AcousticDesign Surface Mount Series

AD-C1200 Loudspeaker Assembly / AD-C1200BB Backbox Enclosure

Summary description:

The AD-C1200 is a high-output full-range loudspeaker assembly, including passive crossover electronics and coaxial low- and high-frequency drivers, that is baffle-mounted for use with ceiling-mounted speaker enclosures including the 3.1 cubic foot AD-C1200BB.

Drivers:

The loudspeaker assembly shall incorporate a 12-inch (304 mm) cone transducer of treated paper on a steel frame with a coaxial a 1.75-inch (44 mm) neodymium diaphragm compression driver that is acoustically mated to the woofer for a smooth transition at the crossover point.

Enclosure:

The loudspeaker assembly shall be mounted on a ported steel baffle that is ready for attachment to the face of the acoustically optimized QSC enclosure model AD-C1200BB or similar enclosure whose volume is approximately 2.5 to 3.1 cubic feet. The baffle shall mount to the enclosure using screws at industry-standard transducer mounting locations. The baffle shall accept the optional QSC AD-C1200SG square grille.

Electronics:

The loudspeaker system shall include a passive crossover. The loudspeaker assembly shall include a custom low-distortion, wide-bandwidth laminated-core transformer that shall be switchable between 16 Ohm bypass and constant-voltage operation. Transformer taps at 70V shall be 150, 75, 37.5, and 18.2 watts. Transformer taps at 100V shall be 150, 75, and 37.5 watts.

Connectors:

The input connectors to the AD-C1200 loudspeaker assembly baffle shall be Euro-style connectors. The input connectors on the AD-C1200BB enclosure shall be ceramic block input and through connectors (rated for 400 W max).

Performance criteria:

The AD-C1200 loudspeaker assembly shall meet the following performance criteria when the baffle is mounted into the AD-C1200BB enclosure:

- Frequency response shall be within -6 dB at 42 Hz to 18 kHz;

- Useable frequency range shall be within -10 dB at 37 Hz to 18 kHz;

- Peak output at 1 meter shall be 124 dB SPL in half space;

- Continuous output at 1 meter shall be 118 dB SPL in half space;

- Nominal coverage shall be 85 degrees horizontal and vertical;

- Nominal impedance shall be 16 ohms;

- RMS power handling shall be 300 watts tested per IEC recommendations;

- Recommended max amplifier power shall be 600 watts RMS;

- Sensitivity shall be 93 dB SPL at 1 watt/1 meter.

Agency Rating:

The loudspeaker system shall have the following agency ratings:

- CE

- UL 1480 (commercial/professional use)

- UL 2043 (air handling spaces)

Mounting hardware:

The AD-C1200BB enclosure shall include four mounting tabs.

Dimensions and weight:

The combined AD-C1200/AD-C1200BB assembly shall have the following physical characteristics:

- Height shall be 23 inches (584 mm);

- Width shall be 18 inches (454 mm);

- Depth shall be 15.5 inches (393 mm);

- Net weight shall be no more than 78 pounds (35.3 kg), 25 pounds (11.3 kg) for the AD-C1200 and 53 pounds (24 kg) for the AD-C1200BB.

Model:

The loudspeaker assembly shall be the QSC Audio Products AD-C1200 and the enclosure shall be the AD-C1200BB.