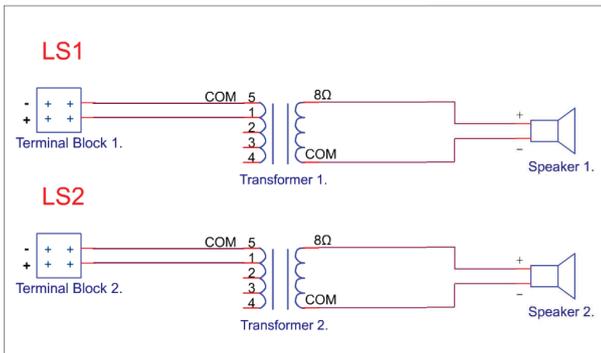
reassurance after installation. The fire-dome has two cable entries at the top, covered with rubber grommets (supplied).



Rear view

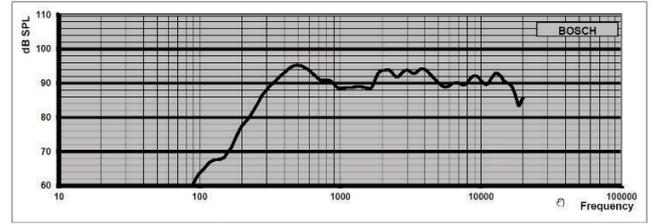


Dimensions

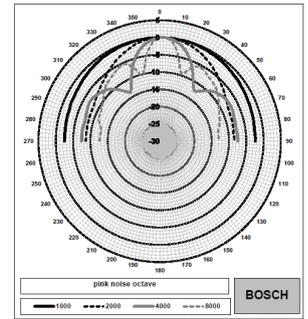
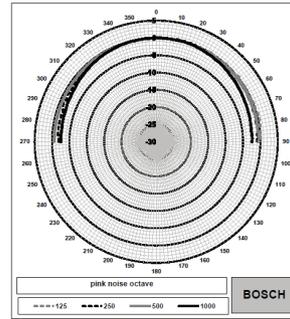


Power: 100V		
POS	LS1	LS2
1	6W	6W
2	3W	3W
3	1.5W	1.5W
4	0.75W	0.75W

Circuit diagram



Frequency response



Polar diagrams

Octave band sensitivity*	Driver A/B active		
	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	66.9	-	-
250 Hz	75.8	-	-
500 Hz	91	-	-
1000 Hz	87.0	-	-
2000 Hz	88.9	-	-
4000 Hz	89.6	-	-
8000 Hz	87.2	-	-
A-weighted	-	85.8	86.5
Lin-weighted	-	92.5	93.5

Octave band opening angles

	Horizontal	Vertical
125 Hz	180	180
250 Hz	180	180
500 Hz	180	180
1000 Hz	180	180
2000 Hz	170	180
4000 Hz	170	170
8000 Hz	80	80

Acoustical performance specified per octave

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

Octave band sensitivity *		Driver A + B active	
	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	67.4	-	-
250 Hz	83.8	-	-
500 Hz	94.1	-	-
1000 Hz	89.7	-	-
2000 Hz	91.9	-	-
4000 Hz	92.5	-	-
8000 Hz	90.2	-	-
A-weighted	-	88.7	98.3
Lin-weighted	-	89.5	99.5

Octave band opening angles

	Horizontal	Vertical	
125 Hz	180	180	
250 Hz	180	180	
500 Hz	180	180	
1000 Hz	180	180	
2000 Hz	170	100	
4000 Hz	170	50	
8000 Hz	75	25	

Acoustical performance specified per octave

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

Parts included

Quantity	Component
1	A/B Ceiling loudspeaker
1	Metal fire-dome
1	Installation instruction
1	Mounting cut-out template
2	Access restriction plugs

Technical specifications

Electrical\*

Rated power (PHC)	2 x 6 W (6-3 - 1.5 - 0.75 W)
Sound pressure level at 6 W/1 W (1 kHz, 1 m)	95 / 87 dB (single driver) 98 / 90 dB (both drivers)
Sound pressure level at 6 W/1 W (1 kHz, 4 m)	84 / 75 dB (single driver) 88 / 78 dB (both drivers)
Frequency response (-10 dB)	316 Hz to 20 kHz
Opening angle at 1 kHz / 4 kHz (-6 dB)	180° / 170° (single driver) 180° / 170° (both drivers)
Rated voltage	100 V
Rated impedance	1667 Ohm @ 6 W 3333 Ohm @ 3 W 6667 Ohm @ 1.5 W 13333 Ohm @ 0.75 W
Connector	2 x 2-pole ABS screw terminal block
Acceptable wire gauge	0.5 to 4 mm <sup>2</sup>

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

Mechanical

Diameter	220 mm
Maximum depth	95 mm
Allowable ceiling thickness	9 to 25 mm
Mounting cut-out	207 mm
Weight	1.78 kg
Color	
Ceiling speaker	White (RAL 9003)
Fire-dome	Red (RAL 3000)

Environmental

Operating temperature	-10 °C to +55 °C (+14 °F to +131 °F)
Storage and transport temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	< 95%

Note:

- The specification data is measured in an anechoic chamber, on a standard baffle
- The reference axis is perpendicular to the center point of the front grille
- The reference plane is perpendicular to the center of the reference axis
- The horizontal plane is perpendicular to the center of the reference plane

 1438
Bosch Security Systems BV Torenallee 49, 5617 BA Eindhoven, the Netherlands 18 1438-CPR-0580
EN 54-24:2008  Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings  A/B Ceiling Loudspeaker 6 W, with fire-dome LC7-UM06E3-AB Type A DoP: DECL DoP EUR EN54-24 LC7-UM06E3-AB

### Ordering information

**LC7-UM06E3-AB A/B Ceiling Loudspeaker 6W**  
A/B Ceiling loudspeaker with two independent  
loudspeaker systems including metal fire dome  
Order number **LC7-UM06E3-AB**

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