

# PC-2369EN

## Ceiling Speaker 6W EN/ISO



### DESCRIPTION

The PC-2369EN is a new thin-panel speaker design that blends in unobtrusively with an application's architecture and interior décor. This ceiling-mount 16 cm (6") cone-type all-metallic speaker is ideal for BGM and announcement applications. It is also designed for use in a voice alarm system, when the speaker system is integrated with a panel. The PC-2369EN is EN 54-24\* and ISO 7240-24 certified and is therefore authorized for use in conjunction with fire detection systems. Mounting the speaker into the ceiling is quick and easy, thanks to a spring clamp installation method.

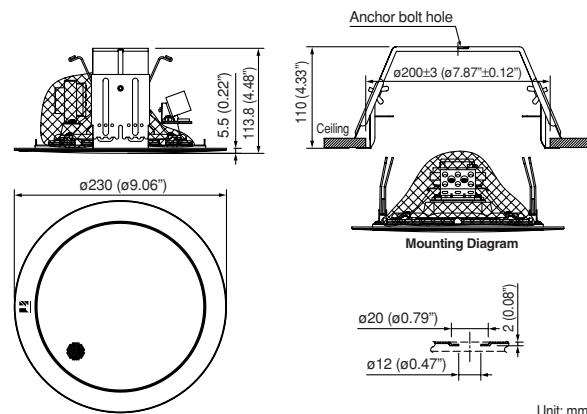
A screw connector steatite input terminal allows secure cable connections and bridge wiring. Input impedance can easily be adjusted by changing the tap position of the transformer.

\*EN 54-24: Loudspeaker for voice alarm systems for fire detection and fire alarm systems.

### FEATURES

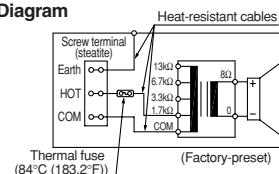
- Thin panel does not clash with interior design
- Easy installation with spring clamp
- 16 cm (6") high sound quality cone speaker
- High sensitivity: 94 dB (1 W, 1 m)
- Steatite screw terminal block and thermal fuse
- Certified to EN 54-24 and ISO 7240-24 (Certificate No.: 0359-CPD-0101)
- Ideally suited for voice alarm system applications

### APPEARANCE AND DIMENSIONAL DIAGRAM



Unit: mm

### Wiring Diagram



(Note) Use transformer terminals when changing input impedance.

