

# Phoenix Manufacturing, Inc.

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## SPECIFICATION DATA INDUSTRIAL EVAPORATIVE FAN COOLER

MODELS: 

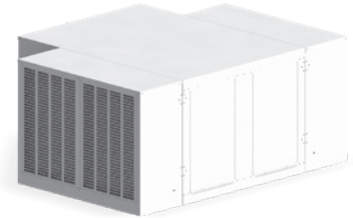
RF4221	RF4223	RF4821	RF4823	RF4833	RF4853
RF4222	RF4224	RF4822	RF4824	RF4834	RF4854



RF42 Series



RF48 Series



RF4853/4854

- Units are UL Listed to UL Standard 507
- High quality architectural grade Peblar XT® finish
- Galvanized sheet steel is zinc coated at weight rated G40 or G90
- Multi-layer bottom pan finish

- Up to 30,000 CFM capacity
- Three Phase EISA motors are NEMA MG-1 table 12-12 compliant
- Motor, belt, pump & float included
- Bearings have an L10 bearing life of 39,600 hours

### PERFORMANCE

**AIR DELIVERY** - data published and derived from test conducted in accordance with A.M.C.A (Air Movement and Control Assoc.) standard 210.

**BEARING LIFE** - L10 bearing life of 39,600 hours is based on ABMA standard 9/ISO standard 281.

**MOTORS** - recognized under UL component standard #1004 for motor certification.

**SINGLE PHASE MOTORS** - tested under UL standard 507 for locked rotor and heat rise protection.

**THREE PHASE MOTORS** - EISA motors are NEMA MG-1 table 12-12 construction.

**PUMPS** - recognized under the UL standard #778 for operating water pumps with thermal overload and locked rotor protection.

### CONSTRUCTION

**EVAPORATIVE MEDIA** - specifically corrugated cellulose material, impregnated with insoluble anti-rot salts and rigidifying saturates.

**SEALANT** - water immersion per ASTM D870.

**FLEXIBILITY** - per ASTM D756.

**HOT DIPPED GALVANIZED SHEET STEEL** - is ASTM A653, type CS, with zinc coating weights rated G40 or G90.

**CORROSION RESISTANCE** - per ASTM B117.

**POLYMERIC MATERIALS** - listed in accordance with UL 94 and 746C.

**PENCIL HARDNESS** - per ASTM D3363.

**IMPACT RESISTANCE** - per D2794.

**FLEXIBILITY** - per ASTM D522.

**SURFACE BURNING CHARACTERISTICS**- of building materials (best rating) per UL 723 and ASTM E-84.

**PEBLAR XT®** - is our one coat TGIC Polyester Powder Coating system that is applied over 5 stage zinc phosphate prepared sheet steel surfaces for protection against atmospheric corrosion. This coating system meets the requirement of UL 1332 - organic coatings for steel enclosures of outdoor use electrical equipment.



UL Listed when used in non-ducted, single discharge applications as shown.



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Performance shown is installation Type B - Free Inlet, duct outlet. Power Rating (B.H.P.) includes transmission losses. Performance ratings include the effects of evaporative media in the airstream.

