

# IN-LINE DUCT FAN™ INDUCTOR®

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## READ AND SAVE THESE INSTALLATION INSTRUCTIONS FOR INDUCTOR IN-LINE DUCT FANS™

### IMPORTANT WARNINGS

**“For General Ventilating Use Only. Do Not Use to Exhaust Hazardous or Explosive Materials and Vapors.”**

#### **WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

Use This Unit Only In The Manner Intended By The Manufacturer. If You Have Any Questions, Contact The Manufacturer. Before Servicing Or Cleaning Unit, Switch Power Off At Service Panel And Lock Service Panel To Prevent Power From Being Switched On Accidentally. When The Service Disconnecting Means Cannot Be Locked, Securely Fasten A Prominent Warning Device, Such As A Tag To The Service Panel.

Suncourt Inc. does not provide electrical connection information. For your safety and protection follow all instructions and adhere to applicable building and/or electrical codes.

#### **IMPORTANT WARNING**

Due to the power of a booster fan, adequate protective measures must be taken to avoid possible contact with the impeller blades. In-Line Duct Fans<sup>®</sup> are designed to boost only dry (ambient) heated or cooled airflow in duct conduits of forced air systems with temperatures between 50°F and 140°F. Suncourt Inc. accepts no responsibility for use of this product in other applications.

**EXPOSURE TO AIRFLOW TEMPERATURES EXCEEDING 140°F WILL PERMANENTLY DESTROY THE ELECTRIC MOTOR VOIDING THE WARRANTY**

### NEVER EXPOSE YOUR IN-LINE DUCT FAN™ TO TEMPERATURES OVER 140°F (60°C)

#### **ELECTRICAL CONNECTIONS AND WIRING**

**“WARNING - To Reduce The Risk Of Fire, Electrical Shock Or Injury To Persons, Observe The Following:“**

Installation work and electrical wiring must be done by qualified person (s) in accordance with all applicable codes and standards, including fire-rated construction.

Your In-Line Duct Fan<sup>®</sup> must be connected to a 110/120 Volt AC, 60Hz fuse or circuit breaker protected power source only in a manner approved by all applicable codes. Never connect your In-Line Duct Fan<sup>®</sup> to a 240 Volt AC blower motor or other 240 Volt system.

The wiring installation must be of an approved type and terminate at a junction box (field supplied) at the In-Line Duct Fan<sup>®</sup> and furnace. The electrical junction box should be attached using self-drilling sheet metal screws with a maximum length of 1". Do not pre-drill the electrical box mounting holes. Consult your furnace wiring diagram to locate the furnace fan power supply wires. To connect to a variable speed furnace fan, please consult a qualified installer.

The ground wire (GREEN) must be terminated at the furnace or other suitable ground. The power source must be protected by a fuse or circuit breaker rated at a minimum of 15 amperes.

You may also supply power to your In-Line Duct Fan<sup>®</sup> via a Suncourt DS100 DuctStat<sup>®</sup> Plug-In Thermostat<sup>®</sup> or a standard

on/off switch.

Operating range is 50°F (10°C) to 140°F (60°C). Exposure to temperatures outside this range voids the warranty.

## IMPORTANT NOTICE

### Single Speed

The motor of your In-Line Duct Fan<sup>®</sup> may have 1 White and 1 Black wire or 2 Black wires. If you have a motor with a White and Black wire, connect the White motor wire to the White supply wire and the Black motor wire to the Black supply wire. If you have a motor with 2 black wires, connect either of the Black wires to the White supply wire and the other Black wire to the Black supply wire.

### Two Speed

Make sure you connect the colored wire as shown below. Failure to connect correctly will destroy the motor. No warranty claim for an incorrectly wired motor will be accepted by Suncourt.

### WIRING INSTRUCTIONS FOR IN-LINE DUCT FANS:

Model	White (neutral or common) wire from power source.	Black (hot or line) wire from power source.	Green (ground) wire from power source.
<b>DB100 DB200 DB204 DB205 DB206 DB208 DB210 DB212 DB412P DB414P DB416P DB6GT</b>	Black wire or white wire (see note above) from motor.	Black wire from motor.	Green wire from motor.
<b>DB301P DB305P DB306P</b>	Black wire from motor.	LOW fan speed: Yellow wire from motor. HIGH fan speed: Red wire from motor.	Green wire from motor.
<b>DB308P DB310P</b>	White wire from motor.	LOW fan speed: Red wire from motor. HIGH fan speed: Black wire from motor.	Green wire from motor.

