

Owner's Manual — Phoenix 230V 50Hz Axial Air Mover

Installation, Operation & Service Instructions

Read and Save These Instructions

The Phoenix 50Hz Axial Air Mover is the industry's only Air Mover specifically engineered with patent pending FOCUS[™] Technology. FOCUS[™] Technology revolutionizes evaporative drying by producing air velocities greater than competitive product offerings. This highly focused air flow is directed towards the restoration industry's problematic drying areas namely, carpet and cushion, sub-floor, sill plate and walls. No other fan dries the sill plate as quickly! Finally, the Phoenix 50Hz Axial Air Mover with FOCUS[™] Technology sustains these air velocities further than any other 50Hz Axial Air Mover.

The Phoenix 50Hz Axial Air Mover includes a 2-speed motor delivering a focused airstream of approximately 4900 m³/hr (2900 cfm), lightweight stackable enclosure designed to fit existing vehicle rigging, superior cord management and hour meter.

Conventional 50Hz Axial air movers create a circular air jet. With a circular air jet the only way to get air into the square corner is to point the fan towards the corner. This angle toward the wall wastes valuable air velocity and throw distance. FOCUS[™] Technology creates an air jet with a square corner, resulting in optimized drying ability. In addition, the 50Hz Axial Air Mover features built in 4.5° positioning which increases the fans ability to dry.

Dry fast, smart and profitably with Phoenix.

Patent: 7,331,759



Phoenix 50Hz Axial Air Mover
PN 4030940

Phoenix 50Hz Axial Air Mover

- Approximately 4900 m³/hr (2900 cfm) air flow directed where you need it.
- Operator interface conveniently located for easy access, featuring: power indicator lamp, large three-position switch, and hour meter.
- Units interlock for ease of stacking during storage and handling.
- Weighs more than 1kg less than competitive units.
- Linear low density polyethylene construction.
- Low bearing temperatures increase motor life.



TS-699

10/16 Rev. A

Specifications subject to change without notice.

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Serial No. _____

Purchase Date ____/____/____

Dealer's Name _____

1 Safety Information

- Do not operate the unit with a cut or frayed power cord. Replace cord if it becomes damaged.
- Do not unplug the unit by pulling on the cord. Grasp the plug firmly and pull it out of the wall socket or power receptacle.
- Always use a grounded outlet.
- Never operate electrical equipment in standing water.
- Never operate with the safety grills removed. Personal injury may result.
- Do not stick your fingers or other objects through the safety grills.
- Do not restrict airflow to the unit. This may cause the unit to overheat.
- Unit should never be serviced or cleaned while it is plugged in.
- Do not sit or stand on the unit or use as a shelf or table.
- Before leaving an 50Hz Axial Air Mover unattended, ensure children do not have access to the equipment. Do not allow children to play with or near the unit or in its air flow.
- To reduce the risk of fire or electric shock, do not use this air mover with any solid-state speed control device.
- Do not route cord under furniture or appliances.

LIRE ET CONSERVER CES INSTRUCTIONS

- Risque de choc électrique Peut causer des blessures ou la mort. Débrancher toutes les alimentations en courant électrique à distance avant l'entretien ou le nettoyage.
- Ne pas utiliser l'appareil avec un cordon d'alimentation coupé ou effiloché.
- Ne pas débrancher l'appareil en tirant sur le cordon. Tenir la fiche fermement et la tirer hors de la prise murale ou la prise d'alimentation électrique.
- Toujours utiliser une prise mise à la terre.
- Ne jamais utiliser l'équipement électrique dans de l'eau stagnante.
- Ne jamais utiliser sans les grilles de protection. Des blessures risquent d'en résulter.
- Ne pas passer les doigts ou d'autres objets dans les grilles de protection.
- Ne pas diminuer le débit d'air arrivant jusqu'à l'appareil. L'appareil risque de trop chauffer.
- Ne pas s'asseoir ou se tenir debout sur l'appareil; ne pas l'utiliser comme étagère ou table.
- Avant de laisser un appareil aéraulique 50Hz Axial sans surveillance, s'assurer que les enfants n'ont pas accès à l'équipement. Ne pas laisser les enfants jouer avec l'appareil ou à proximité de l'appareil ou dans l'air qu'il projette.
- Pour réduire le risque d'incendie ou de choc électrique, ne pas utiliser ce ventilateur avec un dispositif de commande de vitesse à semi-conducteurs.

