

# Typical Specifications

**Model:** FCP-66

**Description:** Fan shall be a fiber-reinforced polyester resin, single width, single inlet, backward inclined airfoil, arrangement 10, belt driven Class II centrifugal blower.

**Certifications:** Fan shall be manufactured at an ISO 9001 certified facility. Fan shall bear the AMCA certified ratings seal for sound and air performance.

**Construction:** The fan shall be of bolted construction with stainless steel fasteners. Fasteners in the airstream shall be encapsulated in resin to further protect against corrosion. Structural parts shall be made of either fiber reinforced polyester resin or epoxy coated steel. All fiberglass resin to be formulated to achieve a Class I flame spread below 25. All resin surfaces shall have additional chemical, flame and ultraviolet protective top coating. A neoprene shaft seal shall be provided. The fan housing shall be field rotatable to any one of eight discharge positions and shall have an outlet discharge flange of duct connection. Unit shall have the motor and drives enclosed in an OSHA motor compartment. Nameplate shall indicate design CFM, static pressure, and maximum fan RPM. Unit shall be shipped in ISTA certified transit tested packaging.

**Wheel:** Wheel shall be centrifugal airfoil backward inclined, constructed of fiber-reinforced vinylester resin, molded and formed in one solid piece of the specified rotation. Wheels constructed of separately molded shroud, floats and backplate and then assembled are considered unacceptable. Wheel shall include a precision machined aluminum hub encapsulated in resin. Wheel inlet shall overlap an aerodynamic 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.

**Bearings:** 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 250,000 hours at maximum cataloged operating speed.

**Blower Shaft:** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished with an FRP sleeve in the airstream for protection. Shafting shall be sized for a critical speed of at least 125% of maximum RPM.

**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 FCP-66 as manufactured by Loren Cook Company of Springfield, Missouri.