



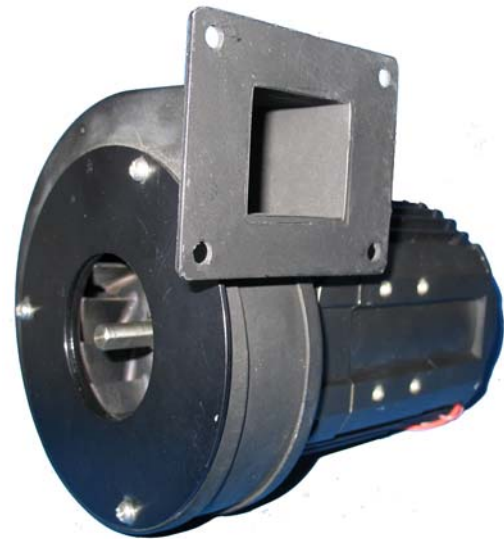
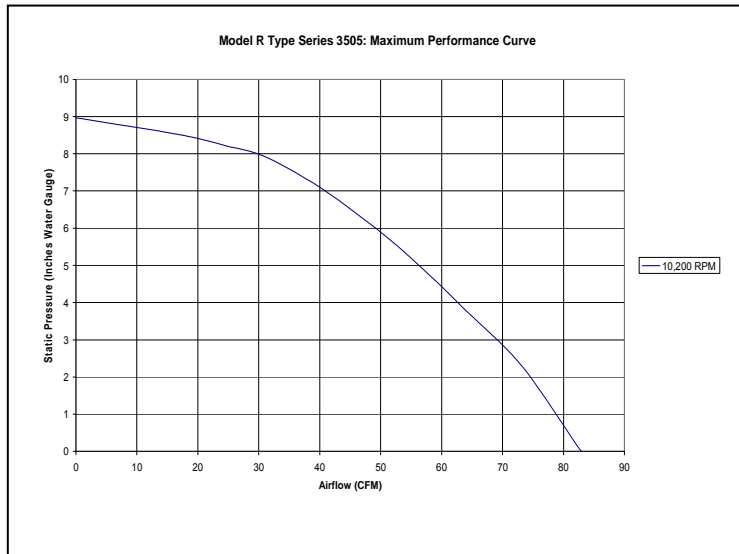
# Rotron Model R Type 3505 Radial Blowers

## General Radial Blower Information

Rotron Radial Blowers are unusually small and compact in design. They are available in CW or CCW, and in either simplex or duplex models. Duplex Blowers simplify ductwork and allow for greater volume performance in tight locations. Models are available for DC and AC power.

Radial Blowers come in a variety of voltages and frequencies and are available with a variety of inlet and outlet configurations. Most units are available with an optional internal Fan Performance Sensor (FPS) or external Low Speed Warning Device (LSWD).

## Rotron Model R Type 3505



\*Individual Performance Curve Characteristics Available Upon Request

### General

- Physical envelope: varies— maximum inlet diameter is 2.00"; maximum length is 4.94"<sup>1</sup>.
- Weight: 3.3 lbs.
- Suitable for use in airborne applications and in tightly packed electronic equipment.

### Materials and Finishes

- Aluminum components finished with a chemical conversion coating per MIL-C-5541, top coat of lusterless black enamel, color #37038, per Federal Standard 595 conforming to TT-E-489 Type B.
- Steel housing coated with a black epoxy powder coat.
- Corrosion-resistant stainless steel shaft and hardware.
- Impeller runs on two high-precision, double-shielded, stainless steel ball bearings (ABEC Class 5) contains integral grease reservoir for a long, maintenance-free life.
- Motors have stator winding insulation which is rated for continuous duty for either Class F or Class H.

<sup>1</sup> See specific part-number drawing for complete product dimensions

## Options/Accessories

- LSWD (Low Speed Warning Device)
- FPS (Fan Performance Sensor)



### AC Line Power Units <sup>1</sup>

- 3-phase and 1-phase permanent-split capacitor motor designs.
- Fixed speeds (performance) based on input frequency.
- Meets or exceeds the requirements of MIL-B-23071 and other applicable U.S. military and commercial aerospace specifications <sup>2</sup>.
- Max free delivery airflow of 24.5 CFM at 50 Hz, 29.5 CFM at 60 Hz, and 110 CFM at 400 Hz.
- Ambient temperature range: -54 °C to 100 °C
- Acoustic levels as low as 77 dBA.

<sup>1</sup> Airflow, maximum ambient and acoustic levels will vary depending on design parameters

<sup>2</sup> Please call for further information concerning applicable U.S. military and commercial aerospace specifications

### DC Line Powered Units – E.C.D.C.® <sup>1</sup>

- Brushless permanent magnet design (Electronically Commutated DC).
- Speed (performance) fixed by input voltage.
- Meets or exceeds the requirements of MIL-B-28873 and other applicable U.S. military and aerospace specifications <sup>2</sup>.
- Max free delivery airflow of 83 CFM.
- Ambient temperature range: -54 °C to 80 °C.
- Acoustic levels as low as 77 dBA.

