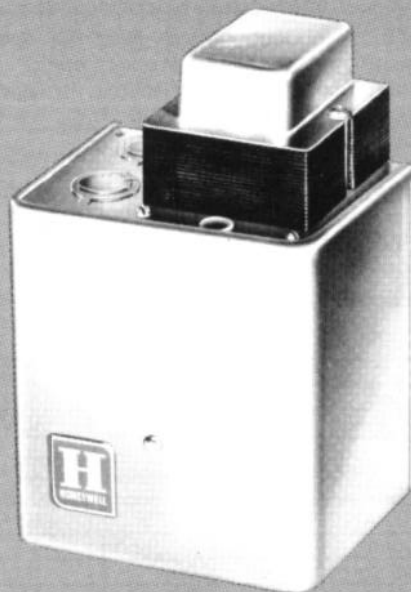


Honeywell

R856 FAN CENTERS CONTROL AN EVAPORATOR FAN.

- ☐ These fan centers are used with heating-cooling thermostat and subbase combinations such as the T87-Q539, T872-Q672, or T834-Q634.
- ☐ All R856 Fan Centers provide line voltage spst, spdt, or dpst switching.
- ☐ R856B and D have integral 45 va transformer to supply low voltage power for the system.
- ☐ R856D includes a spst thermal delay relay to prevent short cycling the compressor motor.
- ☐ Low voltage terminal strip for thermostat and panel connections.
- ☐ Case and cover on all models.
- ☐ Models available to control single or two speed fan motors.
- ☐ Models available with dpst 20 amp contactor for switching heavy duty 240v loads.

FAN CENTERS



R856A,B,D

SPECIFICATIONS

TRADELINE MODELS

Tradeline models are selected and packaged to provide ease of stocking, ease of handling and maximum replacement value. Tradeline model specifications are the same as those of standard models except as noted below.

TRADELINE MODELS AVAILABLE:

- R856A Fan Center—spdt fan switching.
- R856B Fan Center—spdt fan switching; includes 45 va transformer.
- R856D Fan Center—spdt fan switching; includes 45 va transformer and spst thermal delay relay.

PRIMARY POWER SUPPLY:

- R856A—24 volts ac.
- R856B—120 volts ac.
- R856D—120 volts ac.

RELAY COIL RATING:

- Sealed—9 va
- Inrush—32 va
- Sealed current—.375 amp

WIRING TERMINALS: Quick connect and screw type terminals for line voltage loads; screw connections for low voltage wiring. Standard screw terminals are for No. 8 wire.

ADDITIONAL FEATURES:

- Tradeline package with cross reference label and special instruction sheet.

STANDARD MODELS

MODELS:

- R856A Fan Center—switching is spst normally open, spdt, or dpst normally open.
- R856B Fan Center—switching is spst normally open, spdt normally open. Includes 45 va transformer.
- R856D Fan Center—switching is spst normally open, spdt, or dpst normally open. Transformer and spst thermal delay relay.

ELECTRICAL RATINGS:

Spst and spdt models:

	NORMALLY OPEN		NORMALLY CLOSED	
	120V AC	240V AC	120V AC	240V AC
Full Load	14.0	8.0	10.0	7.0
Locked Rotor	84.0	48.0	60.0	42.0

Dpst models:

VOLTAGE	240/277V	480V	600V
Full Load	20	12	12
Locked Rotor	100	60	50
Resistive	30	30	30

TRANSFORMER VOLTAGE:

- R856A—24v at 60 Hz.
- R856B—120 or 240v ac, 60 Hz (specify when ordering).
- R856D—120v ac, 60 Hz.

