

2021-2022

COMMERCIAL



FAN COOLERS

ENERGY EFFICIENCY WITH EXCEPTIONAL PERFORMANCE

Phoenix Manufacturing Inc.

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RIGID MEDIA COMMERCIAL FAN COOLERS

Rigid Media Commercial Fan Coolers, in the correct low static application, offer an energy efficient alternative to standard blower wheel units at a fraction of the operating cost. Designed for large areas with cooling needs to match, these units can save up to 70% in energy costs.

FEATURES

- · High Quality Architectural Grade Peblar XT® Finish
- · Heavy gauge galvanized steel construction
- · Up to 26,000 CFM capacity
- · Motors comply with US DOE Efficiency regulation 10 CFR Section 431 Subpart B or Subpart X
- · Motor, belt, pump & float included
- · Bearings have an L10 bearing life of 39,600 hours
- · Multi-Layer bottom pan finish
- · 70% Less Energy Costs than mechanical A/C
- · Meets or Exceeds Most Local & National Codes
- · U.L. Listed
- · 8" Rigid Media



MORE AIR - LESS ENERGY

These highly efficient, commercial-grade blades deliver more air while using less horsepower than a comparable sized blower wheel model. Designed for open space applications such as warehouses, factories, manufacturing areas, laundries etc., this specially designed, six-blade fan provides optimum air delivery.

U.L. LISTED FOR SAFETY

These high capacity units are U.L. Listed for safety when used in non-ducted, single discharge applications, as shown to the right. All units are completely pre-wired with factory installed and tested motor and circulating pump systems. This Phoenix Manufacturing, Inc. unit will meet or exceed most local and national codes.



2 & 3 HP RF SERIES - TWO WET SECTIONS



5 HP RF SERIES - THREE WET SECTIONS



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

ENGINEERING DATA

Technical information for the 3 & 5 Hp Aerocool Commercial Rigid Media Fan coolers

ELECTRICAL DATA AND AIRFLOW

| MODEL | | МОТ | OR SPECIFICAT | TIONS | | | PUMP | AIR FLOW (CFM) AT SPECIFIED STATIC PRESSURE (INCHES WATER) | | | | | | |
|---------|-----------------|-----|---------------|---------|-------|-----------|-----------------|--|--------|--------|--------|--------|--|--|
| NUMBER | NAMEPLATE HP | ВНр | FAN RPM | VOLTAGE | PHASE | AMPERAGE | VOLTS / AMPS | 0.0" | 0.1" | 0.2" | 0.25" | 0.3" | | |
| RF4833A | 3 | 3.2 | 562 | 208-240 | 3 | 8.3-7.6 | 120 / 3.4 | 22100 | 20100 | 17.600 | 16,200 | 15,000 | | |
| RF4834A | 3 | 3.2 | 562 | 480 | 3 | 3.8 | 120 / 3.4 | 22,100 | 20,100 | 17,600 | | 15,000 | | |
| RF4853A | 5 | 5.2 | 664 | 208-240 | 3 | 13.7-12.4 | 120 / 5.1 | 26.200 | 27.500 | 22.000 | 21.500 | 20.700 | | |
| RF4854A | 5 | 5.2 | 664 | 480 | 3 | 6.3 | 120 / 5.1 | 26,200 | 24,500 | 22,600 | 21,500 | 20,400 | | |

Performance shown is Free Inlet, duct outlet. Power Rating (B.H.P.) includes transmission losses. Performance ratings include the effects of evaporative media in the airstream. Model and performance data not AMCA certified.

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.

