

Rotron AXIMAX® 4

Small Vaneaxial Fans

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General Small Vaneaxial Information

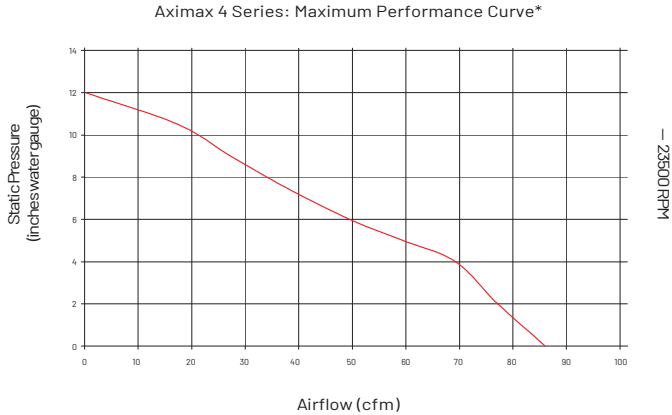
Small Vaneaxial Fans are compact, high-speed fans whose airflow is parallel to the motor shaft. The impeller and guide vanes are of airfoil construction for maximum aerodynamic efficiency and minimum acoustical noise.

These fans are designed for use in tightly packaged airborne "black boxes" where sizes and weight must be held to an absolute minimum, where reliability is critical, and where high heat loads must be

dissipated with cooling air.

Small Vaneaxial Fans come in a variety of voltages and frequencies and are available with lead wires, terminal blocks and MS connectors. Most units are available with an optional internal Fan Performance Sensor (FPS) or an external Low Speed Warning Device (LSWD).

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*Individual Performance Curve Characteristics Available Upon Request



General

- Physical envelope: 2.94" Dia. x 3.120"L 1.
- Weight: approximately 1.75 lbs.
- Specially designed for avionics cooling.
- Custom mounting configurations, such as flanges or servo rings and synclamps, are available 2.

¹See specific part-number drawing for complete product dimensions

²Please contact the Application Engineering Department for further information

Materials and Finishes

- All 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.
- Corrosion-resistant stainless steel shaft and hardware.
- Impeller runs on two high-precision, double-shielded, stainless steel ball bearings (ABEC Class 7) for a long, maintenance-free life.
- Motors have stator winding insulation which is rated for continuous duty for Class H.

Options/Accessories

- Finger Guards
- Synclamps
- Custom Paints Available
- LSWD (Low Speed Warning Device)
- FPS (Fan Performance Sensor)

AC Line Powered Units ¹

- 3-phase and 1-phase permanent-split capacitor motor designs.
- Fixed speeds (performance) based on input frequency.
- Meets or exceeds the requirement of MIL-B-23071 and other applicable U.S. military and commercial aerospace specifications².
- Max free delivery airflow of 116 CFM at 400 Hz.
- Ambient temperature range: -54 °C to 100 °C.
- Acoustic levels as low as 74.6 dBA.

¹Airflow, maximum ambient and acoustic levels will vary depending on design parameters

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

Optional DC-AC Inverters and AC-AC Converters for AC Powered Models¹

BATAC[®] Inverter Driven Units

- AC square wave fans driven from a DC power source through a BATAC[®] Inverter.
- Low cost alternative when multiple fans are used in a single application or area.
- Allows for greater than 100 VDC input voltage

¹See 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

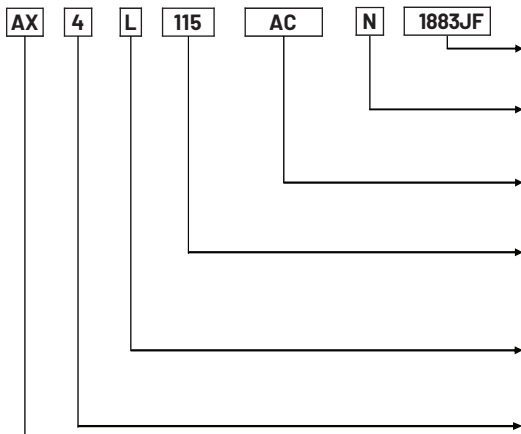
DC Line Powered Units – E.C.D.C.^{® 1}

- Not available with this model fan.

