ROTRON / AMETEK®

Rotron MINIMAX®- AC Small Vaneaxial Fans

Small Vaneaxial Fans

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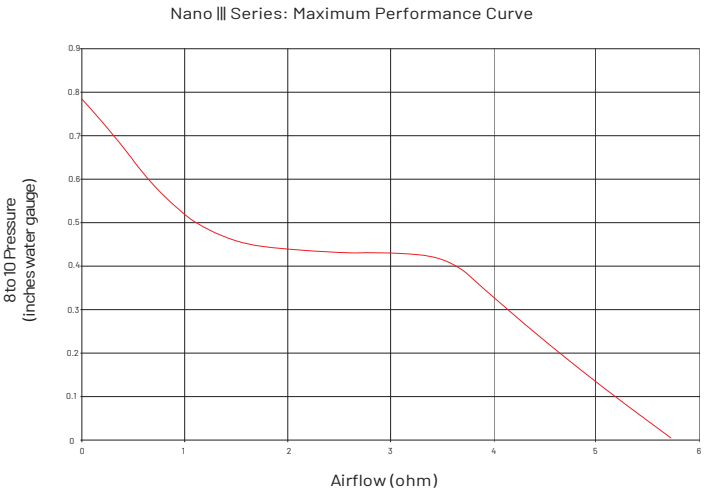
General Small Vaneaxial Information

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.

Rotron MINIMAX®- AC



*Individual Performance Curve Characteristics Available Upon Request



General

- Physical envelope: 1.25" Dia. x 1.54" L[1]
- Weight: approximately 2 oz.
- Specially designed for spot cooling of electronics and optics
- 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 black anodized coating per MIL-C-8725
- 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 F

Options/Accessories

- Custom Paints Available

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 10 CFM at 400 Hz.
- Ambient temperature range: -54 °C to 100 °C.
- Acoustic levels as low as 57 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

DC Line Powered Units – E.C.D.C®

- See standard Rotron Minimax® - DC product offering.

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.

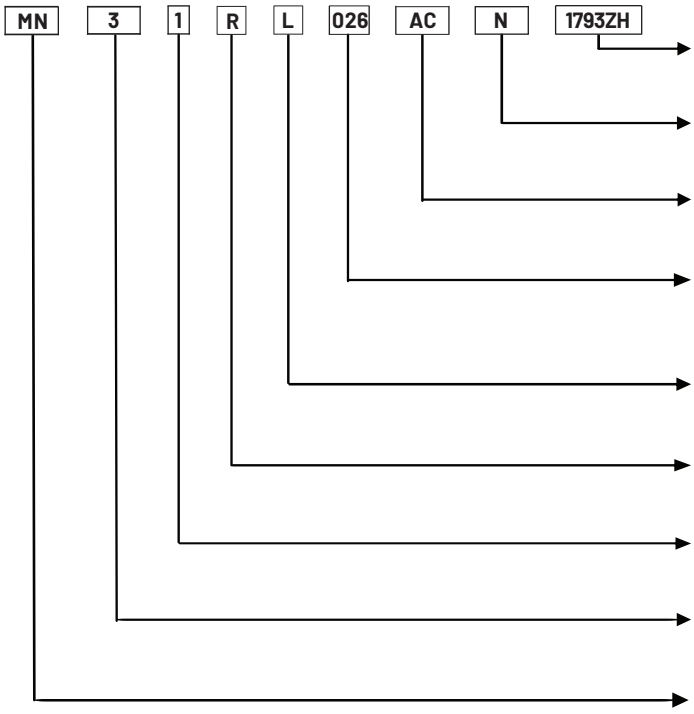
[1] See Accessories: Power Conversion

DELTAC® Converter Driven Units[1]

- 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.



