ROTRON / AMETEK®

Rotron HF/ HFV/ HFG
Propeller Fans

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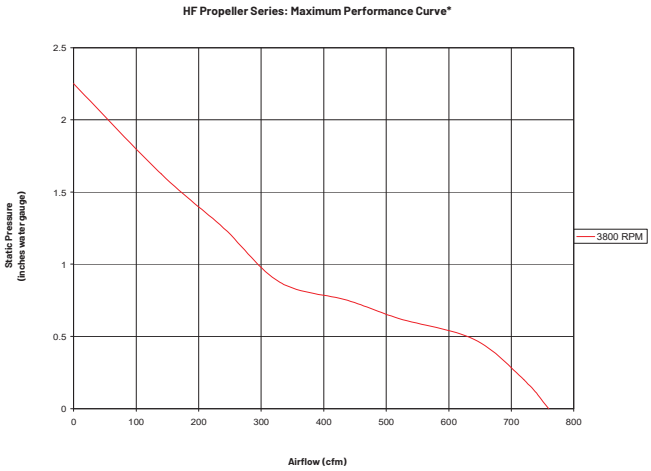
General Propeller Information

Propeller Fans have sheet metal blades, usually four or more in number, which are curved to provide an aerodynamic lift and are generally arranged without blade overlap (PREMAIRPROP™ blades overlap). These fans operate best at free delivery or at very low static pressures.

Propeller Fans are suitable for conditions which require movement of a large volume of air against low resistance to flow. These fans are recommended for flushing cooling air through small enclosures such as radio cabinets, instrument panels, and communications equipment shelters.

They come in a variety of voltages and frequencies and are available with lead wires only. Most units are available with an optional internal Fan Performance Sensor (FPS) or external Low Speed Warning Device (LSWD).

Rotron HF (8" propeller)



*Exact Performance Curve Characteristics Available Upon Request



General

- Physical envelope: 10.0" Dia. x 7.875" L 1.
- Weight: approximately 8.0 lbs.
- Specially designed for engine compartment cooling and cooling electronics in radio cabinets, instrument panels, radar systems, shipboard applications.
- HF – standard model, spun venturi.
- HFG – high shock resistance, cast venturi, reinforced mounting brackets and propeller.
- HFV – vibration isolator mounts.

[1]Note: See specific part-number drawing for complete product dimensions

Materials and Finishes

- Propellers stamped aluminum with a painted or anodized finish.
- Venturi rings available in spun or cast aluminum with a painted or anodized finish.
- Mounting brackets made of zinc plated steel.
- Stainless steel shaft motors and aluminum frames finished in black enamel.
- "Lubricated-for-Life" ball bearings.

Options/Accessories

- Screen Guard
- Rear Finger Guard
- 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.
- Max free delivery airflow of 1140 CFM at 50 Hz, 1140 CFM at 60 Hz, 1880 CFM at 400 Hz.
- Ambient temperature range: -54 °C to 125 °C.

[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®

- 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.
- Free delivery airflow of 1283 CFM.
- Ambient temperature range: -54 °C to 125 °C.

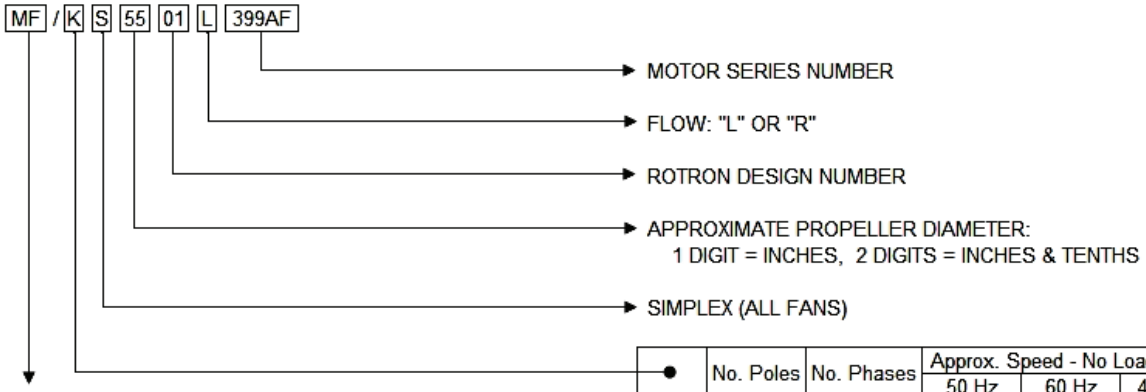
Optional DC-AC Inverters and AC-AC Converters for AC Powered Models

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.

