

Product Specifications – Model VFC Commercial Forward Curved Centrifugal Fan, DWDI

Fans shall be Type VFC Forward Curved, Double Width, Double Inlet Fans as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE — Performance ratings shall conform to AMCA Standard 205 (fan efficiency grade), 211 (air performance) and 311 (sound performance). Fans shall be tested in accordance with ANSI/AMCA Standard 210 (air performance) and 300 (sound performance) in an AMCA accredited laboratory. Fans shall be licensed to bear the AMCA certified ratings seal for both sound and air, and fan efficiency grade (FEG).

HOUSING — Fan housings shall be constructed of galvanized steel for corrosion resistance. For fan sizes up to 18" the housing sides and scroll shall be spot welded together to form a durable assembly. Fan sizes 20" and above the side plates shall be Pittsburgh lock formed to the scroll for a durable, air tight construction without compromising the galvanized surface coating of the metal.

WHEEL — Forward curved, double width, double inlet fan wheels shall be constructed of galvanized steel. Blades shall be tab locked to a structural steel center plate and end rings.

SHAFT — Shafts shall be AISI 1040 or 1045 hot rolled steel, accurately turned, ground, polished, and ring gauged for accuracy. Shafts shall be sized for the first critical speed of at least 1.43 times the maximum speed.

BEARINGS — Bearings shall be selected for a minimum average bearing life (AFBMA L-50) in excess of 200,000 hours at the maximum fan RPM.

Class L and R - Deep groove, self-aligning ball bearings shall be permanently lubricated and sealed. Bearings shall be mounted inside a rubber isolator and attached directly to the fan housing with a three or four prong mount.

Class K - Deep groove, self-aligning re-greaseable pillow block ball bearings mounted in a single piece housing. Bearings shall be mounted on a sturdy angle iron base and bolted to the frame.

Class K2 - Deep groove, self-aligning re-greaseable ball and roller pillow block bearings mounted in a single-piece housing. Bearings shall be mounted on a sturdy angle iron base and bolted to the frame.

FRAME CONSTRUCTION — Housings shall be oriented to THD, DBD, BHD or UBD discharges in both CW and CCW rotations.

Class L - Mounting feet shall be provided.

Class R - Fans shall be provided with rectangular angle side frames.

Class K and K2 - Fans shall be provide with rectangular angle side frames attached to angle cross members.

FACTORY TEST — Each wheel shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.