**DesignMax DM8C-SUB in-ceiling loudspeaker**

ARCHITECTS’ & ENGINEERS’ SPECIFICATIONS

JULY 2023

The loudspeaker shall contain an 8-inch woofer.

The loudspeaker shall meet the following performance specifications: On-axis system frequency range shall be 38 Hz to 155 kHz (-10 dB) with the use of recommended active equalization. The loudspeaker sensitivity shall be 89 dB SPL in half-space environment with Bose Professional EQ voicing with 1 W input at 1 meter. The long-term power handling rating shall be 180 W (AES test methodology using IEC system noise, 2-hour duration). Maximum continuous output shall be 112 dB SPL and the maximum peak output shall be 118 dB SPL. The nominal coverage pattern shall be omnidirectional below 200 Hz.

The loudspeaker shall be constructed of an engineered-plastics front baffle with a low-profile integrated steel formed enclosure. The loudspeaker shall consist of PC-PBT plastic materials that are resilient to cooking oil exposure. The loudspeaker shall be plenum rated for use in air handling spaces and in compliance with the following safety standards; UL1480A, UL2043. The transducers shall be located behind a perforated steel grille with a powder-coated finish that is magnetically attached. The loudspeaker shall contain a proprietary mounting system including spring-loaded mounting arms. The loudspeaker shall be available in black or white and shall be paintable. Input connectors shall be a Euroblock 6-pin connector with loop-through, located on the front baffle. The loudspeaker shall have a nominal rated impedance of 8 ohms and shall be wired in parallel with a line voltage matching (stepdown) transformer with a level selector appropriate for output taps of 20, 40, 80, 150 W and bypass (8 ohms). The loudspeaker input connections shall allow for direct connection to 70-volt, 100-volt or low-impedance amplifiers. Loudspeaker backcan dimensions shall be 340 × 240 mm (13.4 × 9.5 in) and net weight shall be 9.9 kg (21.9 lb) with grille. Outward front grille dimensions shall be 409 mm (16.1 in).

Warranty shall be 5 years. The loudspeaker shall be the DesignMax DM8C-SUB in-ceiling loudspeaker.