ROTRON / AMETEK®

Rotron NF & NFV & NFG
Propeller Fans

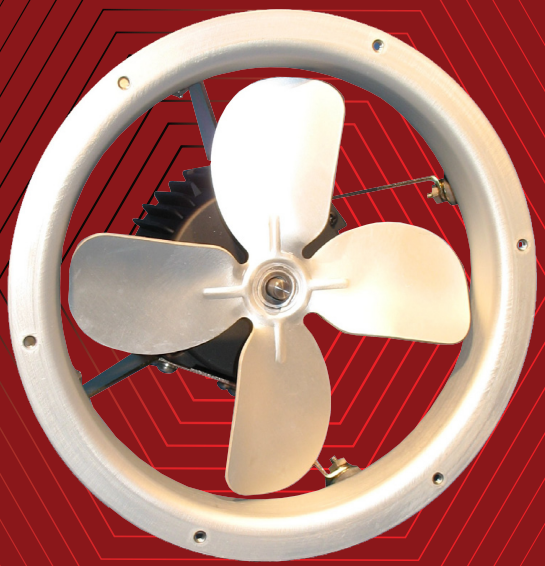
NORTH AMERICA
T: +1 845-679-1361
F: +1 845-679-1870

UNITED KINGDOM
T: +44 (0) 1932 765822
F: +44 (0) 1932 761098

EUROPE
T: +49 8145 951767
F: +49 8145 951768

ASIA PACIFIC
T: +65 6484 2388
F: +65 6481 6588

www.rotron.com



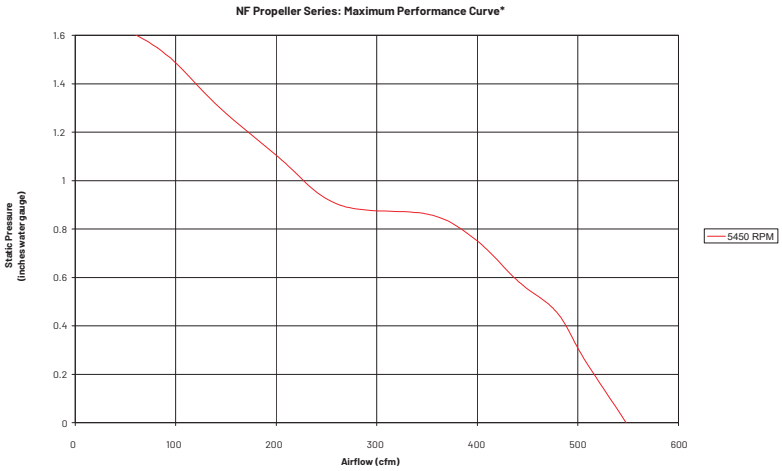
General Propeller Information

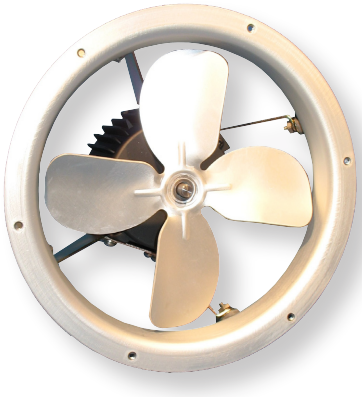
Propeller Fans have sheet metal blades, usually four or more in number, which are curved to provide an aerodynamic lift and are generally arranged without blade overlap (PREMAIRPROP™ blades overlap). These fans operate best at free delivery or at very low static pressures.

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 NF (6.5" propeller)





*Exact Performance Curve Characteristics Available Upon Request

General

- Physical envelope: 8.5" Dia. x 4.94" L 1.
- Weight: approximately 5.0 lbs.
- Specially designed for cooling electronics in radio cabinets, instrument panels, radar systems and shipboard applications.
- NF – standard model, spun venturi.
- NFG – high shock resistance, cast venturi, reinforced mounting brackets and propeller.
- NFV – 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 which are 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 360 CFM at 50 Hz, 360 CFM at 60 Hz, 545 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

DC Line Powered Units – E.C.D.C®

- May be constructed for this model fan with similar properties to that of AC line powered units.