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.

possible. Please contact the Application Engineering department for more information regarding possible custom configurations.



- MOTOR SERIES
PER ROTRON STD 3.201
- FAN PERFORMANCE SENSOR
N - WITHOUT, S - WITH
- VOLTAGE TYPE
AC - AC LINE OPERATED
- NOMINAL DESIGN COLTAGE
FOR AC FAN, USE 3 DIGITS (ENTER "0" PRECEEDING SIGNIFICANT NUMBER(S) FOR 1 OR 2 DIGIT VOLTAGE)
- HOOK-UP CONFIGURATION
L - LEADWIRES, T - TERMINAL BLOCK, M - MS CONNECTOR**

STD	CASE	BLADES
4A	Std. Servo Rings	Std. Prop
4B	Std. Servo Rings	Mixed Flow, High Pitch
4C	Std. flanges, both ends	Mixed Flow, Low Pitch
4D	Std. Servo Rings, Shortened Case	Mixed Flow, Low Pitch
4E	Std. Servo Rings, Extended Case	Mixed Flow, Low Pitch
4F	Square Flange, Both Ends	Mixed Flow, High Pitch
4G	Std. Servo Rings, Mng. 3.12LG	Mixed Flow, Low Pitch

AXIMAX
EXAMPLE: AX3L, 115 AC, N, 470JH

**X" IN ANY POSITION DENOTES SPECIAL FOR THAT FEATURE

Ordering Information

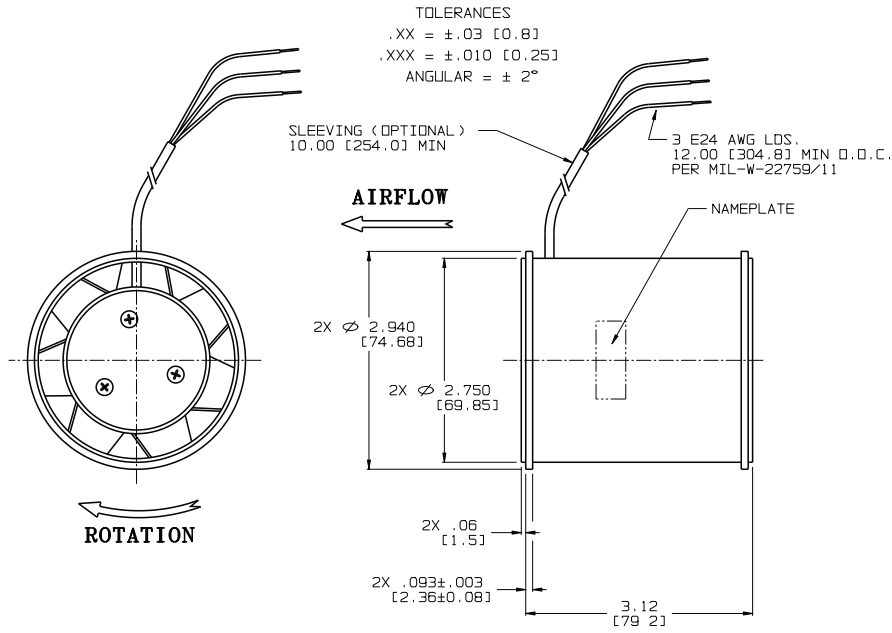
When ordering, please specify the specific Rotron part number listed on the model table below. Further ordering information, based on the configuration and motor series, may be obtained by contacting customer service. Please refer to the Unit Description Key explanation above.