MOTOR SERIES
PER ROTRON STD 3.201

FAN PERFORMANCE SENSOR
N - WITHOUT, S - WITH

VOLTAGE TYPE
AC - AC LINE OPERATED

NOMINAL DESIGN VOLTAGE
USE 3 DIGITS (ENTER "0" PRECEEDING SIGNIFICANT NUMBER(S) FOR 1 OR 2 DIGIT VOLTAGE)

HOOK-UP CONFIGURATION
L - LEADWIRES, T - TERMINALS

LOCATION OF & MOUNTING CONFIGURATION
F - FRONT (INLET END), R - REAR (OUTLET END)

MOUNTING CONFIGURATION
1 - SERVO RING, 2 - 2 POINT/FLANGE, 3 - 3 POINT/TABS, X - SPECIAL

DESIGN SERIES
2 - MARK 2, 3 - MARK 3

MINIMAXEXAMPLE: MN31RT, 26 AC, N, 1793ZH

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

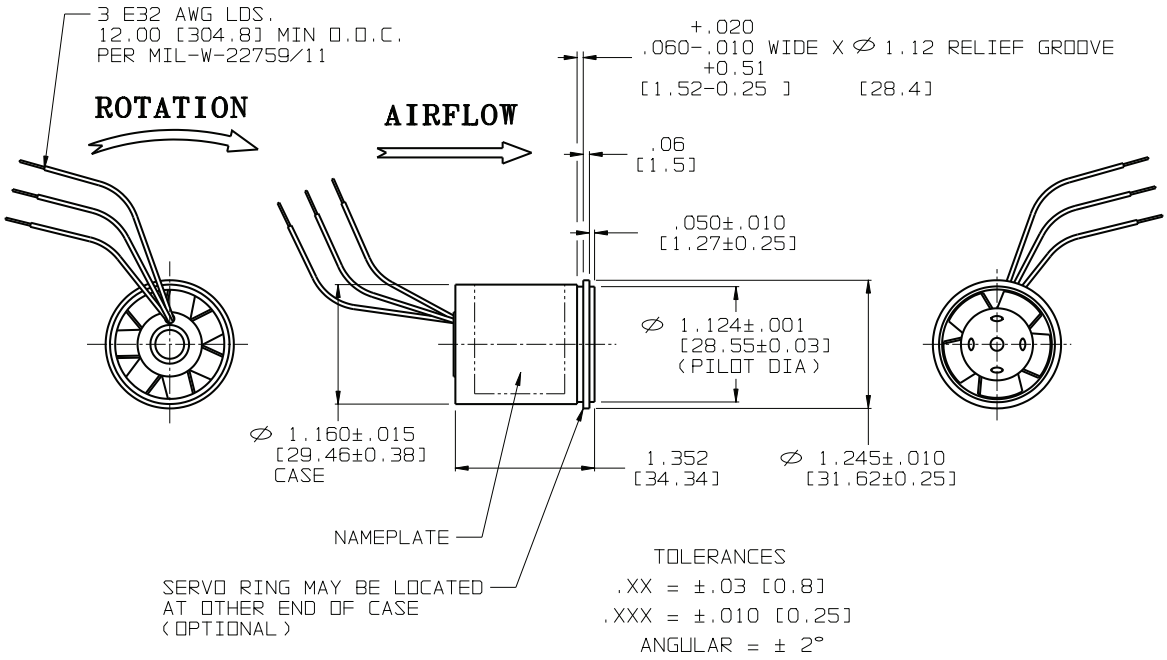
Ordering Information

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.