2 Intended Application

The Phoenix 50Hz Axial Air Mover has changed the drying industry by minimizing overall drying time on water restoration jobs. The Phoenix 50Hz Axial Air Mover uses patent pending FOCUS Technology to maximize air velocity across floors and along walls for longer distances. By maximizing the air velocity, water evaporates more quickly from the carpet, cushion, sub-floor, wall, and sill plate.

3 Safety Certifications

The Phoenix 50Hz Axial Air Mover (P/N 4030940) conforms to UL STD 507. Certified to CAN/CSA STD C22.2 No. 113.

4 Specifications

Part No.	4030940
Motor	1/4 hp 2-speed 4-pole, PSC Electric Motor.
	Cords 4028264 IEC C13 to BS 1363 U.K. Plug 4028265 IEC C13 to AS 3112 Australian Plug 4028268 IEC C13 to CEE 7/7 European Plug
Air Flow	Approximately 4900 m3/hr (2900 cfm)
Cord	7 m Power Cord (20 ft)
Current	High - 1.4 Amps Low - 1.25 Amps
Voltage	230 volts/50hz
Warranty	Year One - 100% parts and labor (all components) Year Two - 100% parts only (all components) Years Three through Seven - Only materials and workmanship of the housing are covered.
Dimensions	
	Cabinet
Width	51 cm (19.9")
Height	50 cm (19.5")
Depth	39 cm (15.2")
Weight	13.4 kg (29.5 Lbs)

5 Power Requirements

5.1 International Cord/Plug Set

Connect the appropriate Cord/Plug set (provided) to the IEC C13 connector. The Phoenix 50Hz Axial Air Mover draws 1.28 Amps; 230 volts and should be plugged into an appropriate grounded (earthed) outlet.

5.2 Integrated Cord Wrap

The Phoenix 50Hz Axial Air Mover features integrated cord management. Wrap the cord around the cord wrap as shown and tuck under the previous wrap.



Figure 3: Cord wrap

6 Applications

6.1 Sizing for Water Restoration Jobs

Current industry standards call for one air mover per 3-5 meters (10-16 linear feet) of wall space, dependent upon the Class of water damage. For commercial structures, the industry standard calls for one air mover for every 4.6 - 5.6 square meters (50-60 square feet).

The water restoration industry based these estimates on the air mover technology available when writing the standards. Following these equipment-sizing standards when using the Phoenix 50Hz Axial Air Mover will result in dramatically faster drying times. If the restoration professional desires to merely achieve industry standard drying times, he can use fewer Phoenix 50Hz Axial Air Movers than standard equipment standards allow.

6.2 Placement

Current industry guidelines suggest placing air movers at a 15° - 45° angle to wall. These guidelines apply to air movers without FOCUS Technology. FOCUS Technology allows the restoration professional to place the Phoenix 50Hz Axial Air Mover at an angle nearly parallel to the wall.

The test graph shown below depicts immediate air flow at the FOCUS Technology corner. The 50Hz Axial Air Mover sustains this air flow for more than 6 meters (20 feet) and maximizes the air velocity across the floor and along the wall when placed the at 4.5° angle from the wall.

By touching the front edge of the output side of the 50Hz Axial air mover against the wall and rotating the rest of

the unit against the wall, the restoration professional will place the 50Hz Axial air mover at 4.5° due to the housing's built-in design. Industry experts agree placing 50Hz Axial Air Movers 45° angle to the wall wastes air flow and reduces the performance by forcing air up the wall.

The best set up angle for quickly and completely drying the sill plate is 4.5°. Set-up angles greater than 4.5° may be used under unique circumstances such as corner air flow and structure variations. Set-up angle should never exceed 23°.