### GENERAL INSTALLATION NOTES

For maximum performance and minimum noise, the best location to install your In-Line Duct Fan<sup>®</sup> is 6 - 10 feet from the register you wish to boost air to. To prevent air leaks use a good quality duct tape to seal seams in the ductwork after installing the In-Line Duct Fan<sup>®</sup>. By utilizing tapered reducers you may use larger diameter duct fans in smaller diameter ducts. Always leave your In-Line Duct Fan<sup>®</sup> accessible for maintenance, cleaning or repair.

### VARIABLE SPEED CONTROL

The in-line duct fans can be speed controlled using the Suncourt VS100 solid state speed control. Follow the installation instructions included with the VS100.

**NEVER USE A RHEOSTAT TO CONTROL FAN SPEED.**

## INSTALLATION INSTRUCTIONS

### MODEL: DB100

1. Locate the place in the duct where you wish to install the In-Line Duct Fan<sup>®</sup>.
2. Tape the enclosed template to the duct with the arrow pointing in the direction of the airflow. Cut out the required opening by first drilling a pilot hole and cutting along the dashed line using a jig saw or tin snips.
3. Place the Inductor<sup>®</sup> In-Line Duct Fan<sup>®</sup> in the opening, making sure that the fan blade can turn freely. Align the arrow on the unit in direction of airflow.
- 4a. Connect the spring through the middle hole provided in the base plate, stretch the spring and bend over the end for a snug installation. You may complete the installation by covering the seams in the duct with a good quality duct tape.
- 4b. Secure the In-Line Duct Fan<sup>®</sup> in position with the supplied #6 sheet metal screws using the provided holes in the base plate

of the unit.

**MODELS: DB200, DB204**

1. Locate the place in the duct where you wish to install the In-Line Duct Fan. Align arrow label on unit in direction of airflow.

**FLEXIBLE DUCT**

2a. Simply cut the flexible duct and slide the In-Line Duct Fan in place by slipping the cut flexible duct ends over the crimped ends on the In-Line Duct Fan, making sure the unit is well supported. Complete the installation by securing the In-Line Duct Fan to the flexible duct with good quality duct tape or nylon cable ties.

**METAL DUCT**

2b. Remove a section of the existing ductwork and slide the In-Line Duct Fan in place by slipping the duct ends over the crimped ends of the unit. Complete the installation by securing the In-Line Duct Fan to the metal duct with the supplied #6 sheet metal screws spaced evenly around the circumference on each end of the unit.

**MODELS: DB205, 206, 208, 210, 212, 305P, 306P, 308P, 310P, 412P, 414P, 416P**

**MODELS: DB6GT**

1. Locate the place in the duct where you wish to install the In-Line Duct Fan. Align arrow label on unit in direction of airflow.

**FLEXIBLE DUCT**

2a. Install connectors onto any un-crimped ends of the unit. Then simply cut the flexible duct and slide the In-Line Duct Fan in place by slipping the cut flexible duct ends over the connectors or crimped ends on the In-Line Duct Fan, making sure the unit is well supported. Complete the installation by securing the In-Line Duct Fan to the flexible duct with good quality duct tape or nylon cable ties.

**METAL DUCT**

2b. Install connectors onto any un-crimped ends of the unit, or crimp your existing ductwork. Then simply place the existing duct over the crimped ends of the unit, or the existing crimped ductwork into the unit. Secure the In-Line Duct Fan to the metal duct with the supplied #6 sheet metal screws spaced evenly around the circumference on each end of the unit.

**CLEANING AND MAINTENANCE**

Suncourt Inc. recommends that you clean your In-Line Duct Fan at regular intervals, similar to what is recommended for the fan of your furnace, but at least twice a year. Keep your In-Line Duct Fan free of lint, dust, and debris. The In-Line Duct Fan must never be exposed to temperatures over 140°F (60°C).

**ONE YEAR WARRANTY**

Subject to the following limitations, Suncourt Inc. (manufacturer) warrants that the In-Line Duct Fan will, for 1 (one) year from date of original retail purchase, but not exceeding two years from date of manufacture, remain free from appearance of defects in workmanship or materials. This warranty is subject to the following limitations: (a) manufacturer's liability is limited to the replacement or repair of the unit, as decided by the manufacturer; (b) a defective unit must be returned, prepaid, with proof of purchase, to the point of purchase or to Suncourt; and (c) this warranty does not apply to defects resulting from the alteration, abuse, accidental damage, unauthorized repair, or misuse of the unit. This warranty is given in lieu of all other warranties, guarantees, and conditions on manufacturer's part, and the manufacturer shall have no tortious or other liability in respect to this In-Line Duct Fan.

Actual product appearance may differ from illustrations.

Suncourt reserves the right to modify any or all of its products' features, designs, components and specifications without notice.

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