Standard Product Offering of AC Line Powered Models

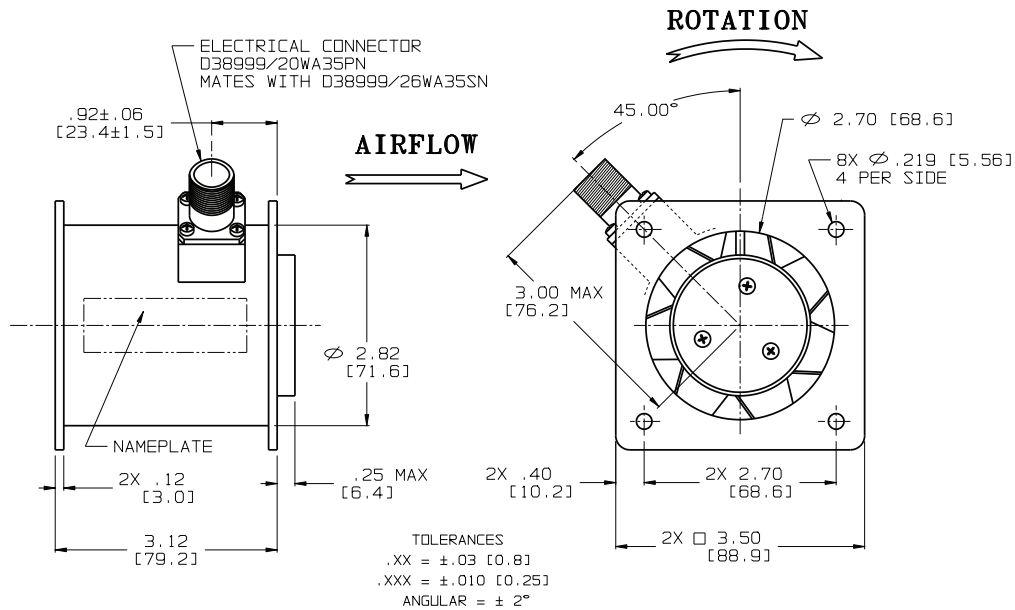
Part #	Prod. Desc.	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (°C)	Weight (lbs)	Volts	Phase	Hz	Capacitor	Airflow Source Data	Features
034710000	AX4BT 1883JF	116	6.8	15595	164	0.5	90	1.4	200	3	400	N/A	A570-6	TERMINALS
034953000	AX4BL 1883JF	116	6.8	15595	164	0.5	90	1.4	200	3	400	N/A	A570-6	LEADS
035284000	AX4BM 1883JF	116	6.8	15595	164	0.5	90	1.5	200	3	400	N/A	A570-6	CONNECTOR
033603000	AX4L 1883XF	111	4.7	14000	182	0.7	85	1.4	200	3	400	N/A	A614-23C	LEADS
034869000	AX4DL 2723XF	88	12.3	23200	118	0.8	75	1.5	200	3	400	N/A	A576-14	LEADS
034752000	AX4CM 2723JF	86	12.8	23200	137	0.8	100	1.5	200	3	400	N/A	A490-5	CONNECTOR, SQUARE FLANGE
035065000	AX4CM 2723JF	86	12.8	23200	137	0.8	100	1.5	200	3	400	N/A	A490-5	CONNECTOR, SQUARE FLANGE
041278000	AX4CL 2723JF	86	12.8	23200	137	0.8	100	1.7	200	3	400	N/A	A490-5	LEADS, SQUARE FLANGE
035883000	AX4CL 2723JF	86	12.8	23200	137	0.8	100	1.8	200	3	400	N/A	A490-5	LEADS, SQUARE FLANGE
041370000	AX4GL 2723QF	86	12.8	23200	118	0.8	75	1.5	200	3	400	N/A	A490-5	LEADS
034841000	AX4DL 2824XF	80	7.7	20200	76	0.3	100	1.2	200	3	400	N/A	A758-25	LEADS
041394000	AX4CM 2824XF	77	7.7	20200	76	0.3	100	1.5	200	3	400	N/A	A758-25	CONNECTOR

AXIMAX 4 - AC*

AX4AL



AX4CM



*Part Number Specific Drawings Available Upon Request



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