# **RKB-Inline Specification**

## TYPICAL SPECIFICATIONS

### Model: RKB-Inline

### Description:

Fan shall be a backward incline, roof mounted or indoor, belt driven, and centrifugal exhaust ventilator. Fan shall be of the "Inline Restaurant Duty" type with a square inlet and outlet. Fan shall be a corrosion resistant steel, belt driven, square inline blower.

#### Application

Square In-Line Fans are suitable for various applications. Commonly mounted indoors with both inlet and outlet ducts to exhaust air. Square In-Line Fans are engineered to discharge air, fumes and other contaminants horizontally in a duct.

#### Certifications

All models shall be ETL Listed and comply with UL 705, UL762 Standards and CSA Std C22.2, No 113.

# Housing

The fan housing shall be constructed of stainless steel. The internal structural support and external mounting material shall be 14 GA G90 galvanized steel minimum. Fan housing shall have a Hinge/Latch removable door design.

#### Base

The base shall be constructed of galvanized steel for improved rigidity. Bolt patterns shall be provided in the base to allow connection to a pollution control unit.

#### Wheel

The fan wheel shall be centrifugal backward inclined and non-overloading. Wheels shall be balanced in two planes and done in accordance with AMCA standard 204-96, Balance Quality and Vibration Levels for Fans. The wheel blades shall be aerodynamically designed to minimize turbulence, increase efficiency and reduce noise. The wheel blades shall be welded to the wheel inlet cone. In the event that balancing weights are required they shall be riveted to the blades or wheel. The wheel inlet shall overlap the fan inlet for maximum performance and efficiency. The wheel shall be firmly attached to the motor shaft with two set screws.

## **Motor & Motor Compartment**

Motors shall be heavy duty ball bearing type, mounted on an adjustable base and furnished at the specified voltage, phase and enclosure. Motor mounting plate shall be constructed of heavy gauge steel and isolated from the fan structure with vibration isolators. The motor compartment shall be of a two-piece construction quick release clips to provide quick and easy access to the motor compartment. Motor assembly is not in the air stream.

# Shaft & Bearings

Shafts shall be precision ground and polished. Heavy duty, pre-lubricated bearings shall be selected for a minimum (L10) life in excess of 200,000 hours of operation at maximum cataloged operating speed. They shall be designed for and individually tested specifically for use in air handling applications.

# Belts & Drives

Belts shall be oil and heat resistant, non-static type. Drives shall be cast type, precision machined and keyed and secured attached to the fan and motor shafts. Drives shall be sized for a minimum of 150% of the installed motor horsepower. Fan operating speed shall be factory set using adjustable pitch motor pulleys; motors over 2 HP will come standard with double groove pulleys. Drive assembly is not in the air stream.

# Safety Disconnect Switch

A safety disconnect switch shall be standard on all units. Switches shall be installed in a NEMA3R enclosure and mounted to exterior of the fan for easy access.

Product: Fan shall be model RKB-Inline as manufactured by RUPP Air Systems