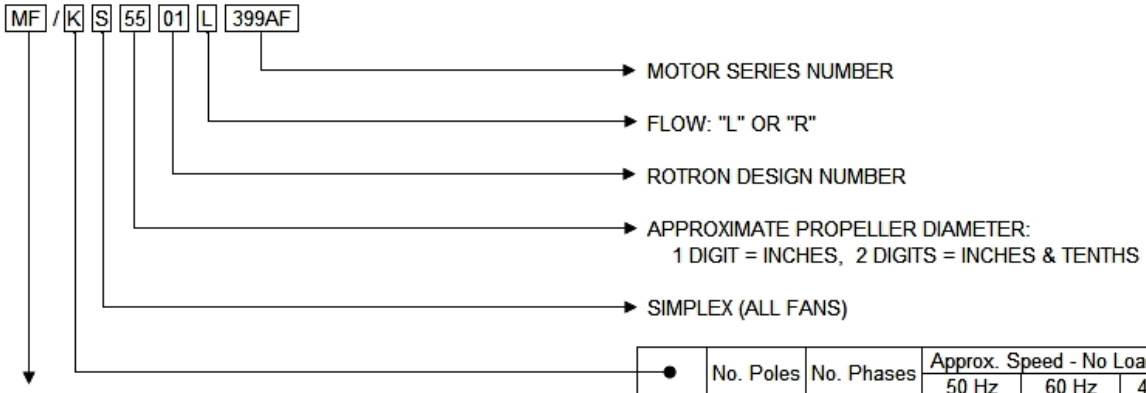
Optional DC-AC Inverters and AC-AC Converters for AC Powered Models

BATAC® Inverter Driven Units

- AC square wave fans are 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

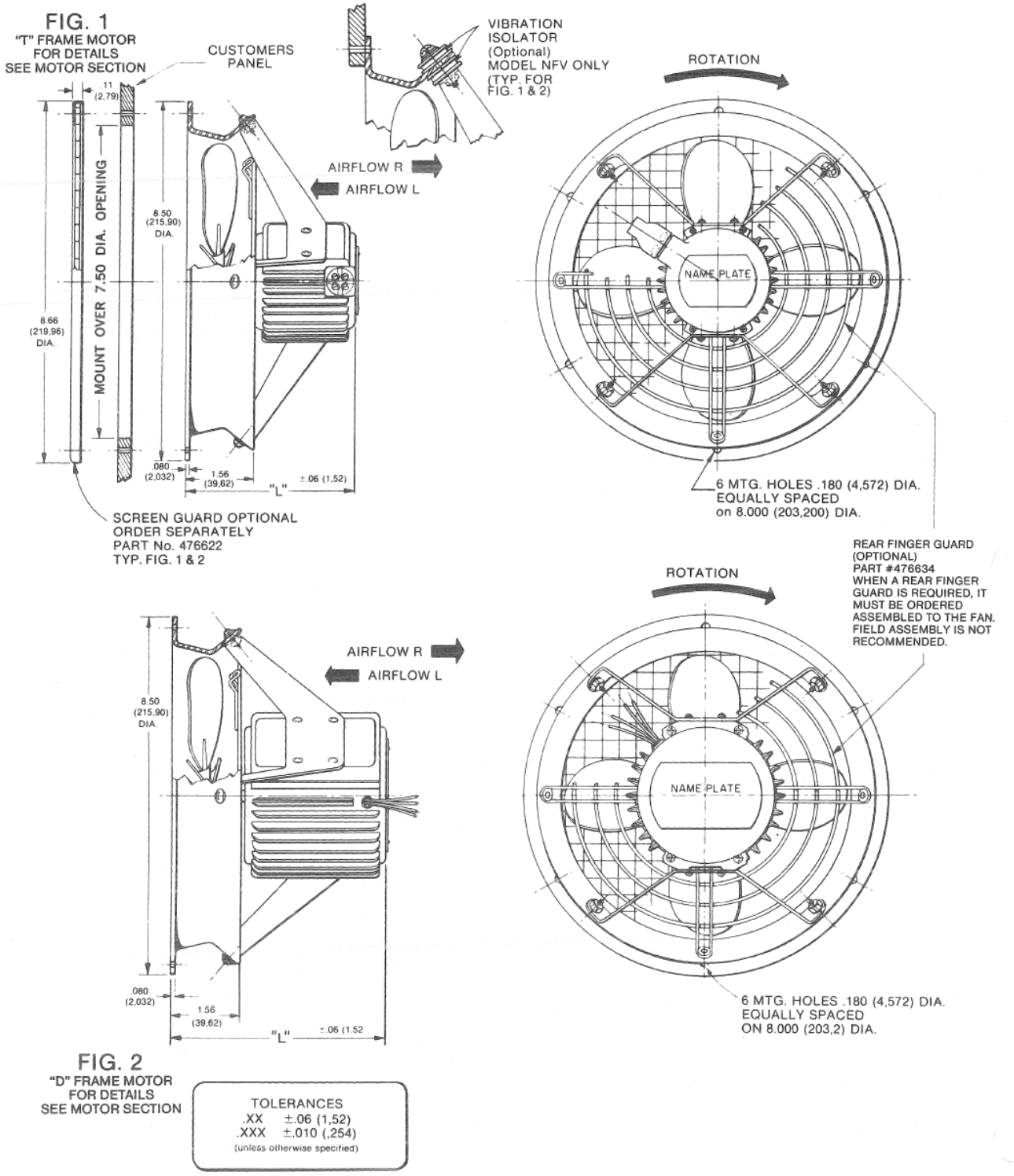
Note: Dual frequency or dual pole motors designated by using 2 digits. Ex: "KM" = 2 pole 10 50/60 Hz, 6 pole 10 400 Hz

