

## INSTALLATION, OPERATION, AND MAINTENANCE MANUAL

This publication contains the installation, operation and maintenance procedures for standard units of the **R Series - Inline Fans**

Carefully read this publication prior to installation.

### Receiving and Inspection

Carefully inspect the fan and accessories for any damage or shortage upon receiving the fan.

- Turn the wheel by hand to ensure it turns freely and does not bind.
- Inspect dampers (if included) for free operation of all moving parts.
- Remove shipping tape.
- Record on the *Delivery Receipt* any visible sign of damage.

### Storage

If the fan is stored for any length of time prior to installation, store it in its original shipping crate and protect it from dust, debris and weather.

### WARNING

This unit has rotating parts. Safety precautions should be exercised at all times during installation, operation, and maintenance.

**ALWAYS** disconnect power prior to working on fan.

### PERSONAL SAFETY

Disconnect switches are recommended. Place the disconnect switch near the fan so that the power can be swiftly cut off in case of an emergency, and so that maintenance personnel are provided complete control of the power.

**READ AND SAVE THESE INSTRUCTIONS**



\*On select Models



### Electrical Supply

Check that the voltage and circuit details on the fan are suitable for your supply.

**Caution: Never work on a fan unless power is turned off.**

### Wiring

All wiring should be carried out in compliance with regulations for electrical installations and comply with any local requirements.

**Caution: Never work on a fan unless power is turned off.**

### Starting

All fans are suitable for direct starting by switch or direct line starter. All fans may be directly controlled by thermostat or similar devices, provided that the current rating is at least three times the motor rating.

### Protection

All fan blowers are provided with Thermal Overload Protection internally. In the event that the fan overheats, the T.O.P. will break the circuit until the fan returns to normal operating temperature.

**Caution: Never work on a fan unless power is turned off.**

### Rotating

The direction of rotation, looking into the hub of the blower, is clockwise.

### Mounting (See images to the right)

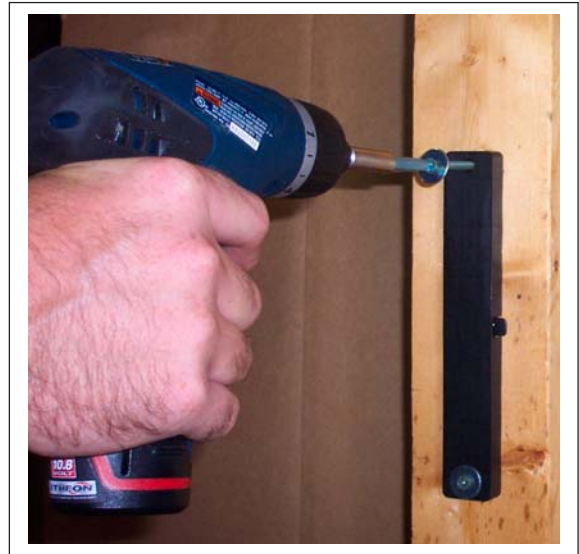
All fans are suitable for mounting in any plane. Attach the black plastic mounting bracket to the support frame where you wish to mount the fan. Slide in the metal bracket (attached to the fan) into the already mounted black plastic bracket until you hear a light clicking sound.

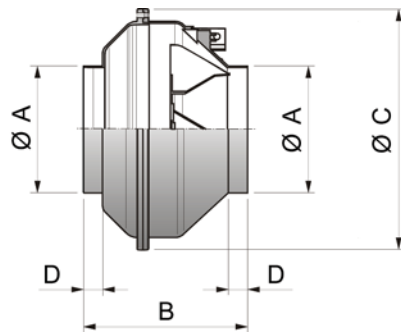
### Operation

All fans are suitable for internal or external use. When used externally, sealing around the casing joint is recommended. The blower is designed to operate in a temperature range of -25F to +175F and up to 95% Relative Humidity.

### Ductwork Connection

Flexible ducting should be clamped to the unit by using screw tensioned connector clips or duct tape. Rigid ducting should be connected with a flexible connector and screw tensioned clip or insulated fast clamp.