Unit Description Key

The unit description key is for reference only and should not be confused with an order form. 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.



FAN MODEL:

MF = 5.5" FAN
MFV = 5.5" FAN WITH VIBRATION ISOLATOR
NF = 6.5" FAN
NFV = 6.5" FAN WITH VIBRATION ISOLATOR
NFG = 6.5" FAN (CAST VENTURI, REINFORCED SPIDER)
HF = 8" FAN
HFV = 8" FAN WITH VIBRATION ISOLATOR
HFG = 8" FAN (CAST VENTURI, REINFORCED SPIDER)
JFG = 10" FAN
JFGV = 10" FAN WITH VIBRATION ISOLATOR

●	No. Poles	No. Phases	Approx. Speed - No Load (Ref.)		
			50 Hz	60 Hz	400 Hz
A	2	3	2900	3500	-
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

Note: Dual frequency or dual pole motors designated by using 2 digits. Ex: "KM" = 2 pole 10 50/60 Hz, 6 pole 10 400 Hz

MODEL MF & MFV

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.	Motor Motor Series	Variants Line Voltage
KS-801	DA-1	364AF	115	1	50 60	2.0 2.0	2850 3320	54 60	.66 .56	1.6 1.6	450 520	364BF 364CF	115/230 230
LS-801	DA-1	268AF	115	1	50 60	2.0 2.0	1475 1750	31 25	.37 .27	.69 .67	215 255		
AS-801	TA-3	105JF	220 200-230	3	50 60	-	2825 3300	41 45	.21 .17	.50 .50	410 480		
PS-801	DA-1	272WF	200	3	400	-	3780	111	.93	1.6	580	363WF 505WF	416 115
KS-802 A	DA-1	564AF	115	1	50 60	3.0 3.0	2840 3300	57 66	.64 .58	1.6 1.6	590 695	564BF 564CF	115/230 230
LS-802A	DA-1	268AF	115	1	50 60	2.0 2.0	1470 1760	32 27	.38 .29	.67 .67	300 368		
BS-802 A	DA-1	254JF	220 200-230	3	50 60	-	1475 1750	62 45	.43 .35	.82 .82	290 350		
PS-802 A	DA-2	270WF	200	3	400	-	3875	125	2.25	4.3	750	277WF	115
KS-802	DA-2	329AF	115	1	50 60	4.0 4.0	2825 3275	72 90	.79 .81	2.4 2.3	660 780	329BF 329CF	115/230 230
BS-802	DA-1	254JF	220 200-230	3	50 60	-	1480 1760	74 34	.42 .28	.80 .70	350 420		
PS-802	DA-3	594WF	200	3	400	-	3825	220	2.15	4.15	880		
KS-803	DA-3	328AF	115	1	50 60	2.5** 2.5**	2890 3320	110 170	1.2 1.5	4.3 4.2	900 1040	328BF 328CF	115/230 230
LS-803	DA-1	268AF	115	1	50 60	2.0 2.0	1430 1690	34 33	.38 .32	.67 .66	430 510		
BS-803	DA-1	254JF	220 200-230	3	50 60	-	1470 1720	64 40	.42 .28	.80 .70	430 520		
PS-803	DA-3	594WF	200	3	400	-	3700	290	2.3	4.2	1125		

MECHANICAL SPECIFICATIONS

Lbs. (Kg.) — Inches (mm)

Type	Approx. Weight	Dimension "L" Max. Vibration Isolators With	Dimension "L" Max. Vibration Isolators Without	Type	Approx. Weight	Dimension "'L" Max. Vibration Insulators With	Dimension "'L" Max. Vibration Insulators Without
KS-801	5.0 (2,3)	6.25 (158,8)	6.25 (158,8)	**KS-802**	6.0 (2,7)	6.75 (171,5)	6.75 (171,5)
LS-801	5.0 (2,3)	6.25 (158,8)	6.25 (158,8)	**BS-802**	5.0 (2,3)	6.25 (158,8)	6.25 (158,8)
AS-801	3.5 (1,6)	6.375 (161,9)	6375 (161,9)	**PS-802**	80 (3,6)	NA (200,0)	7875
PS-801	5.0 (2.3)	6.25 (158,8)	6.25 (158,8)	**KS-803**	80 (3,6)	NA	7.875 (200,0)
KS-802A	5.0 (2.3)	6.25 (158,8)	6.25 (158,8)	**LS-803**	5.0 (2,3)	6,25 (158,8)	6.25 (158,8)
LS-802A	5.0 (2,3)	6.25 (158,8)	6.25 (158,8)	**BS-803**	5.0	6.25	6.25
BS-802A	5.0 (2,3)	6.25 (158,8)	6.25 (158,8)	**PS-803**	(2,3) 8.0	(158,8) NA	(158,8) 7.875
PS-802A	6.0 (2,7)	6.75 (171,5)	6.75 (171,5)		(3,6)		(200,0)