### Optional DC-AC Inverters and AC-AC Converters for AC Powered Models <sup>1</sup>

#### BATAC® Inverter Driven Units

- AC square wave fans driven from a DC power source through a BATAC® Inverter.

#### DELTAC® Converter Driven Units

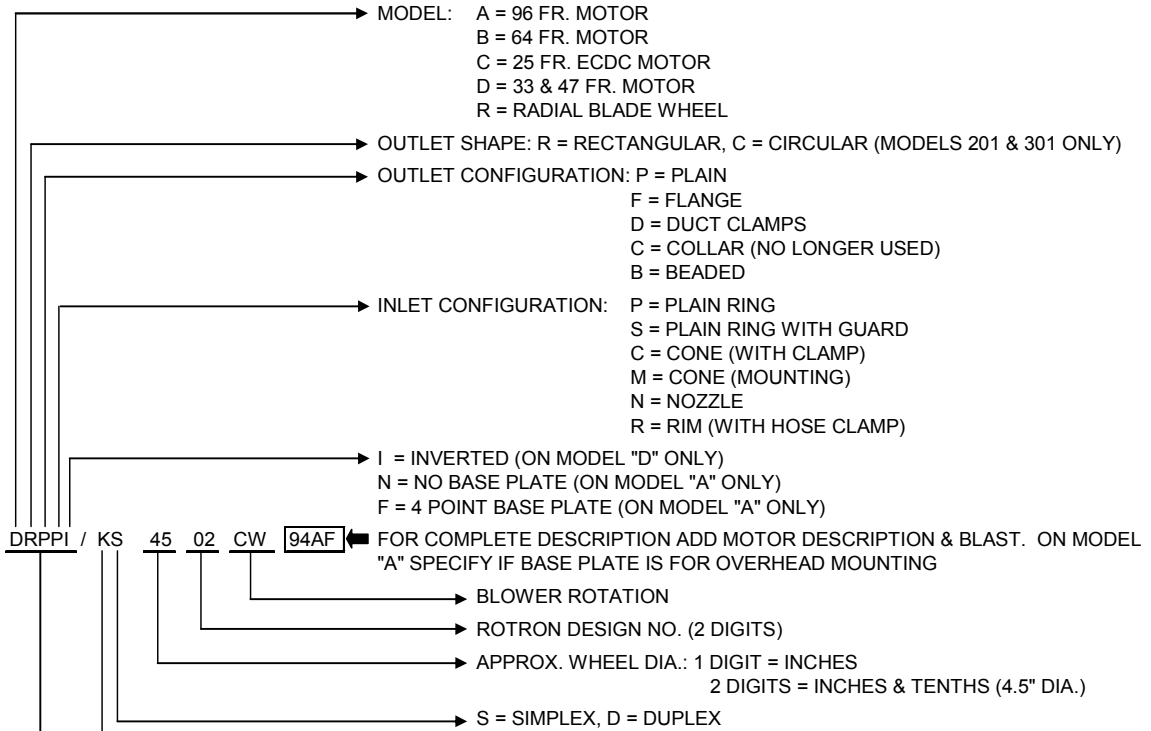
- DELTAC® converters allow high frequency (typically 400 Hz) fans to be driven by variable frequency (typically 360-800 Hz) power or low frequency 50/60 Hz power to obtain the higher frequency performance.

<sup>1</sup> See Accessories: Power Conversion



### Unit Description Key

The unit description key is for reference only and should not be confused with a part number. While most units are custom configurations, not all variations of the key shown below are possible. Please contact the Application Engineering department for more information regarding possible custom configurations.



DRPPI / KS 45 02 CW 94AF

"X" IN ANY POSITION DENOTES SPECIAL FOR THAT FEATURE

EXAMPLE: DRPPI/KS 4502 CW

DUPLEX VARIATIONS:

\*1st CALLOUT IS THE STD SIMPLEX

\*2nd CALLOUT IS THE DUPLEX END

EX: DRPP/KD4502CW (3:00) CCW (12:00)

EX: DRPP/DRFS/KD4502

NO. POLES	NO. PHASES	APPROX. SPEED- NO LOAD (REF.)			
		50 Hz	60 Hz	400 Hz	
A	2	3	2900	3400	-
B	4	3	1450	1750	-
E	6	1 OR 3	950	1150	-
F	8	1 OR 3	700	850	-
K	2	1	2900	3500	-
L	4	1	1450	1750	-
M	6	1 OR 3	-	-	7500
N	8	1 OR 3	-	-	5500
P	12	1 OR 3	-	-	3900
Q	4	1 OR 3	-	-	11000
R	2	1 OR 3	-	-	23000
V	ECDC				

NOTE: DUAL FREQUENCY OR DUAL POLE MOTORS DESIGNATED BY USING 2 DIGITS. EX: KM = (2 POLE 1Φ 50/60 Hz, 6 POLE 1Φ 400 Hz)

### Ordering Information

When ordering, please specify the specific Rotron part number listed on the following model table. Further ordering information, based on the configuration and motor series, may be obtained by contacting customer service. Please refer to the Unit Description Key explanation above.