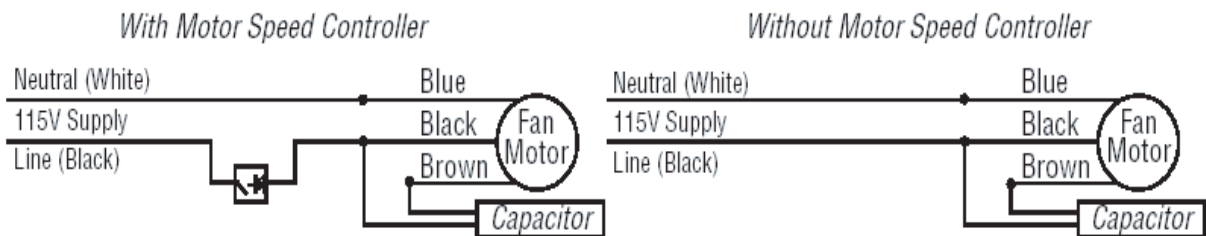
Model	A	B	C	D
*R-100	4	9.7	11.3	1.2
R-110	4	9.7	11.3	1.2
R-125	5	9.7	11.3	1.2
*R-150	6	9.0	14.9	1.2
*R-200	8	9.0	14.9	1.2
R-225	8	9.0	14.9	1.2
R-250	10	9.0	14.9	1.2
*R-315	12	10.8	17.8	1.2

All dimensions in inches  
\* Energy Star

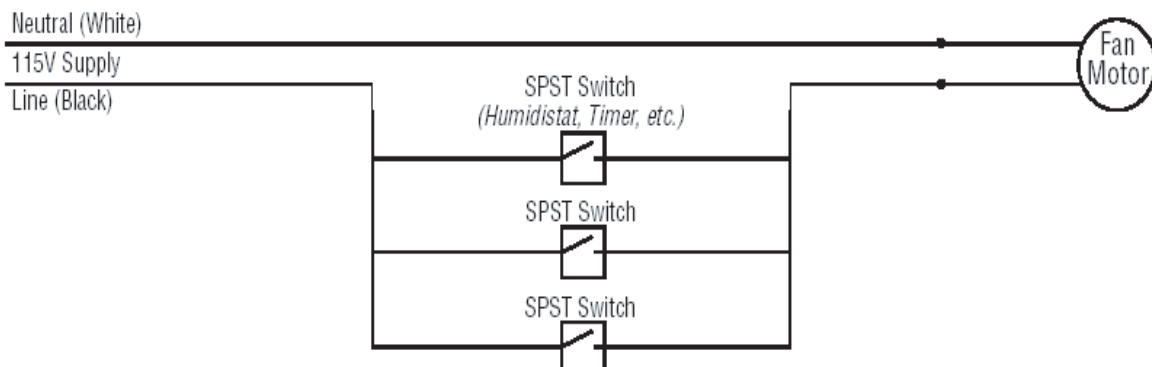
## Wiring Diagrams

### Models: R Series

#### ALL MODELS



#### MULTIPLE LOCATION SWITCHING WIRING DIAGRAM



### Models: R Series

#### **SPECIAL WIRING PRECAUTIONS**

*All installations should be wired according to the supplied diagrams. Failure to comply will cause the motor to "hum" or not work.*

1. Turn off power at service entrance before wiring this fan.
2. Read the fan serial number to determine the current draw. Check that available supply is suitable.
3. Be certain to use proper connector type for securing conduit cable.
4. Connect electrical supply per diagrams supplied.

## Troubleshooting

1. If fan fails to operate, please check the following:
  - a) Consult wiring diagrams included to assure proper connection.
  - b) To assure proper contact, check motor lead wiring, incoming supply wiring and capacitor connections.
  - c) If possible, use a meter to test for continuity between fan leads. Please note that capacitor will show no reading if tested with meter.
2. If fan still fails to operate, consult distributor for return/replacement instructions.

## Maintenance

1. Since fan bearings are sealed and have been provided with an internal lubricating material, no lubrication is necessary.
2. At least once a year, clean any particles accumulated in the fan.
3. When using in a dryer boosting application, **DISCONNECT POWER SUPPLY** and check impeller periodically or any lint build up. No other maintenance is necessary.

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