**DesignMax DM8C in-ceiling loudspeaker**

ARCHITECTS’ & ENGINEERS’ SPECIFICATIONS

JULY 2023

The loudspeaker shall contain a two-way, 8-inch coaxially mounted woofer and a center-firing 1-inch compression driver.

The loudspeaker shall meet the following performance specifications: On-axis system frequency range shall be 52 Hz to 20 kHz (-10 dB) with the use of recommended active equalization. The loudspeaker sensitivity shall be 91 dB SPL in half-space environment with recommended high-pass protection with 1 W input at 1 meter. The long-term power handling rating shall be 150 W (AES test methodology using IEC system noise, 2-hour duration). Maximum continuous output shall be 113 dB SPL and the maximum peak output shall be 119 dB SPL The nominal coverage pattern shall be 135° conical at 1–4 kHz.

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 2.5, 5, 10, 20, 40, 80 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 9.6 kg (21.1 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 in-ceiling loudspeaker.