

APPLICATION

R856 Fan Centers control an evaporator fan and a high side cooling center panel. These fan centers are used with heating-cooling thermostat and subbase combinations such as the T87-Q539, T872-Q672, and T834-Q634.

R856 Fan Centers provide spdt switching and a terminal strip for wiring the thermostat and high side panel. R856B and D models supply 24 volt low voltage power for the control circuit; the R856D includes a thermal delay relay which delays compressor operation about 30 seconds.

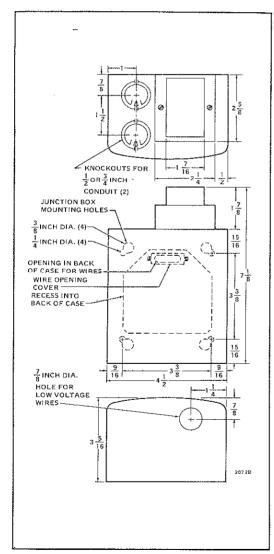


Fig. 1-R856 installation dimensions (in inches).

R856A,B,D FAN CENTERS

INSTALLATION -

CAUTION

- Installer must be a trained, experienced serviceman.
- Disconnect power supply before beginning installation.
- Always perform a thorough checkout when installation is complete;

LOCATION AND MOUNTING

The R856 may be mounted on any flat surface or on a standard 4 inch square junction box. Fig. 1 shows mounting dimensions.

- Remove cover by squeezing sides and pulling straight outward.
- 2. When mounting on junction box, run line voltage wires through the slots provided in the back of the case. Conduit knockouts are provided for use when mounting on a flat surface; use rubber grommet provided to secure low voltage wires.
- 3. Use the case as a guide, and punch or drill pilot mounting holes.
- 4. Mount the R856 with the two screws provided. Replace cover when installation is complete.

WIRING

CAUTION

Disconnect power supply before connecting wiring to prevent electrical shock and equipment damage.

All wiring must comply with applicable local codes and ordinances. Refer to the following diagrams for internal schematics and typical hookups. Also refer to installation information furnished with the system equipment. The fan relay has both quick connect and screw terminals for line voltage wiring and screw terminals for low voltage wiring.

The R856 Fan Center contacts are rated as follows:

	120V AC		208/240V AC	
	NOR-	NOR-	NOR-	NOR-
	MALLY	MALLY	MALLY	MALLY
	OPEN	CLOSED	OPEN	CLOSED
	(AMP)	(AMP)	(AMP)	(AMP)
Full Load	14	10	8	7
Locked Rotor	84	60	48	42

Thermal Delay Relay: 1.5 amps at 24v ac.

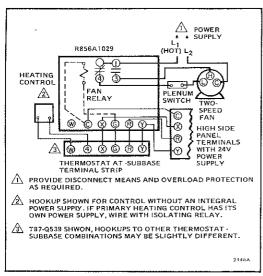


Fig. 2-Typical R856A1029 hookup diagram with internal schematic. For wiring with isolating relay, refer to Fig. 5.

NOTE: X terminal is used to power a subbase indicating light when the impedance relay in the high side panel pulls in.

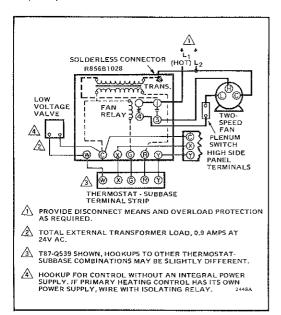


Fig. 3-Typical R856B1028 hookup diagram with internal schematic. For wiring with isolating relay, refer to Fig. 5.

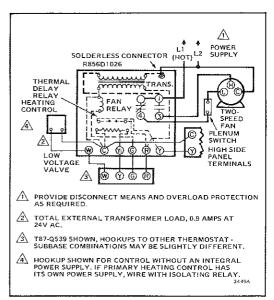


Fig. 4-Typical R856D1026 hookup diagram with internal schematic. For wiring with isolating relay, refer to Fig. 5.

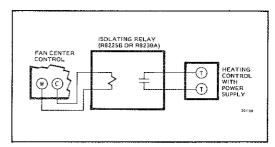


Fig. 5-Isolating relay added to prevent interconnection of power supplies. Isolation of the power supplies may also be accomplished by using special thermostat subbase combinations with isolated circuits (such as T87F-Q539A1147, T822A-Q611A1037, T834A-Q634D1002). Refer to applicable thermostat specification sheets for details.

CHECKOUT -

After the mounting and wiring have been completed, turn on the power supply. Check system operation by starting the heating and cooling system from the room thermostat before leaving the installation. The R856D has a thermal delay relay; therefore it will take the compressor about 30 seconds to start after the thermostat has made contact. Observe at least one complete heating and cooling cycle, making certain the R856 and all other equipment function properly.

WARRANTY "Unless otherwise specified, the Company warrants all Residential Division equipment manufactured by it and bearing its nameplate to be free from defects in workmanship

and materials under normal use and service as follows:

1. Equipment which is received transportation prepaid at the factory originating shipment [1] within twelve months after date of manufacture, or (2) with a certification by the installer to be within twelve months after date of manufacture, or (2) with a certification by the installer to be within twelve months after date of installation, and found by the Company's inspection to be defective in workmanship or materials within the quarantee, will be repaired or replaced at the Company's option, free of charge and returned lowest cost transportation prepaid. Premium transportation will be used at customer's request and expense;

2. If inspection by the Company does not disclose any defect covered by the guarantee, equipment will be repaired or replaced and the Company's require service charge will apply;

3. WITH EXCEPTION OF THE FOREGORING AND UNLESS SPECIFICALLY EXPRESSED IN WRITING, THE COMPANY MAKES NO EXPRESS WARRANTIES, NO WARRANTIES OF MERCHANTABILITY AND NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF."