ROTRON / AMETEK®

Rotron AXIMAX® 3R
Small Vaneaxial Fans

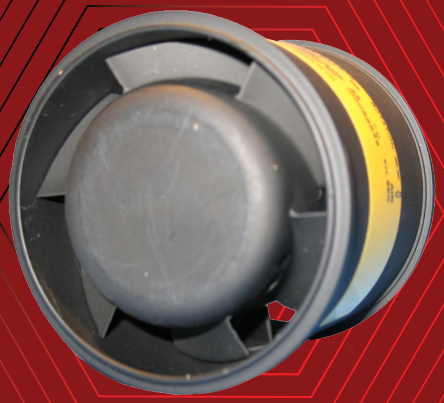
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General Small Vaneaxial Information

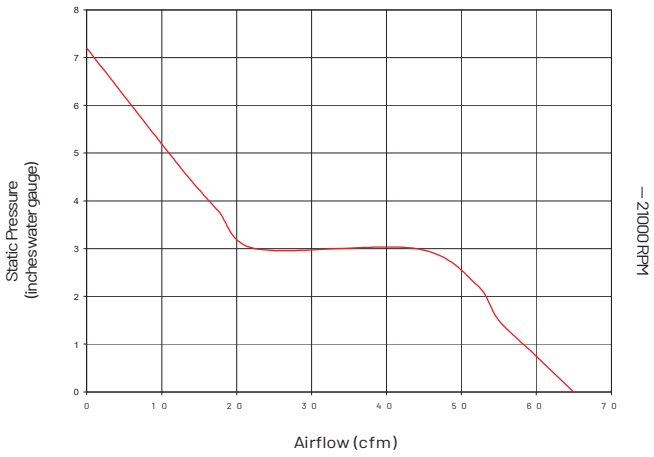
Small Vaneaxial Fans are compact, high-speed fans whose airflow is parallel to the motor shaft. The impeller and guide vanes are of airfoil construction for maximum aerodynamic efficiency and minimum acoustical noise.

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.

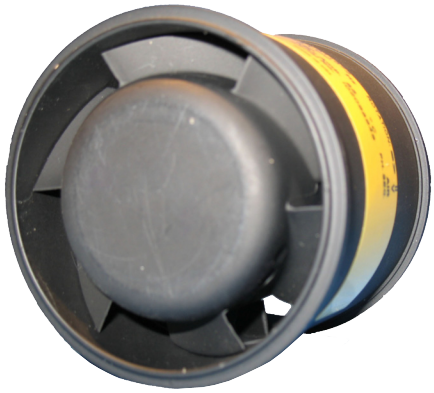
Small Vaneaxial Fans come in a variety of voltages and frequencies and are available with lead wires, terminal blocks and MS connectors. Most units are available with an optional internal Fan Performance Sensor (FPS) or an external Low Speed Warning Device (LSWD).

Rotron AXIMAX® 3R

Aximax 3R Series: Maximum Performance Curve*



*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]

[1] See specific part-number drawing for complete product dimensions
[2] Please 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 5) with an integral lubricant reservoir for a long, maintenance-free life
- Motors have stator winding insulation which is rated for continuous duty for Class H

Options/Accessories

- Finger Guard
- Synclamp
- 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 requirements of MIL-B-23071 and other applicable U.S. military and commercial aerospace specifications[2]
- Max free delivery airflow of 92 CFM at 400 Hz
- Ambient temperature range: -54°C to 125°C
- Acoustic levels as low as 81.0 dBA

DC Line Powered Units – E.C.D.C® [1]

- 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 commercial aerospace specifications[2]
- Max free delivery airflow of 113 CFM
- Ambient temperature range: -54°C to 85°C
- Acoustic levels as low as 74.6 dBA

[1] Airflow, maximum ambient and acoustic levels will vary depending on design parameters
[2] Please call for further information concerning applicable U.S. military and commercial aerospace specifications

Optional DC-AC Inverters and AC-AC Converters for AC Powered Models[1]