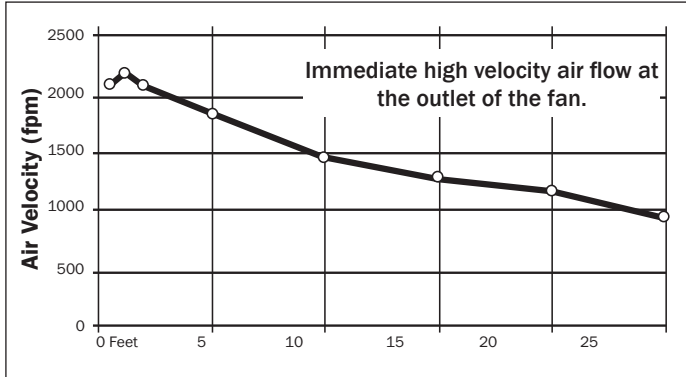


Figure 4: Airflow of the Phoenix 50Hz Axial Air Mover measured 3.5" parallel to wall.



Figure 5: 4.5° to wall as shown

6.3 Orienting of Directional Drying System

The 50Hz Axial air mover dries in counter-clockwise and clockwise directions for optimum ease of use. The 50Hz Axial air mover ships with rubber feet on one side of the unit for counter-clockwise drying.

When the water restoration professional needs to employ clockwise drying (such as the need to dry a door jamb), simply rotate the 50Hz Axial air mover 90° so the FOCUS Technology corner points toward the door jamb and floor for the clockwise drying.

If the water restoration professional dries in the clockwise direction often, we suggest attaching the two (factory provided) rubber feet into the threaded holes on the side of the unit. By attaching the rubber feet and creating the optimal downward angle of 4.5°, the Phoenix 50Hz Axial Air Mover will maximize air velocity across the floor and wall when drying in the clockwise direction.

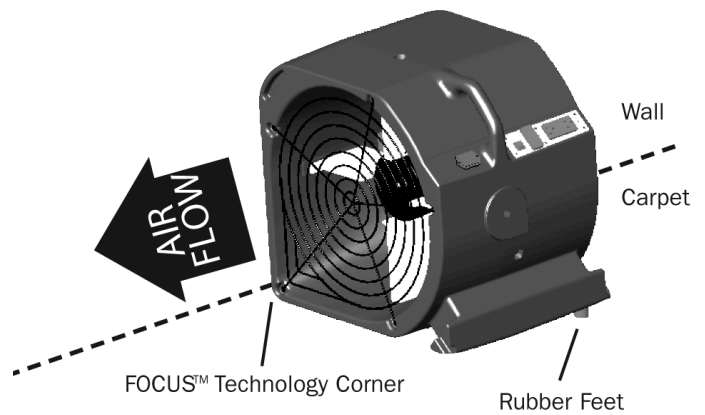
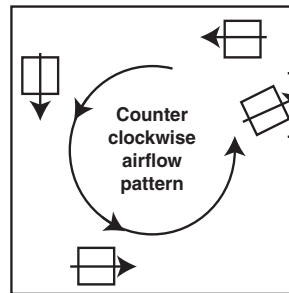


Figure 6: Placement for counter-clockwise drying

Making use of factory installed feet (4)



Making use of user installed feet (2)