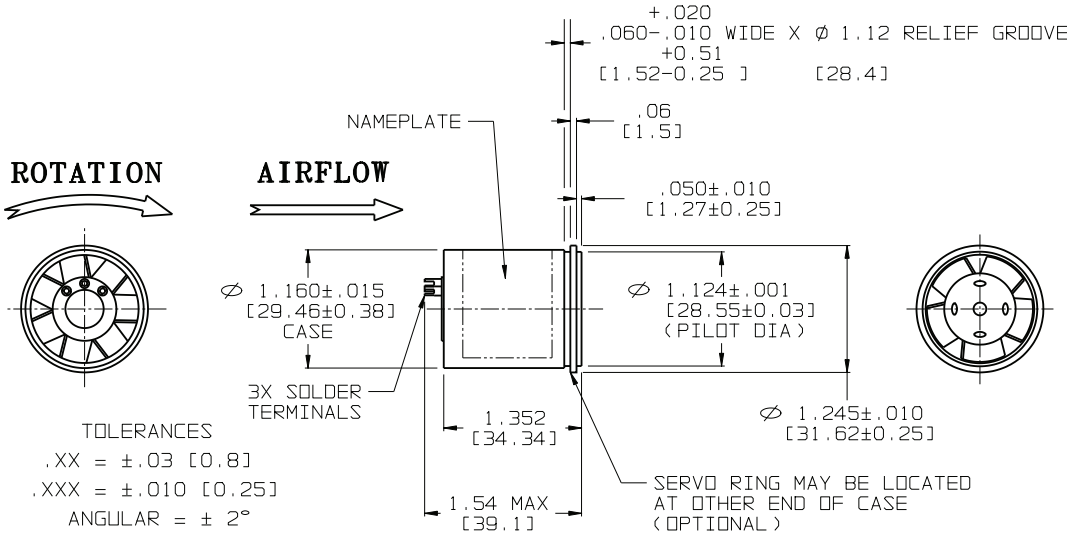
Standard Product Offering of DC Line Powered Models

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
035789000	MN32RL 1793ZH	10	0.7	23800	9	0.4	71	0.1	26	1	400	2.0/50	A424-19	LEADS
041494000	MN32RL 3093ZH	9	0.8	23800	7	0.4	71	0.1	115	1	400	2.0/50	A780-19	LEADS
034866000	MN31FL 1914ZH	5	0.2	12000	5	0.2	100	0.1	26	1	400	1.5/110	A481-26	LEADS

MN31RL

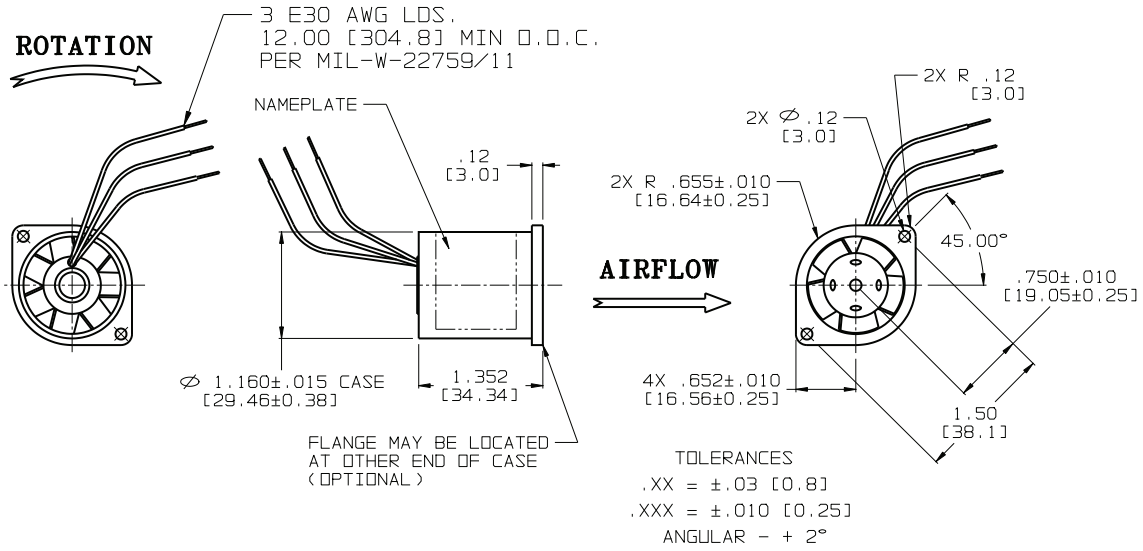


MN31RT



*Part Number Specific Drawings Available Upon Request

MN32RL



*Part Number Specific Drawings Available Upon Request

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Specifications subject to change without notice