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

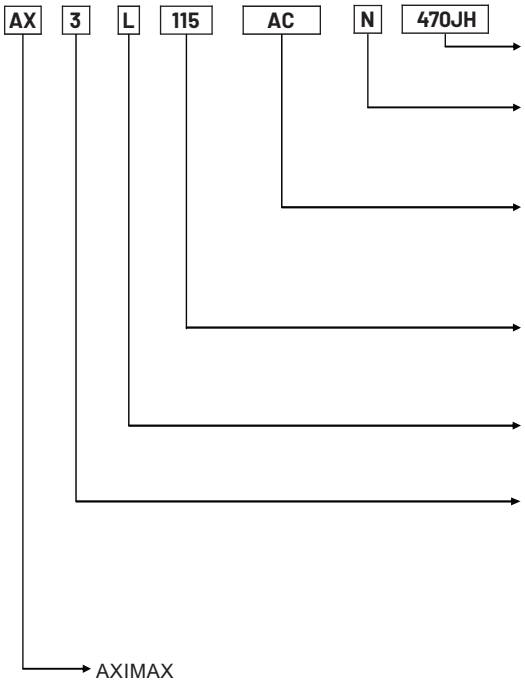
[1] See Accessories: Power Conversion

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

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.



EXAMPLE: AX3L, 115 AC, N, 470JH

STD	CASE	BLADES
3	Std. Servo Rings	4 Blades
3A	Std. Servo Rings	6 Blades
3E	Special Case, High Pressure	11 Blades
3R	Special Case, High Pressure - Low Volume Smaller Hub O.D.	6 Blades
3RA	3R Case/ Flow L	6 Blades Cut Down

* "X" IN ANY POSITION DENOTES SPECIAL FOR THAT FEATURE
* * TERMINAL BLOCK AND MS CONNECTOR NOT AVAILABLE ON AX3R/ 3RA

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

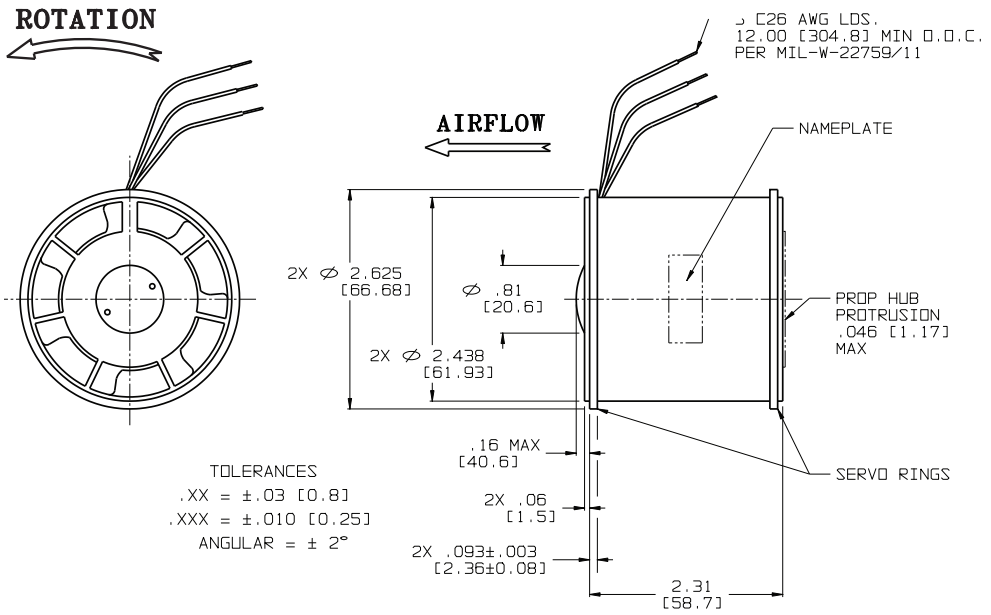
Part #	Prod. Desc.	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (°C)	Weight (lbs)	Volts	Phase	Hz	Capacitor	Airflow Source Data	Features
035724000	AX3RL 1033YH	64	6.7	20800	76	0.7	125	1.0	115	1	400	1.0/220	A163-10	LEADS, FPS
022172000	AX3RL 1034JH	63	7.1	21000	65	0.2	125	1.0	200	3	400	N/A	A368-9	LEADS

Standard Product Offering of DC Line Powered Models

Part #	Prod. Desc.	Fbw (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (°C)	Weight (lbs)	Volts (DC)	Airflow Source Data	Features
012272000	AX3RAS 3845SF	98	3.6	22000	133	5.2	85	1.6	26	A711-19A	CONNECTOR, FPS, EMI FILTER
012107000	AX3RAMX 318SF	74	2.1	19600	94	3.3	85	1.5	28	A716-1	CONNECTOR, FPS

AXIMAX 3R – AC*

AX3RL



*Part Number Specific Drawings Available Upon Request

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Specifications subject to change without notice