TRANSFORMER EXTERNAL LOAD: R856 Fan Centers with transformers will operate the following Honeywell relays and contactors with up to 300 feet of No. 18 gauge wire (150 ft. run):

- two R8230 or R8222 Relays;
- one R850 Contactor;
- one R8230 or R8222 Relay and one R850 Contactor;
- one R850 Contactor and one R8093 Thermal Delay Relay;
- one R8210, R8212 or R8214 Contactor;
- one R8210, R8212 or R8214 Contactor and one R8230 or R8222 Relay;
- one R8210, R8212 or R8214 Contactor and one R8093 Thermal Delay Relay or
- two R850 Contactors.

WIRING TERMINALS: Color coded leadwires for line voltage loads; screw connections for low voltage wiring. Except R856B dpst models which have quick connect and screw terminals for up to No. 8 wire for line voltage loads.

RELAY COIL RATINGS:

	SPST AND SPDT MODELS	DPST MODELS
Sealed va	6 va	15 va
Inrush va	11 va	47 va
Sealed amps	0.22 amp	0.62 amp

FINISH: Gray enamel.

(continued on page 3)

ORDERING INFORMATION

WHEN ORDERING REFER TO THE TRADELINE CATALOG OR PRICE SHEETS FOR COMPLETE ORDERING SPECIFICATION NUMBER, OR ...

SPECIFY—

1. MODEL NUMBER.
2. FAN RELAY SWITCHING.
3. TRANSFORMER SUPPLY VOLTAGE.
4. CONTACTOR TERMINAL CONNECTORS NO. 115182, IF NO. 6 WIRE IS TO BE USED.

ORDER FROM—

1. YOUR USUAL SOURCE, OR
2. HONEYWELL
1885 DOUGLAS DRIVE NORTH
MINNEAPOLIS, MINNESOTA 55422
(IN CANADA—HONEYWELL CONTROLS LIMITED
740 ELLESMERE ROAD
SCARBOROUGH, ONTARIO)
INTERNATIONAL SALES AND SERVICE OFFICES
IN ALL PRINCIPAL CITIES OF THE WORLD.

LISTING BODIES: R856A, B and D Fan Centers are listed by Underwriters' Laboratories, Inc. under File E4436, Guide Number XAPX.
DIMENSIONS: See Fig. 1.

REPAIR PARTS:
Relay—spst and spdt R851E1075
Transformer—116826A
Contactor—dpst - R850B1617

INSTALLATION

CAUTION

1. Installer must be a trained, experienced serviceman.
2. Disconnect power supply to prevent electrical shock and equipment damage.
3. Always conduct a thorough checkout when job is complete.