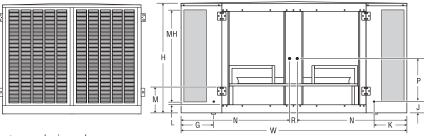
DIMENSIONAL DATA

| | FAN | | MEDIA | | | CAB | NFT | | DI | SCHAR | GF | DRAI | N LOC | ATION | | TER | вотто | OM PAN | | ECTRIC | | | ROX. | | | |
|--------|--------------------|------|--------|--------|----|-------|-----|----|----|--------|----|------|-------------------|-------|-------|--------------------------------|-------------|--------|--------------------|--------|-------|------------------|------|---|------|-------|
| MODEL | DIMENSION O. D. | | MENSIC | | | DIMEN | | | | MENSIC | | | INS ARE HOSE T | | WATER | VICE SERVICE IGS IS 1/4" | DEPTH RISER | | ELECTRICAL CERVACE | | | WEIGHT (LBS.) | | | | |
| | INCHES | | INCHES | INCHES | МН | MW | MD | Н | W | D | S | Α | В | С | E | F | G | J | K | L | М | N | P | R | SHIP | OPER. |
| RF483- | 48 | 44 ½ | 60 | 8 | 49 | 96 | 62 | | 52 | 5 | 22 | 13 | 36 | 13 ½ | 5 | 13 ½ | 3 ½ | 12 | 46 3/8 | 26 ½ | 3 1/4 | 825 | 1025 | | | |
| RF485- | 48 | 44 ½ | 60 | 8 | 49 | 96 | 91 | 62 | 52 | 5 | 22 | 13 | 36 | 13 ½ | 5 | 13 ½ | 3 ½ | 12 | 46 3/8 | 26 ½ | 3 1/4 | 970 | 1400 | | | |

PUMP REQUIREMENTS

| PUMP MODEL | VOLTS | AMPS | WATTS | GPM @ 5' HEAD |
|---------------|-------|------|-------|------------------|
| PK60LA | 120 | 1.7 | 105 | 7.3 |

A separate 120 volt, 60 hertz, single phase, GFCI protected pump circuit is required to maintain the UL Listing of the evaporative cooler. 1 pump per wet section is included.



AEROCOOL® Evaporative Coolers and components are designed and tested in accordance with one or more of the following standards or agencies:

AIR DELIVERY - Data published on this page is derived from tests conducted in accordance with Air Movement and Control Assoc. standard 210. **SEALANT** - Water immersion per ASTM D870.

FLEXIBILITY - per ASTM D756.

CORROSION RESISTANCE - per ASTM B117.

PENCIL HARDNESS - per ASTM D3363.

IMPACT RESISTANCE - per D2794.

FLEXIBILITY - per ASTM D522.

SPECULAR GLOSS - per ASTM D523.

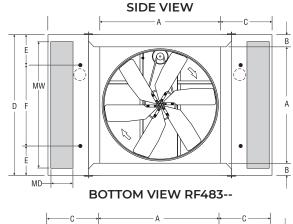
SURFACE BURNING CHARACTERISTICS - of building materials (best rating) per UL 723 and ASTM E-84.

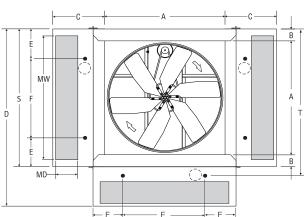
EVAPORATIVE MEDIA - Specially corrugated cellulose material, impregnated with insoluble anti-rot salts and rigidifying saturants.

 ${\bf PUMPS}\,$ - Classified per UL 778 & UL507 for operating water pumps with thermal overload and locked rotor protection.

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

MOTORS - Recognized under UL component standard #1004 for motor certification. Single phase motors tested under UL 507 standard for locked rotor and heat rise thermal protection.





ENGINEERING DATA

Technical information for the 2 Hp Aerocool Commercial Rigid Media Fan coolers

PERFORMANCE AIR ROYERLET AND OUTDOOL AND

Phoenix Manufacturing, Inc. certifies that the evaporative coolers shown below are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