Rotron / Airscrew

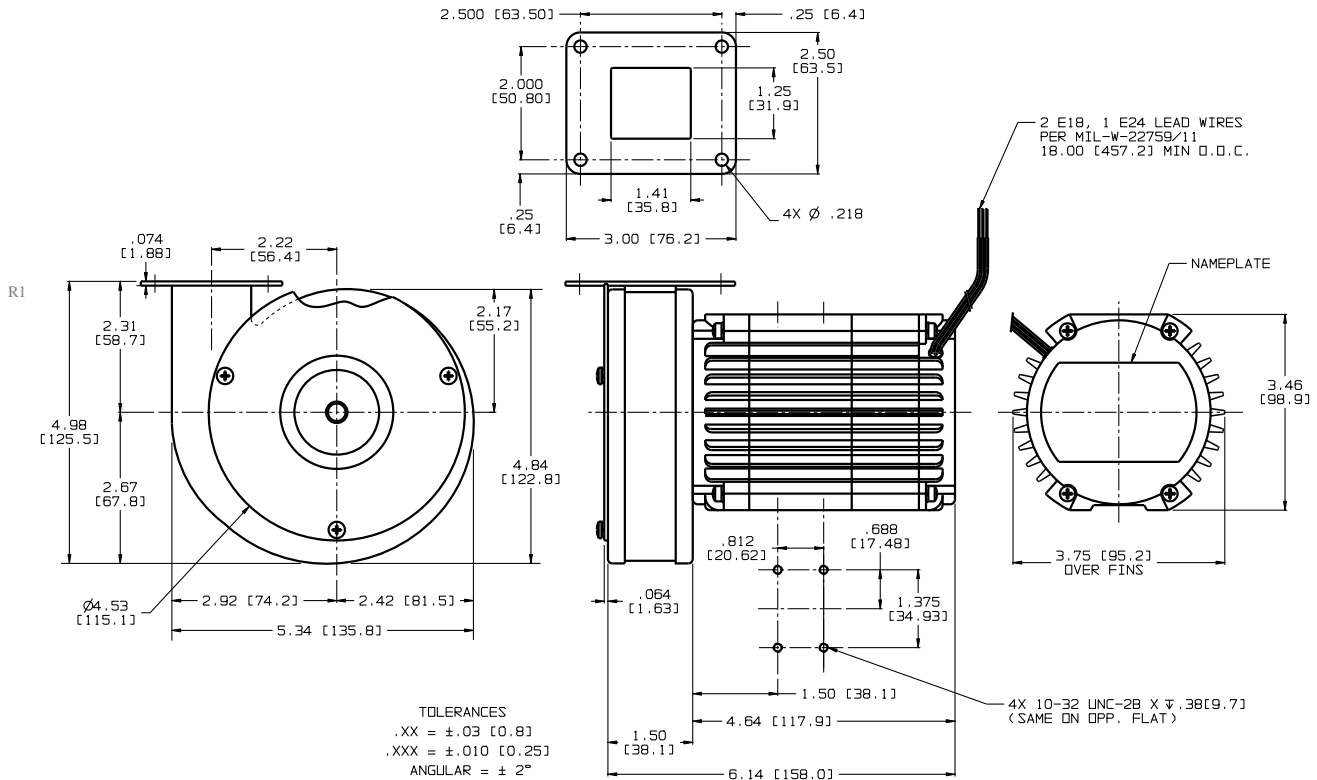


Part #	Product Description	Motor Series	Static Pressure (IWG)	Weight (lb)	Airflow Source Data	Features
035496000	R/QS3505 83	83XF	8.97	3.3	A325-10	CONNECTOR
020767000	R/QS3505 83QF	83QF	8.97	3.3	A325-10	12" LEADS

### ELECTRICAL SPECIFICATIONS

See Hookup Section for Motor Wiring

Type	Frame	Series	Volts	Phase	Hz	Cap. † Mfd.	Nom. RPM	Full Load Watts	Line Amps	Lock. Rotor Amps	Air CFM at Free Del.
QS-3505	TB-3	83QF	200	3	400	-	10,200	130	.45	.88	85



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Specifications subject to change without notice

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