

Typical Specifications

Model: PLC

Description: Fan shall be a single width, single inlet backward inclined centrifugal airfoil, belt or direct driven plenum blower as specified.

Certifications: Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance. Performance shall be certified for both inlet and outlet sound.

Construction: The fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The inlet panel shall be constructed from heavy gauge reinforced steel with an integral rectangular formed duct connection. High performance airflow baffle shall be standard to reduce under-unit turbulence and improve efficiency. Integral lifting points shall be standard. Unit shall bear an engraved aluminum nameplate. Nameplate shall indicate design CFM, static pressure and maximum fan RPM. Unit shall be shipped in ISTA Certified Transit Tested Packaging.

Coating: Steel fan components shall be Lorenized™ with an electro-statically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

Wheel: Wheel shall be steel, non-overloading, centrifugal backward inclined, high efficiency, airfoil type. Blades on all sizes shall be continuously welded to the back plate and inlet shroud. All sizes shall be securely keyed to the fan shaft. Wheel shall overlap an aerodynamic aluminum inlet cone to provide maximum performance and efficiency. Wheel shall be balanced in accordance with AMCA Standard 204-05, *Balance Quality and Vibration Levels for Fans*.

Motor: Motor shall be NEMA design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Blower Shaft: Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

Bearings: Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives: Belts shall be oil and heat resistant, static conducting. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product: Fan shall be model PLC as manufactured by Loren Cook Company of Springfield, Missouri.