AMCA CERTIFIED AIR FLOW AND ELECTRICAL DATA

| MODEL | MOTOR SPECIFICATIONS | | | | | | PUMP | AIR FLOW (CFM) AT SPECIFIED STATIC PRESSURE (INCHES WATER) | | | | | | |
|--------|----------------------|-----|---------|-----------|-------|-----------|-----------------|--|--------|--------|--------|--------|--|--|
| NUMBER | NAMEPLATE HP | ВНр | FAN RPM | VOLTAGE | PHASE | AMPERAGE | VOLTS / AMPS | 0.0" | 0.1" | 0.2" | 0.25" | 0.3" | | |
| RF4221 | 2 | 2.2 | 592 | 120 | 1 | 17.0 | 120 / 3.4 | | | | | | | |
| RF4222 | 2 | 2.2 | 592 | 240 | 1 | 8.5 | 120 / 3.4 | 15.000 | 17.500 | 12.500 | 11,300 | 10.500 | | |
| RF4223 | 2 | 2.2 | 592 | 208 - 240 | 3 | 5.9 - 5.5 | 120 / 3.4 | 15,800 | 14,500 | 12,500 | | 10,600 | | |
| RF4224 | 2 | 2.2 | 592 | 480 | 3 | 2.8 | 120 / 3.4 | | | | | | | |
| RF4821 | 2 | 2.2 | 506 | 120 | 1 | 17.0 | 120 / 3.4 | | | | | | | |
| RF4822 | 2 | 2.2 | 506 | 240 | 1 | 8.5 | 120 / 3.4 | 20.000 | 17.600 | 14,700 | 13,300 | 12,400 | | |
| RF4823 | 2 | 2.2 | 506 | 208 - 240 | 3 | 5.9 - 5.5 | 120 / 3.4 | 20,000 | 17,600 | 14,700 | | 12,400 | | |
| RF4824 | 2 | 2.2 | 506 | 480 | 3 | 2.8 | 120 / 3.4 | | | | | | | |

Performance certified is for installation Type B - free inlet, ducted outlet. Power Rating (B.H.P.) includes transmission losses. Performance ratings include the effects of evaporative media.

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.

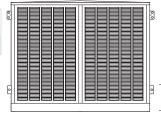
DIMENSIONAL DATA

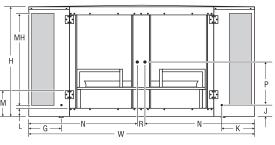
| | FAN M | | MEDIA | | (| ABINE | т | DI | SCHAR | GF | DRAI | N LOCA | ATION | | TER | вотто | M PAN | | ECTRIC | | | ROX. |
|--------|------------------------------|------|--------|----|----|--------|----|----|--------|----|------|--------------------|-------|-------|--|-------|-------|--------|-----------------------|-------|------------|-------------|
| MODEL | DIMENSION O. D. INCHES | | MENSIC | | | IENSIO | | | MENSIC | | | INS ARE HOSE TI | | WATER | SERVICE WATER SERVICE OPENINGS IS 1/4" | | RISER | ELECT | RICAL SE CESS 7/8" | RVICE | WEI (LE | GHT BS.) |
| | INCHES | МН | MW | MD | Н | W | D | Α | В | С | E | F | G | J | K | L | М | N | Р | R | SHIP | OPER. |
| RF422- | 42 | 34.5 | 60 | 8 | 39 | 96 | 62 | 46 | 8 | 25 | 13 | 36 | 13 ½ | 5 | 13 ½ | 3 ½ | 12 | 46 3/8 | 19 ½ | 3 1/4 | 725 | 925 |
| RF482- | 48 | 44.5 | 60 | 8 | 49 | 96 | 62 | 52 | 5 | 22 | 13 | 36 | 13 ½ | 5 | 13 ½ | 3 ½ | 12 | 46 3/8 | 24 ½ | 3 1/4 | 800 | 1000 |

PUMP REQUIREMENTS

| PUMP MODEL | VOLTS | AMPS | WATTS | GPM @ 5' HEAD |
|---------------|-------|------|-------|------------------|
| PK60LA | 120 | 1.7 | 105 | 7.3 |

A separate 120 volt, 60 hertz, single phase, GFCI protected pump circuit is required to maintain the UL Listing of the evaporative cooler. 1 pump per wet section is included.





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EVAPORATIVE MEDIA - Specially corrugated cellulose material, impregnated with insoluble anti-rot salts and rigidifying saturants.

SEALANT - water immersion per ASTM D870.

FLEXIBILITY - per ASTM D756.

CORROSION RESISTANCE - per ASTM B117.

PENCIL HARDNESS - per ASTM D3363.

IMPACT RESISTANCE - per D2794.

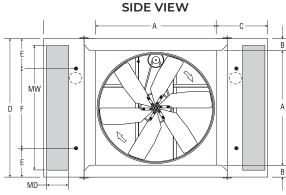
FLEXIBILITY - per ASTM D522.

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

 $\ensuremath{\textbf{SINGLE}}$ $\ensuremath{\textbf{PHASE}}$ $\ensuremath{\textbf{MOTOR}}$ tested under UL standard 507 for locked rotor and heat rise protection.



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



BOTTOM VIEW



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