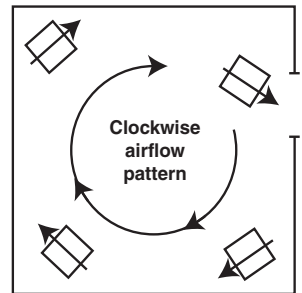


Figure 7: Birds eye view of room set-up

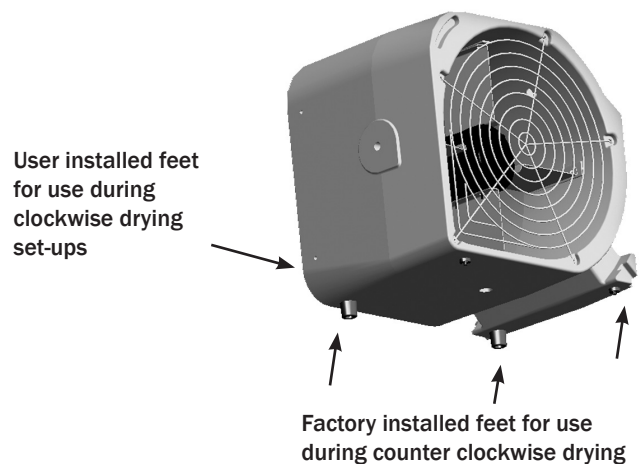


Figure 8: Clockwise feet locations

7 Operating Instructions

The Phoenix 50Hz Axial Air Mover as packaged is ready to be put into service after attaching the appropriate plug/cord set. Inspect the unit completely for any shipping damage. Place the unit on the ground. Orient the unit so the desired air flow direction is the same as the arrow indicator sticker in the FOCUS Technology corner on the interior of the unit. Plug the unit into a grounded outlet and select the drying mode shown in Figure 9.

8 Operator Panel Features

8.1 Run-Time Hour Meter

The operator interface panel is equipped with an Automatic LCD (Liquid Crystal Display) Hour meter. This hour meter displays cumulative run time. The hour meter meets IP65 for moisture and dust protection and is designed to survive harsh restoration and water recovery applications. The hour meter features non-volatile eeProm memory. This type of memory cannot be erased, nor reset. This feature ensures accurate time tracking.

The display can be used to track time-of-operation and time-to-dry. Some restoration professionals use the hour meters to help them establish billable hours.

8.2 Power Indication Lamp

The red, sealed, high intensity AC voltage power indication lamp allows operators to visually identify the operation status of several Phoenix 50Hz Axial Air Movers at a distance, with a single glance. The power indication lamp will remain lit when the AC power cord is plugged into a standard “powered” AC power outlet and the 3-position drying selector switch is in either the HIGH or LOW operation position. The power indication lamp will remain unlit when the AC power cord is unplugged, the 3-position drying selector switch in the OFF position, or the connected, standard AC wall outlet power has been turned off.

8.3 3-Position Drying Selector Switch

The 3-position drying mode selector switch. This switch is used to select the Phoenix 50Hz Axial Air Mover’s mode of operation. The 3 modes of operation are OFF, LOW or HIGH.

9 Maintenance

⚠ WARNING

WARNING: *Disconnect the unit from power before servicing or cleaning. Replace the wire safety grill after servicing or cleaning.*

9.1 Servicing

Before each use inspect for damage, blocked inlet or outlet, or any excess buildup of foreign material.

When the Phoenix 50Hz Axial Air Mover is first turned on, check for excessive vibration. If the unit vibrates excessively or if blade rubs on housing, turn off the unit immediately. Have a service technician inspect the unit to locate the problem.

9.2 Cleaning

The housing is made of a durable and washable polyethylene. When cleaning, the use of solvents is NOT recommended.

When washing inside the unit, disconnect the unit from its power source. Protect the operator interface panel with a cloth. Clean inner barrel, grills and blade. Wipe down motor exterior with a damp cloth. If the motor gets wet during cleaning, simply allow ample time for motor to dry out completely before restarting.

If you wash the 50Hz Axial Air Mover and do not plan to use it within 24 hours, allow the fan to drip dry for 10 minutes and then let run for 5 minutes.