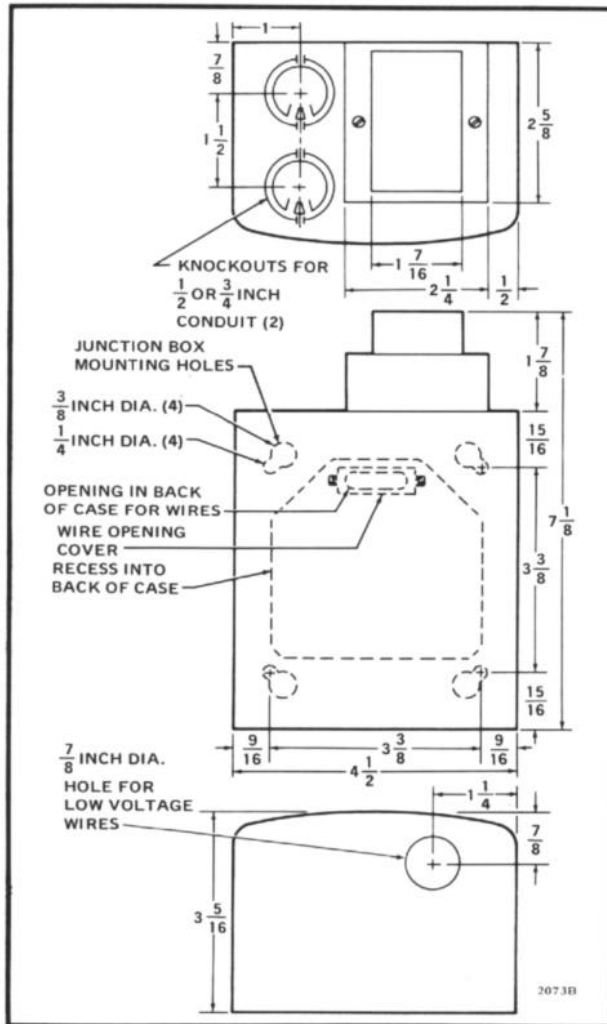


FIG. 1—R856 DIMENSIONS (IN INCHES).

LOCATION AND MOUNTING

The R856 may be mounted on any flat surface or on a standard 4 inch square junction box. Remove the cover by squeezing the sides and pulling straight outward. Knockouts for 1/2 or 3/4 inch conduit are provided in the top of the fan center case. When mounting on a junction box, run line voltage wires through the slot provided in the back of the case. A 7/8 inch diameter hole for low voltage wiring is located at the bottom of the case. Use the rubber grommet provided to secure the low voltage wires.

Use the case as a template, and punch or drill pilot mounting holes. Mount the R856 on a flat surface or the junction box with two screws provided.

WIRING

CAUTION

Disconnect power supply to prevent electrical shock and equipment damage.

All wiring must comply with local codes and ordinances. Refer to information furnished by the system or equipment manufacturer and wiring diagrams for typical hookups and internal schematics.

After wiring is complete, place system into operation. Operate through one complete cycle to make sure equipment functions properly.

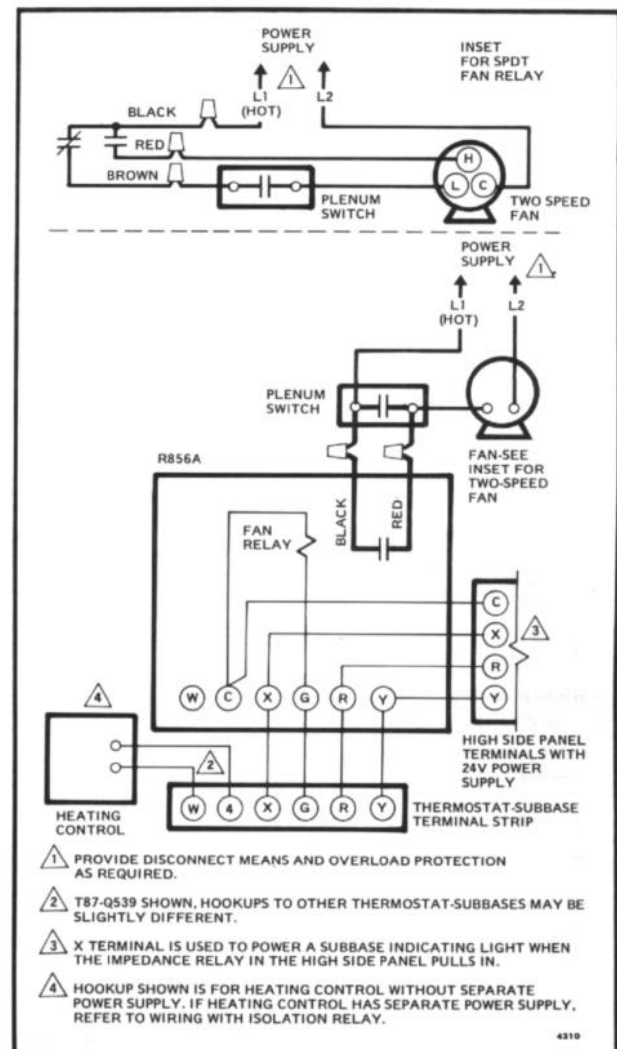


FIG. 2—TYPICAL R856A SPST HOOKUP DIAGRAM WITH INTERNAL SCHEMATIC. INSET SHOWS R856A WITH SPDT FAN RELAY. FOR WIRING WITH ISOLATING RELAY, REFER TO FIG. 4.