† Running capacitors not normally supplied by Rotron
For 3-phase motors all voltages are phase-to-phase
Capacitor voltage rating are 220 VAC unless otherwise specified
* * Capacitor rated at 330 VAC

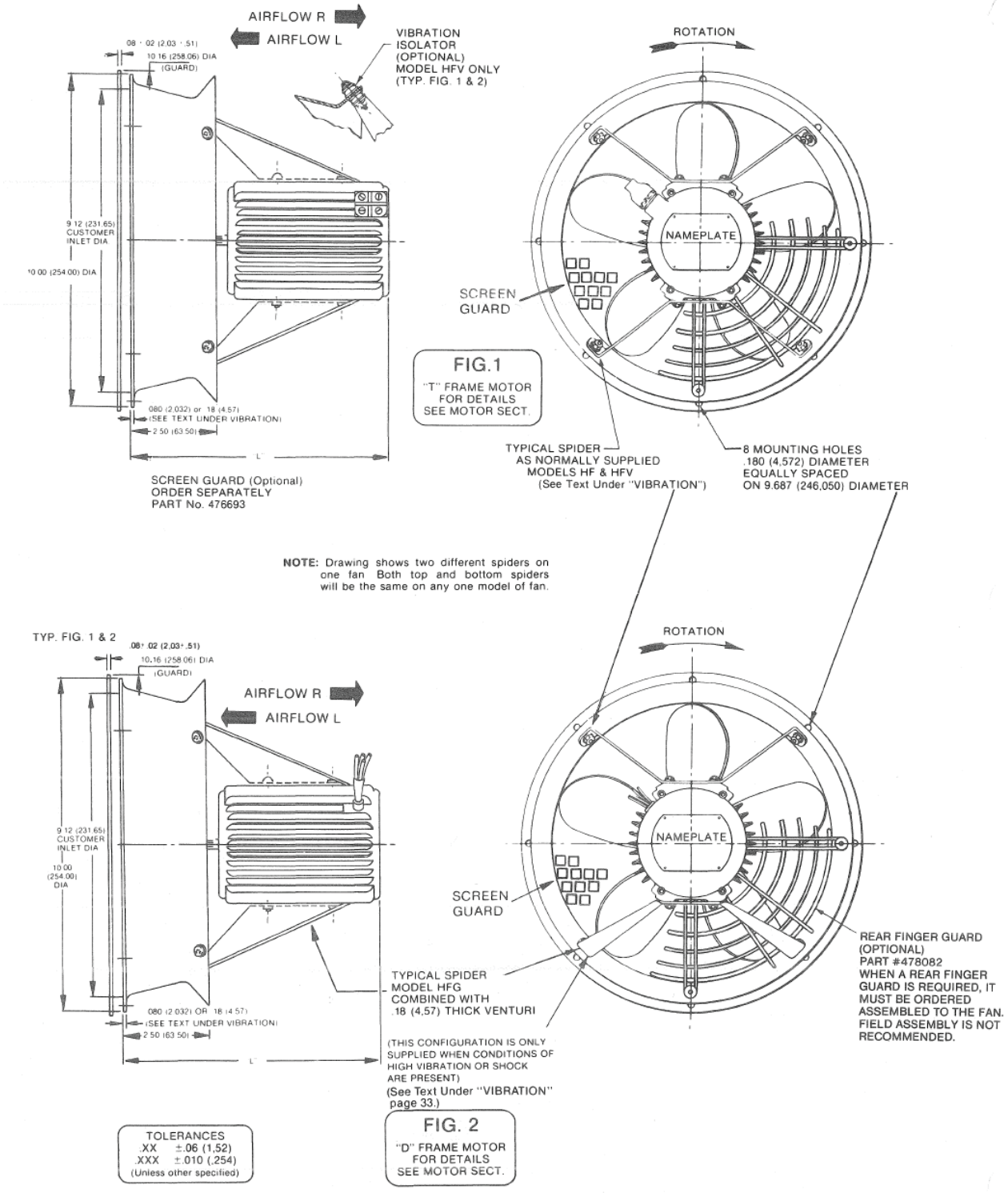
Note: HFG model (with cast venturi 0.18" thick) is available upon request

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.

PROPELLER FANS

MODEL HF & HFV



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Specifications subject to change without notice