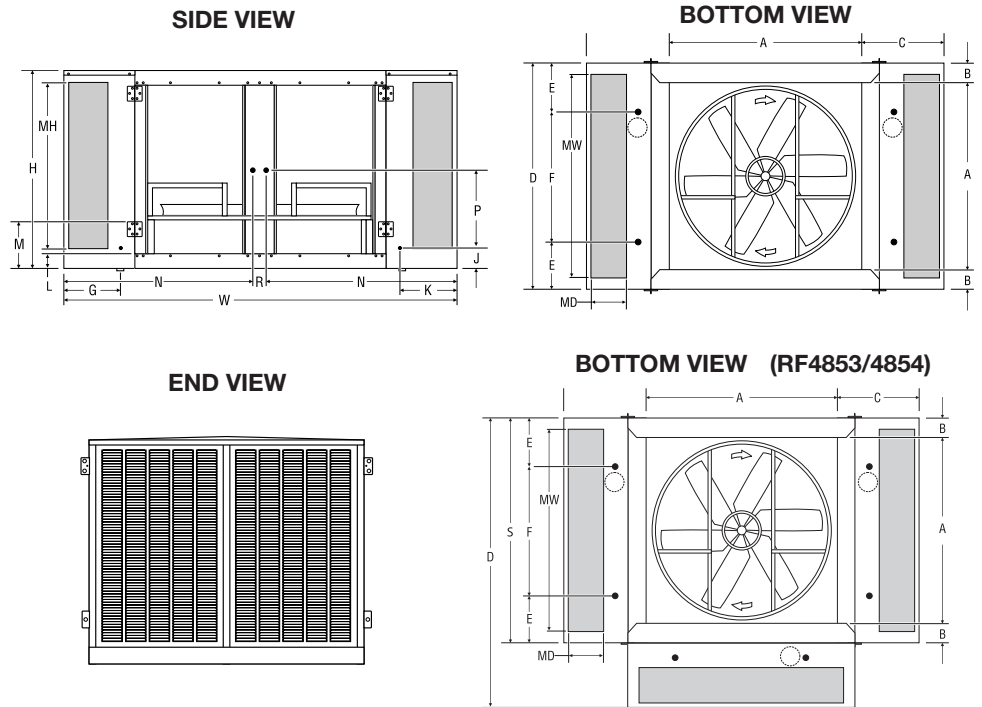
### Electrical Data & Performance

Model	Motor Specifications					Pump Volts/Amps	Motor Amps	Tested Air Flow (CFM) @ Specified Static Pressure (inches of water)			
	HP	BHP	Fan RPM	Voltage	Phase			0.0"	0.1"	0.2"	.25"
RF4221A	2	2.3	592	120	1	120/3.4	18.8	17,800	16,200	13,800	12,400
RF4222A	2	2.3	592	208-240	1	120/3.4	10.2 - 9.4	17,800	16,200	13,800	12,400
RF4223A	2	2.3	592	208-240	3	120/3.4	6.2 - 5.8	17,800	16,200	13,800	12,400
RF4224A	2	2.3	592	480	3	120/3.4	2.9	17,800	16,200	13,800	12,400
RF4821A	2	2.3	506	120	1	120/3.4	18.8	21,600	19,600	15,600	13,500
RF4822A	2	2.3	506	208-240	1	120/3.4	10.2 - 9.4	21,600	19,600	15,600	13,500
RF4823A	2	2.3	506	208-240	3	120/3.4	6.2 - 5.8	21,600	19,600	15,600	13,500
RF4824A	2	2.3	506	480	3	120/3.4	2.9	21,600	19,600	15,600	13,500
RF4833A	3	3.33	578	240	3	120/3.4	8.7	22,600	20,600	18,200	16,500
RF4834A	3	3.33	578	480	3	120/3.4	4.4	22,600	20,600	18,200	16,500
RF4853A	5	4.85	680	240	3	120/5.1	12.6	30,000	28,600	26,700	26,100
RF4854A	5	4.85	680	480	3	120/5.1	6.3	30,000	28,600	26,700	26,100

Pump Specifications				
Pump Model	Volts	AMPS	Watts	GPM @ 5' Head
PK60LA	120	1.7	105	7.3

1 pump per wet section is required

**NOTE:** All external wiring and components such as disconnects, motor starters, and over-current protection are to be field supplied and are not included as part of the evaporative cooler from the factory. A separate 120 Volt, 60 hertz, single phase, GFCI protected pump circuit is required to maintain UL Listing of the cooler.



### Engineering Data

Model	Fan Dimensions O.D.	Media Dimensions			Cabinet Dimensions				Discharge Dimensions			Drain Location Male Hose Thread			Water Service Opening is 1/4" I.D.		Bottom Pan		Electrical Service access is 7/8" I.D.			Approx. Weight	
		MH	MW	MD	H	W	D	S	A	B	C	E	F	G	J	K	L	M	N	P	R	Ship	Oper.
RF422_	42	34-1/2	60	8	39	96	62	na	46	8	25	13	36	13-1/2	5	13-1/2	3-1/2	12	46-3/8	19-1/2	3-1/4	725	925
RF482_	48	44-1/2	60	8	49	96	62	na	52	5	22	13	36	13-1/2	5	13-1/2	3-1/2	12	46-3/8	24-1/2	3-1/4	800	1000
RF483_	48	44-1/2	60	8	49	96	62	na	52	5	22	13	36	13-1/2	5	13-1/2	3-1/2	12	46-3/8	26-1/2	3-1/4	825	1025
RF485_	48	44-1/2	60	8	49	96	91	62	52	5	22	13	36	13-1/2	5	13-1/2	3-1/2	12	46-3/8	26-1/2	3-1/4	970	1400

**⚠ WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



# SUBMITTAL DATA

Project: \_\_\_\_\_  
Location: \_\_\_\_\_  
Architect: \_\_\_\_\_  
Engineer: \_\_\_\_\_  
Contractor: \_\_\_\_\_  
Submitted by: \_\_\_\_\_

**Date:** \_\_\_\_\_

Ref. No.	Cooler Model No.	Quantity	CFM	Static Pressure	HP	Volts	Phase
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

**Notes:** \_\_\_\_\_  
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