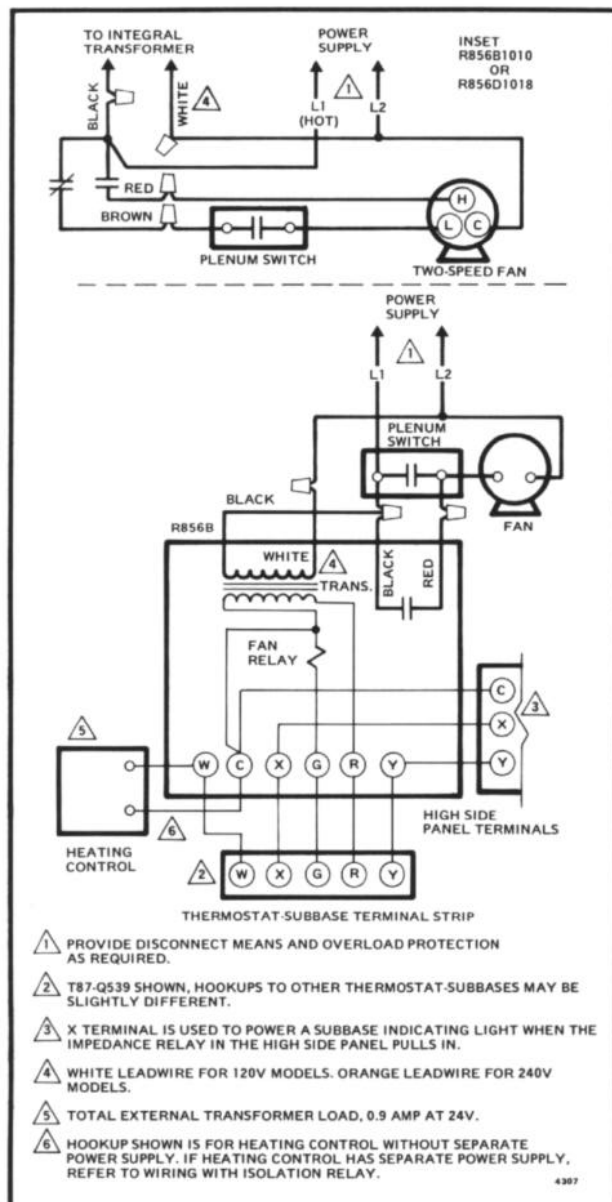


FIG. 3—TYPICAL R856B SPST HOOKUP DIAGRAM WITH INTERNAL SCHEMATIC. INSET SHOWS R856B WITH SPDT FAN RELAY. FOR WIRING WITH ISOLATING RELAY, REFER TO FIG. 4.

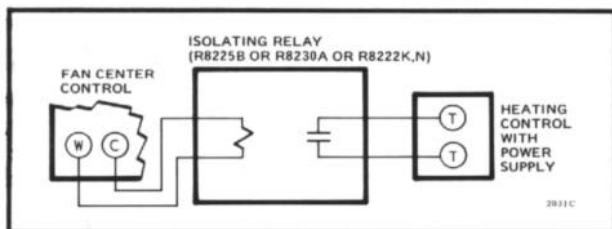


FIG. 4—ISOLATING RELAY ADDED TO PREVENT INTERCONNECTION OF HEATING CONTROL POWER SUPPLY WITH R856 TRANSFORMER. ISOLATION OF THE POWER SUPPLIES MAY ALSO BE ACCOMPLISHED BY USING SPECIAL THERMOSTAT-SUBBASE COMBINATIONS WITH ISOLATED CIRCUITS SUCH AS T87F-Q539A1147, T834A-Q634A1039, OR T882-Q611A1037. REFER TO APPLICABLE HONEYWELL THERMOSTAT SPECIFICATION SHEETS FOR DETAILS.