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 NF & NFV



MODEL MF & MFV

ELECTRICAL SPECIFICATIONS

See Hookup Section for Motor Wiring

Type	Frame	Series	Volts	Phase	Hz	Cap.t Mfd.	Nom. RPM	Full Load Watts	Line Amps	Lock. Rotor Amps	Air CFM at Free Del.	Motor Series	Variants Line Voltage
KS-6501	TA-2	110AF	115	1	50	1.0**	2800	24	.24	.38	280	110CF	230
					60	1.0	3175	26	.23	.38	300	110BF	115/230
KS-6501	TA-3	91AF	115	1	50	1.0**	2925	28	.30	.64	280	173CF	230
					60	1.0	3425	29	.26	.62	340		
LS-6501	TA-2	441AF	115	1	50	2.0	1450	23	.21	.27	145		
					60	2.0	1700	23	.20	.27	170		
AS-6501	TA-2	115JF	115	3	50	-	2800	35	.23	.44	280	107JF	200
					60		3300	31	.26	.50	300	273JF	440
BS-6501	TA-2	178JF	220	3	50	-	1450	12.5	.07	.11	130		
			200-230		60		1750	10	.06	.10	160		
PS-6501	DA-1	134AF	115	1	400	1.0**	3760	65	.84	1.5	380		
PS-6501	DA-1	272WF	200	3	400	-	3900	80	1.55	2.9	370	363WF	416
												505WF	115
NS-6501	DA-1	135JF	200	3	400	-	5450	93	.44	1.91	545	393JF	416
												587JF	115
NS-6501	DA-1	376CF	115		400	1.0	5100	94	1.0	1.65	480		
Dual Frequency													
KPS-6501	DA-1	305FF	115	1	60	1.0**	3420	25	.23	.65	328		
					400	1.0	3820	77	.69	.90	360		

MECHANICAL SPECIFICATIONS

Lbs. (Kg.) — Inches (mm)

Type	Approx. Weight Lbs.(kg)	"L" Inches(mm)	Type	Approx. Weight Lbs.(kg)	"L" Inches(mm)
KS-6501	2.1 (0.95)	3.87 (98.3)	**PS-6501**	5.0 (2.3)	4.94 (125.5)
KS-6501	31 (1,4)	5.06 (128.52)	**NS-6501**	5.0 (2.3)	4.94 (125,5)
LS-6501	2.1 (0.95)	3.87 (98.3)			
AS-6501	2.1 (0,95)	3.87 (98.3)	**Dual Frequency KP5-6501**	5.0 (2.3)	4.94 (125,5)
BS-6501	2.1 (0,95)	3.87 (98.3)			

† 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: NFG-6501 (with cast venturi 0.18" thick) is available upon request

www.rotron.com

NORTH AMERICA
T: +1 845-679-1361
F: +1 845-679-1870

UNITED KINGDOM
T: +44 (0) 1932 765822
F: +44 (0) 1932 761098

EUROPE
T: +49 8145 951767
F: +49 8145 951768

ASIA PACIFIC
T: +65 6484 2388
F: +65 6481 6588

Specifications subject to change without notice