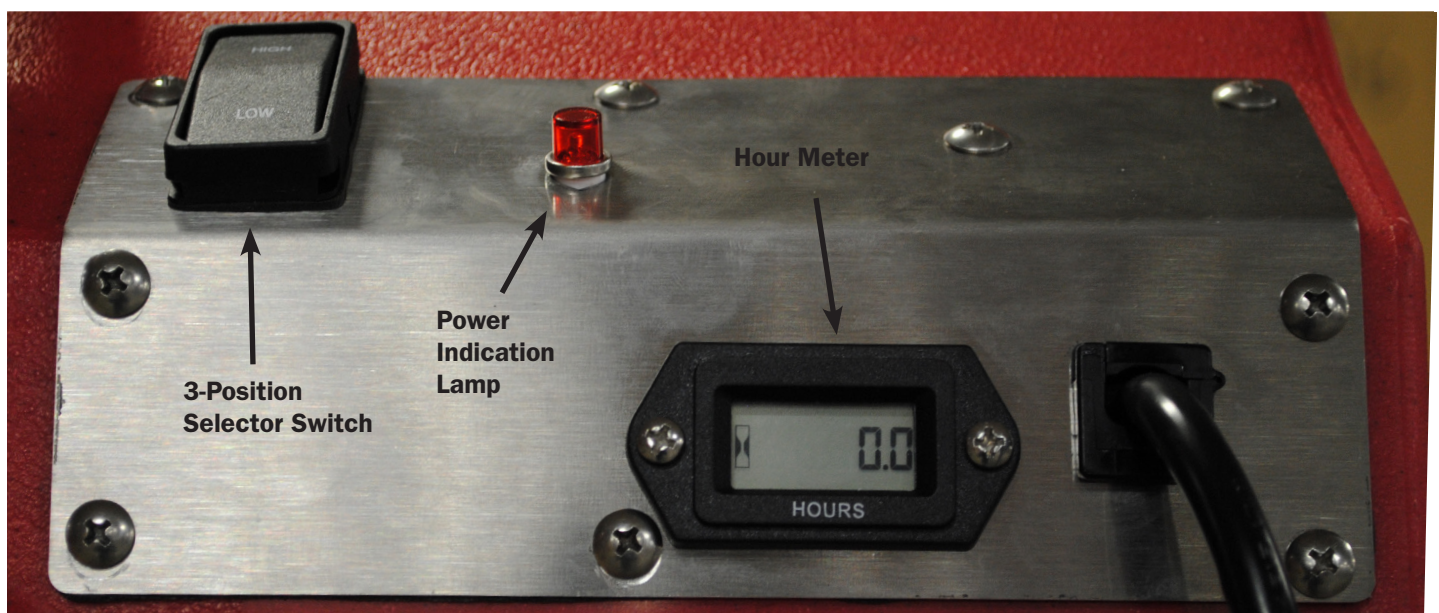


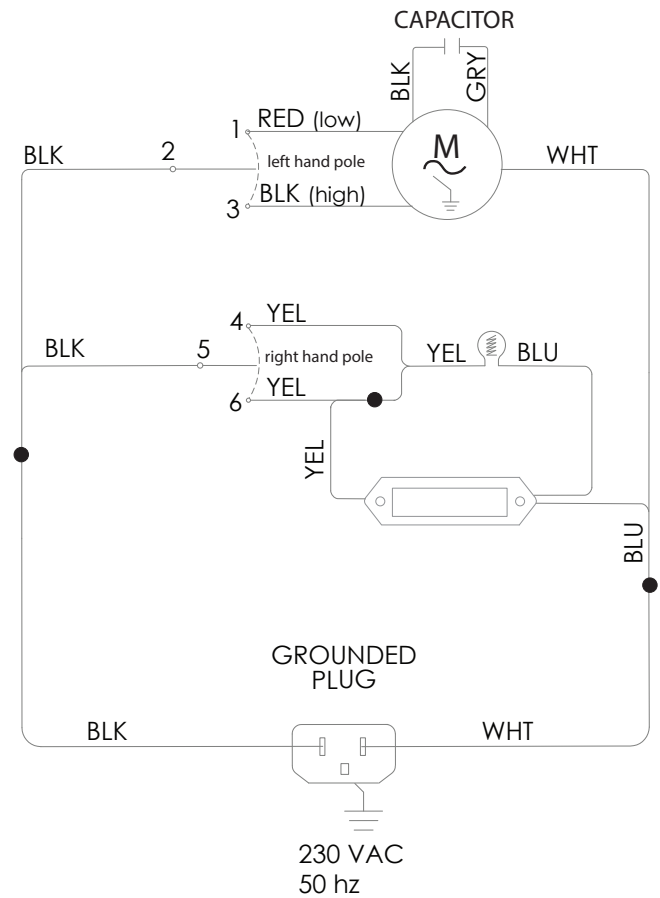
Figure 9: 50Hz Axial Air Mover Operator Panel