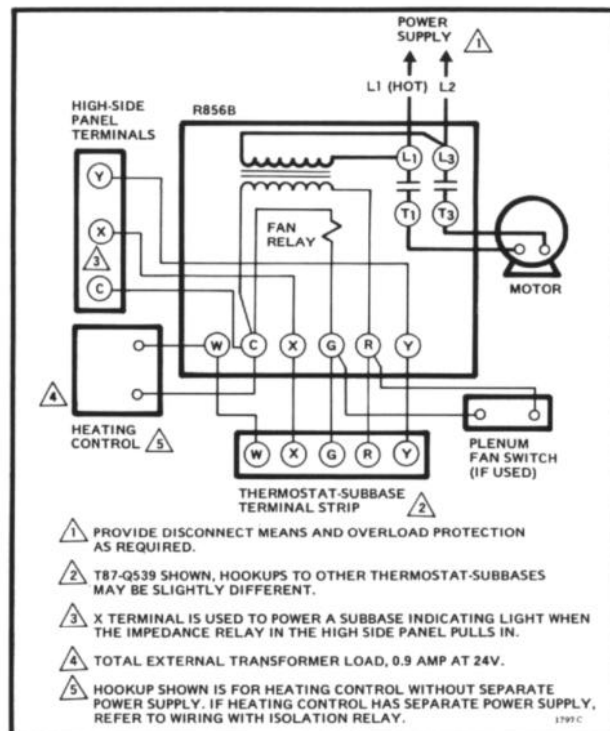


FIG. 5—TYPICAL R856B DPST HOOKUP DIAGRAM WITH INTERNAL SCHEMATIC. FOR WIRING WITH ISOLATING RELAY, REFER TO FIG. 4.

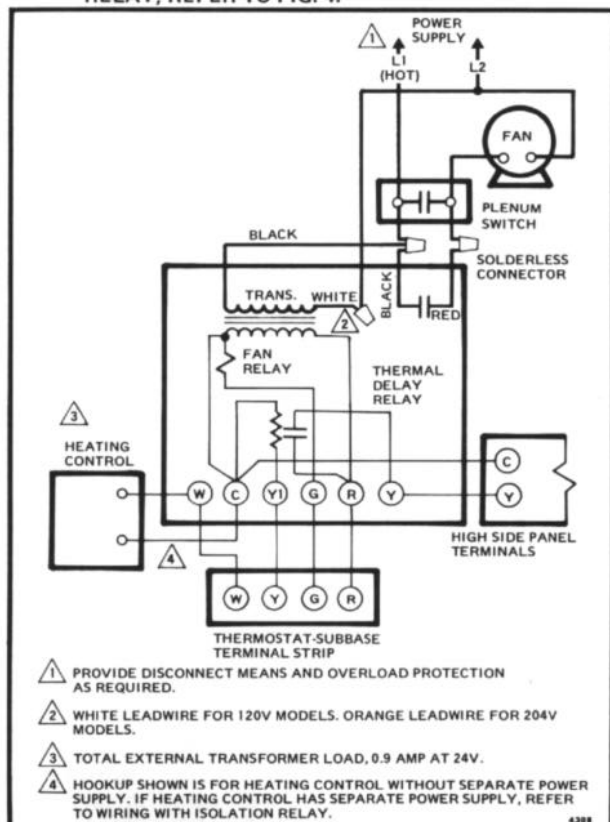


FIG. 6—TYPICAL R856D SPST HOOKUP DIAGRAM WITH INTERNAL SCHEMATIC. INSET ABOVE FIG. 3 SHOWS WIRING R856D SPDT FAN RELAY. THERMAL DELAY RELAY PREVENTS SHORT CYCLING COMPRESSOR. FOR WIRING WITH ISOLATING RELAY, REFER TO FIG. 4.