



Installation Instructions

Part Nos. 09AB900001 and 09AB900032

SAFETY CONSIDERATIONS

Installation of this accessory can be hazardous due to electrical components and equipment location (such as a ceiling or elevated structure). Only trained, qualified installers and service technicians should install and service this equipment.

When installing this accessory, observe precautions in the literature, labels attached to the equipment, and any other safety precautions that apply.

- Follow all safety codes.
- Wear safety glasses and work gloves.
- Use care in handling and installing this accessory.



ELECTRIC SHOCK HAZARD

To avoid the possibility of electrical shock, open and tag all disconnects before installing this equipment.

INTRODUCTION

The Condensing Pressure Fan Control (Part No. 09AB900001) is a thermostat that starts and stops power to the fan motor that it controls. It is intended for use with the 9AB8 and 9AB12 units. This accessory thermostat opens the circuit when the ambient temperature drops. Part No. 09AB900032 is a package containing 3 of Part No. 09AB900001.

The remote bulb senses ambient temperature, and a SPST switch in the thermostat opens when the selected ambient temperature is reached. This shuts off one of the fan motors in the condensing unit and reduces airflow across the condenser coil, thereby maintaining unit head pressure above the minimum required for expansion valve operation. A second 09AB900001 thermostat cannot be used on 2-fan units, such as the 9AB8 or 9AB12, because one fan must always operate. If the unit operates at temperatures below the minimum outdoor-air operating temperature for fan cycling as specified in the product data, a Motormaster® I control is required.

The Condensing Pressure Fan Control Accessory package, Part No. 09AB900001 includes the items listed in Table 1. Part No. 09AB900032 contains 3 Part No. 09AB900001 packages.

Table 1 — Condenser Pressure Fan Control
Accessory Parts List

NO. OF ITEMS	ACCESSORY PART NO.	DESCRIPTION
1	HH22PB035	Temperature Actuated Switch
7	AL79AU216	No. 10 x ½-in. Sheet Metal Screw
2	KA66BA038	Clamp
1	KA56CR245	Grommet
2	KA66RA013	Tube Clamp
1	09AB501405	Instruction Sheet
1	LF40AZ002	Cloth Bag

Thermostat Data

Differential	5° F fixed
Range	20 to 75 F adjustable
Factory setting	60 F to open
Rating	7 amperes, 240 volts 14 amperes, 120 volts

⚠ WARNING

To control single-phase motors, connect the 09AB900001 accessory thermostat in the motor circuit; to control 3-phase motors, connect this accessory in the control circuit.

MOUNTING

⚠ WARNING

To prevent kinking when bending the capillary tube, use a long sweep radius.

Steps 4 and 5 below may be reversed to provide room to route the capillary tube out of the hole in the bottom of control box.

1. Turn off power to the unit. Lock out and tag all disconnects.
2. Remove unit top cover panel.
3. Place thermostat in a convenient location inside control box; mark mounting hole locations and drill ⅝-in. diameter holes.
4. Secure thermostat to control box with the self-tapping screws provided.

5. Drill a $\frac{13}{16}$ -in. diameter hole in bottom of control box and file the hole edges smooth. Route capillary tube through the hole, with tube taped for protection.
6. Route the capillary along the inside-front of the venturi panel, approximately $6\frac{1}{2}$ in. above fan opening nearest control box.
7. Drill a $\frac{13}{16}$ -in. diameter hole in venturi panel. Locate the hole approximately, as shown in Fig. 1.
8. Slide bulb through hole in venturi panel and slip grommet (provided) into place around hole.
9. Using tube clamps provided, mount bulb on outside-front of venturi panel so that bulb is protected from sun by the top cover overhang.
10. Set the thermostat at 60 F, which shuts off the fan when the condensing temperature reaches 90 F, the lowest practical operating condensing temperature.

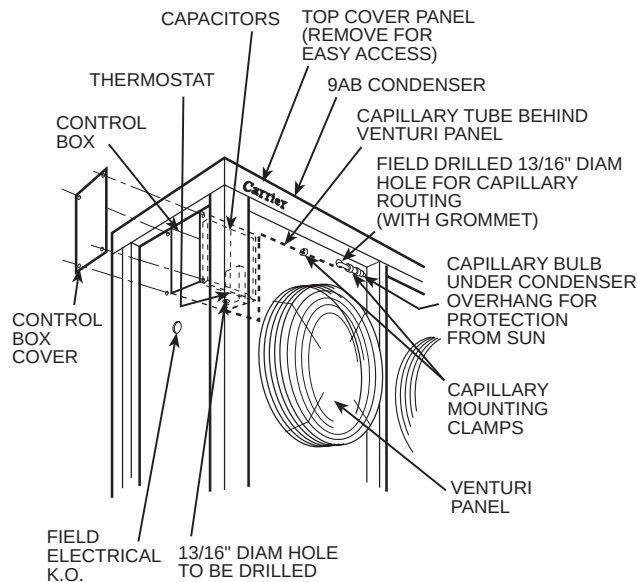
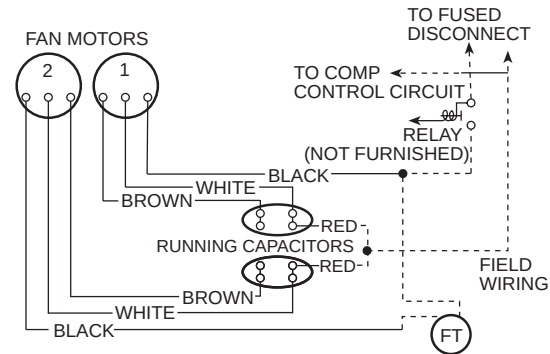


Fig. 1 — Installation of 09AB900001 Fan Cycling Control Accessory on 9AB8, 9AB12 Condenser Units

ELECTRICAL WIRING (Fig. 2)

Wire thermostat switch FT in series with fan no. 2 motor power leads.

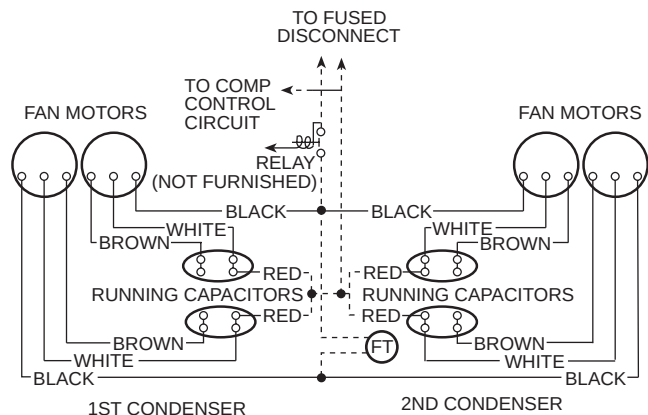


FT — Fan Thermostat

Fig. 2 — 9AB8, 9AB12, Fan Cycling Control Accessory (Schematic Diagram)

MULTIPLE CONDENSER INSTALLATIONS

Where multiple condensers are piped in parallel for a single circuit, wire the thermostat so that one motor in each condenser will stop at the same time when the selected temperature is reached (Fig. 3). If a motor in only one condenser is stopped, the refrigerant pressure drop through that condenser will decrease and result in liquid refrigerant backing up into the other condenser. Excessive refrigerant charge and a larger receiver would be required.



FT — Fan Thermostat

Fig. 3 — Fan Cycling Control Accessory on Two Condensers in Parallel (Schematic Diagram)