

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

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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 |

| Region | Regulatory compliance/quality marks | |
|--------|-------------------------------------|------------------------------------|
| Europe | DOP | DECL DoP EUR EN54-24 LC7-UM06E3-AB |
| | CE | DECL EC LC7-UM06E3-AB |

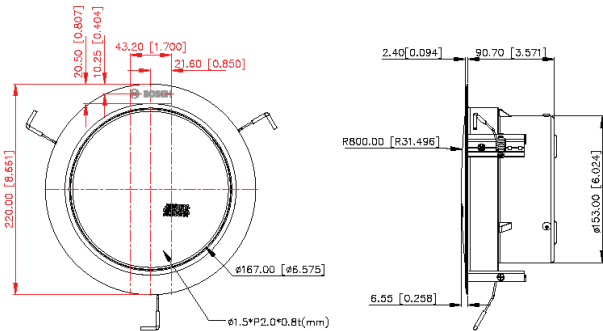
Installation/configuration notes

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

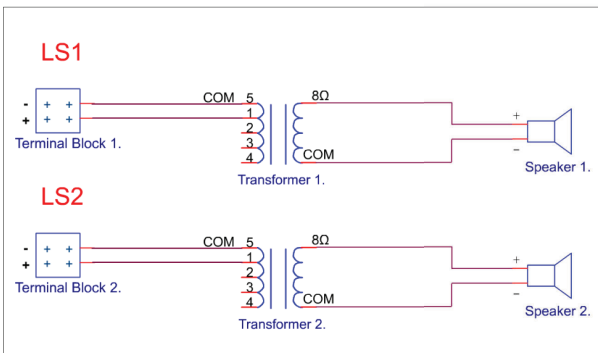
inserted and held with a bayonet fitting. For extra convenience, a safety cord from the fire dome allows the installer to temporarily hang the loudspeaker unit during installation. This cord also provides reassurance after installation. The fire-dome has two cable entries at the top, covered with rubber grommets (supplied).



Rear view

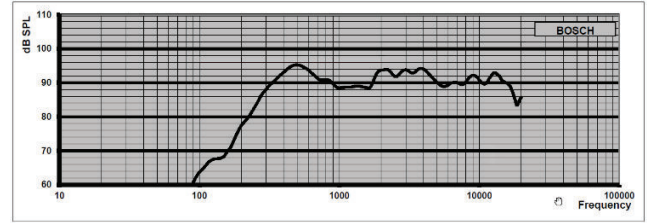


Dimensions

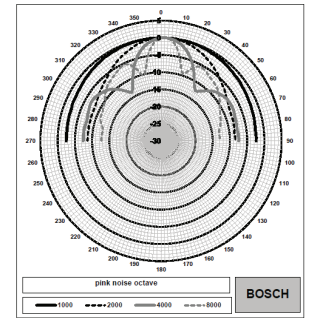
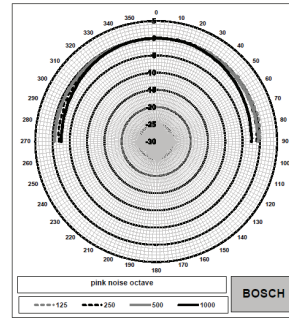


| Power: 100V | | |
|-------------|-------|-------|
| POS | LS1 | LS2 |
| 1 | 6W | 6W |
| 2 | 3W | 3W |
| 3 | 1.5W | 1.5W |
| 4 | 0.75W | 0.75W |

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

| | 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 ² |

* 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 | White (RAL 9003) 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 6 W
 A/B Ceiling loudspeaker with two independent
 loudspeaker systems including metal fire dome
 Order number **LC7-UM06E3-AB**

Services

EWE-LSPSML-IW 12mths wrty ext. speaker small
 12 months warranty extension
 Order number **EWE-LSPSML-IW**

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