10 Replacement Parts and Optional Accessories

Contact the factory at 1-800-533-7533 or 1-608-237-8400 to order replacement parts, or optional accessories

4029721	Switch, Rocker, On-Off-On
4025320	Grill, Safety, Intake
4025321	Grill, Safety, Exhaust
4025460	Axial Air Mover Stand
4025299	Stand Hardware Kit
4031968	Motor
4031969	Blade
4028795	Hour Meter

11 Wiring Diagram



Note: Switch is Double Pole, Double Throw

Figure 11: Optional stand allows the 50Hz Axial Air Mover's air flow to be directed in a 360° range of movement. (PN 4025460)



Phoenix 50Hz Axial Air Mover Limited Warranty

Warrantor:

Therma-Stor LLC
4201 Lien Rd
Madison, WI 53704
Telephone: 1-800-533-7533

Who Is Covered: This warranty covers Phoenix 50Hz Axial Air Movers.

First Year Warranty: 100% parts and labor (all components)

Second Year Warranty: 100% parts only (all components)

Years Three through Seven: Only materials and workmanship of the housing are covered.

If a defect in materials or workmanship occurs within the warranty period, Therma-Stor LLC will repair or replace the defect.

End-User Responsibilities: Warranty service must be performed by a servicer authorized by Therma-Stor Products. To obtain warranty service you must obtain a return material authorization (RMA). To obtain an RMA you must present proof of purchase or (lease), by use of a warranty card, original sales receipt or other reasonable and reliable means.

To obtain an RMA call Therma-Stor LLC at the above number and ask for the Therma-Stor LLC Service Department, which will then issue an RMA# and arrange for, at our option, either repair or replacement.

Freight: Freight to and from the servicer is the responsibility of the end-user. The end-user is responsible for normal care and proper return packaging.

Limitations and Exclusions: This warranty does not cover any defect, malfunction, etc. resulting from misuse, abuse, lack of normal care, corrosion, freezing, tampering, modification, unauthorized or improper repair or installation, accident, acts of nature or any other cause beyond Therma-Stor LLC's reasonable control.

If any Phoenix 50Hz Axial Air Mover part is repaired or replaced, the new part shall be warranted for the balance of original warranty (but all warranty periods will be extended by the period of time, if any, that the Phoenix 50Hz Axial Air Mover with FOCUS Technology is out of service while awaiting covered warranty service).

Warranty service will be performed during normal working hours.

UPON THE EXPIRATION OF THE WRITTEN WARRANTY APPLICABLE TO THE PHOENIX 50Hz Axial AIR MOVER OR ANY PART THEREOF, ALL OTHER WARRANTIES IMPLIED BY LAW, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL ALSO EXPIRE. ALL WARRANTIES MADE BY THERMA-STOR LLC ARE SET FORTH HEREIN, AND NO CLAIM MAY BE MADE AGAINST THERMA-STOR BASED ON ANY ORAL WARRANTY. IN NO EVENT SHALL THERMA-STOR LLC, IN CONNECTION WITH THE SALE, INSTALLATION, USE, REPAIR OR REPLACEMENT OF ANY PHOENIX 50Hz Axial AIR MOVER OR PART THEREOF BE LIABLE UNDER ANY LEGAL THEORY FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION WATER DAMAGE (THE END USER SHOULD TAKE PRECAUTIONS AGAINST SAME), LOST PROFITS, DELAY, OR LOSS OF USE OR DAMAGE TO ANY REAL OR PERSONAL PROPERTY.

Some states do not allow limitations on how long an implied warranty lasts, and some do not allow the exclusion or limitation of incidental or consequential damages, so one or both of these limitations may not apply to you.

Legal Rights: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



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