

Phoenix Manufacturing, Inc.

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SPECIFICATION DATA INDUSTRIAL EVAPORATIVE FAN COOLER

MODELS:

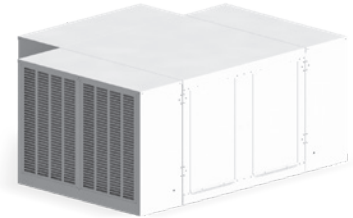
| | | | | | |
|--------|--------|--------|--------|--------|--------|
| RF4221 | RF4223 | RF4821 | RF4823 | RF4833 | RF4853 |
| RF4222 | RF4224 | RF4822 | RF4824 | RF4834 | RF4854 |



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.



All data, specifications and detail contained in this publication are intended as a general guide for using PHOENIX MANUFACTURING, INC. products. These products should not be used in design or construction without an independent evaluation by a qualified engineer or architect to verify the suitability of a particular product for use in a specific application. PHOENIX MANUFACTURING, INC. assumes no liability for failure resulting from the use or misapplication of computation, detail drawings and specifications contained herein. This publication contains the latest information available at the time of printing. PHOENIX MANUFACTURING, INC. reserves the right to make modifications and/or change materials of any of their products without prior notice or obligation. PHOENIX MANUFACTURING, INC. may not produce all of the products contained in this submittal. For product availability and the latest information regarding products contact PHOENIX MANUFACTURING, INC.

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.

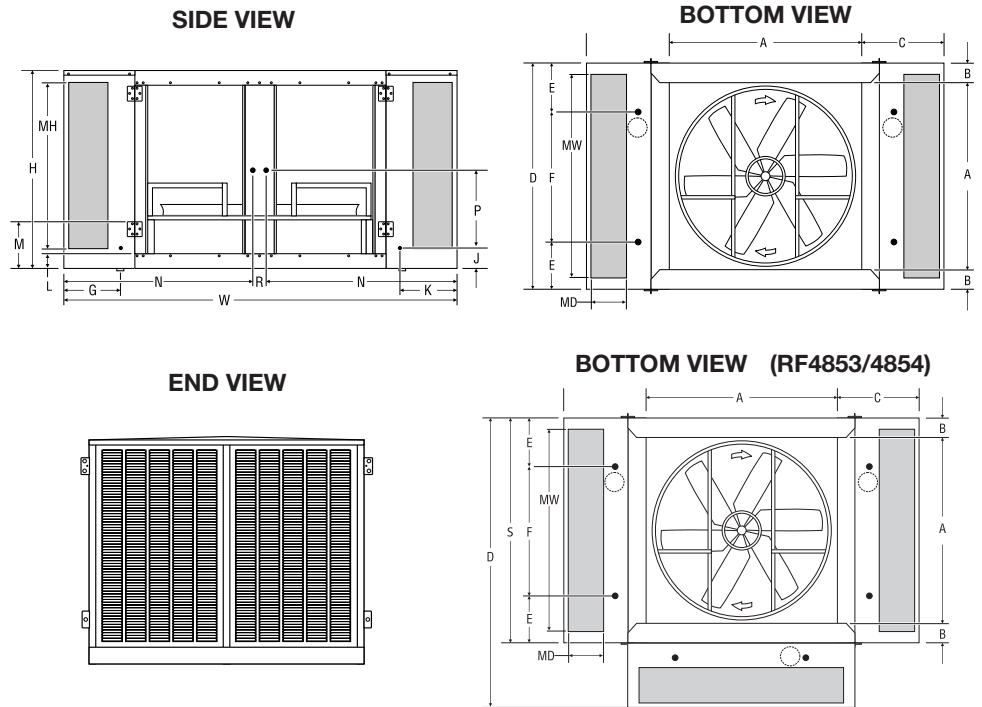
Electrical Data & Performance

| 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



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: _____