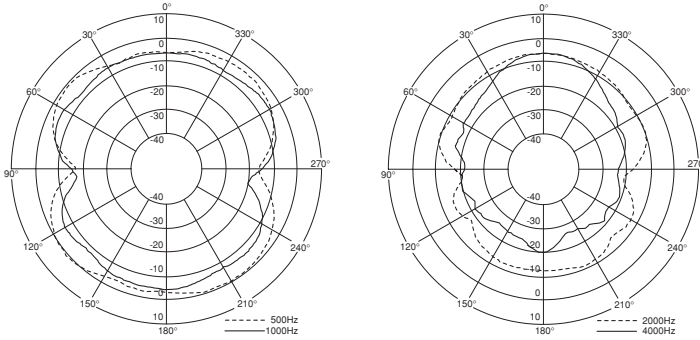
### SPECIFICATIONS

<b>Rated Noise Power:</b>	6 W (100 V Line), 3 W (70 V Line)
<b>Rated Impedance:</b>	100 V line: 1.7k Ω (6 W), 3.3k Ω (3 W), 6.7k Ω (1.5 W), 13k Ω (0.8 W) 70 V line: 1.7k Ω (3 W), 3.3k Ω (1.5 W), 6.7k Ω (0.8 W), 13k Ω (0.4 W)
<b>Sensitivity:</b>	94 dB (1 W, 1 m) (500 – 5,000 Hz, pink noise) 92 dB (1 W, 1 m) (100 – 10,000 Hz, pink noise) 80 dB (1 W, 4 m) (100 – 10,000 Hz, pink noise)
<b>Maximum Sound Pressure Level:</b>	98 dB (6 W, 1 m) (100 – 10,000 Hz, pink noise) 86 dB (6 W, 4 m) (100 – 10,000 Hz, pink noise)
<b>Frequency Response:</b>	70 – 18,000 Hz
<b>Coverage Angle:</b>	Horizontal and Vertical: 160° (500 Hz), 170° (1,000 Hz), 160° (2,000 Hz), 60° (4,000 Hz)
<b>Environmental Type:</b>	A (indoor applications)
<b>Speaker Component:</b>	16 cm (6") cone-type
<b>Operating Temperature:</b>	-10° C to +50° C (14° F to 122° F)
<b>Dimensions for Fixing Hole:</b>	Mounting hole: $\varnothing 200 \pm 3$ mm ( $\varnothing 7.87 \pm 0.12$ ") Ceiling thickness: Max. 58 mm (2.28")
<b>Speaker Mounting Method:</b>	Spring clamp
<b>Applicable Cable:</b>	Outer diameter: $\varnothing 6.6$ – $\varnothing 12.5$ mm Conductor: Solid wire or 7-core wire No bridge connection: 0.8 – 10 mm <sup>2</sup> (AWG 18 – AWG 7) for solid wire 0.8 – 8 mm <sup>2</sup> (AWG 18 – AWG 8) for 7-core wire Bridge connection: 0.8 – 2.5 mm <sup>2</sup> (AWG 18 – AWG 13) for solid wire 0.8 – 1.5 mm <sup>2</sup> (AWG 18 – AWG 15) for 7-core wire
<b>Connation:</b>	Screw connector (steatite terminal) can be bridge connection
<b>Finish:</b>	Baffle: Steel plate, off-white (RAL 9010 or equivalent colour), paint Grille: Surface-treated steel plate net, off-white (RAL 9010 or equivalent colour), paint
<b>Dimensions:</b>	$\varnothing 230 \times 113.8$ (D) mm ( $\varnothing 9.06 \times 4.48$ ")
<b>Weight:</b>	1.1 kg (2.43 lb)

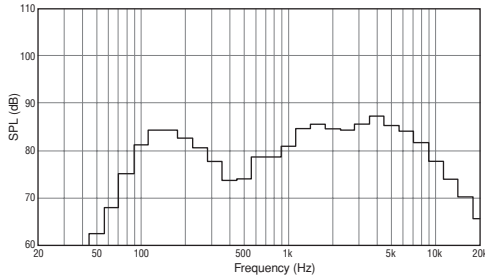


# CHARACTERISTIC DIAGRAMS based on EN 54-24 measurement conditions (Pink noise, 1 W, 4 m)

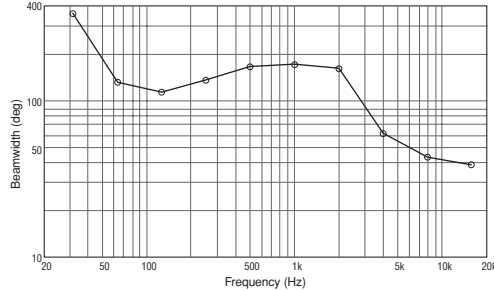
## Polar Response



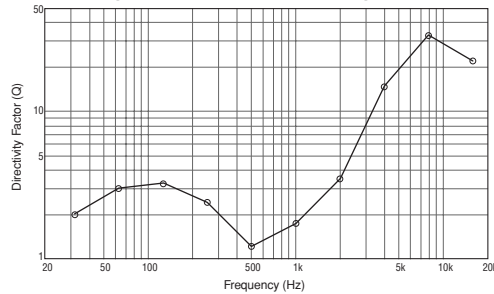
## SPL vs. Frequency



## Beamwidth vs. Frequency



## Directivity Factor vs. Frequency



## ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The PC-2369EN is a new thin-panel speaker design that blends in unobtrusively with an application's architecture and interior décor. This ceiling-mount 16 cm (6") cone-type all-metallic speaker is ideal for BGM and announcement applications. It is also designed for use in voice alarm systems. The PC-2369EN is EN 54-24 certified with CPD number 0359-CPD-0101 and ISO7240-24 certified and is therefore authorized for use in conjunction with fire detection systems. Mounting the speaker into the ceiling is quick and easy, thanks to a spring clamp installation method, off-white colour (RAL 9010).

Fire-resistant terminal blocks made of steatite allows secure cable connections and bridge wiring, thermal fuse with a blowing temperature of 84° C.

Input impedance can easily be adjusted by changing the tap position (6 W, 3 W, 1.5 W, 0.8 W) of the transformer. The output sound pressure level at a distance of 1 m with a 1 W input level applied shall be 92 dB SPL (100 Hz to 10,000 Hz). The speaker shall have a frequency response of 70 – 18,000 Hz. Ingress Protection, IP21C. The unit shall have dimensions of Ø 230 × 110 (D) mm.