

SPECIFICATION

APPLICATION

The R85A-001 is an electronic fan control board that provides control of a three-speed line voltage fan motor. It can be connected to a thermostat that by itself does not have the current or voltage rating to switch a fan motor directly. The fan speed input signals can be 24, 120 or 240VAC.

Table 1. Description of Fan board.

Model	Fan Selection	Powering Method
R85A-001	LOW-MEDIUM-HIGH	24VAC or Line Voltage

FEATURE

- Fan speed input voltage can be 24, 120 or 240VAC.
- Supplied voltage can be selected to either 24VAC or line voltage by 2 removable jumpers.
- If line voltage (120 or 240VAC) is supplied to the fan speed voltage select inputs it should be the same voltage as provided to the motor.

GENERAL SPECIFICATION**Table 2. Fan board Specifications.**

Power Line Voltage Input 24 V Input	120 or 240VAC, 50-60 Hz 24 VAC, 50-60 Hz
Terminal Rated Fan Speed Input Line Hot (For Fan Outputs)	24, 120 or 240VAC VAC, 50-60 Hz 120 or 240VAC, 50-60 Hz
Load Ratings Input Voltage : 240 VAC Input Voltage : 120 VAC Input Voltage : 24 VAC Input Voltage : 24 VAC	240 VAC, 6 Amps, 50/60 Hz 120 VAC, 11 Amps, 50/60 Hz 240 VAC, 6 Amps, 50/60 Hz 120 VAC, 11 Amps, 50/60 Hz
Temperature Operating Temperature Storage temperature	-20 to 140 °F (-28 to 60 °C) -30 to 150 °F (-34 to 65 °C)
Operating Humidity	5 to 90% RH, non-condensing
Voltage Selection	With 2 removable Jumpers
Operating Life	100K cycles at full load
Agencies	Tested to UL 873

DIMENSION

(W x D x H) : 3.5 x 3.5 x 2.5 inch

TERMINAL

All terminals are .25" x 0.032" male quick connectors as follows.

- Line Hot Input
- Line Neutral Input
- Fan Neutral Input
- Fan Low Input
- Fan Medium Input
- Fan High Input
- Fan Low Output
- Fan Medium Output
- Fan High Output
- 24Vac hot
- 24vac Neutral

WIRING DIAGRAM : 24VAC INPUTS

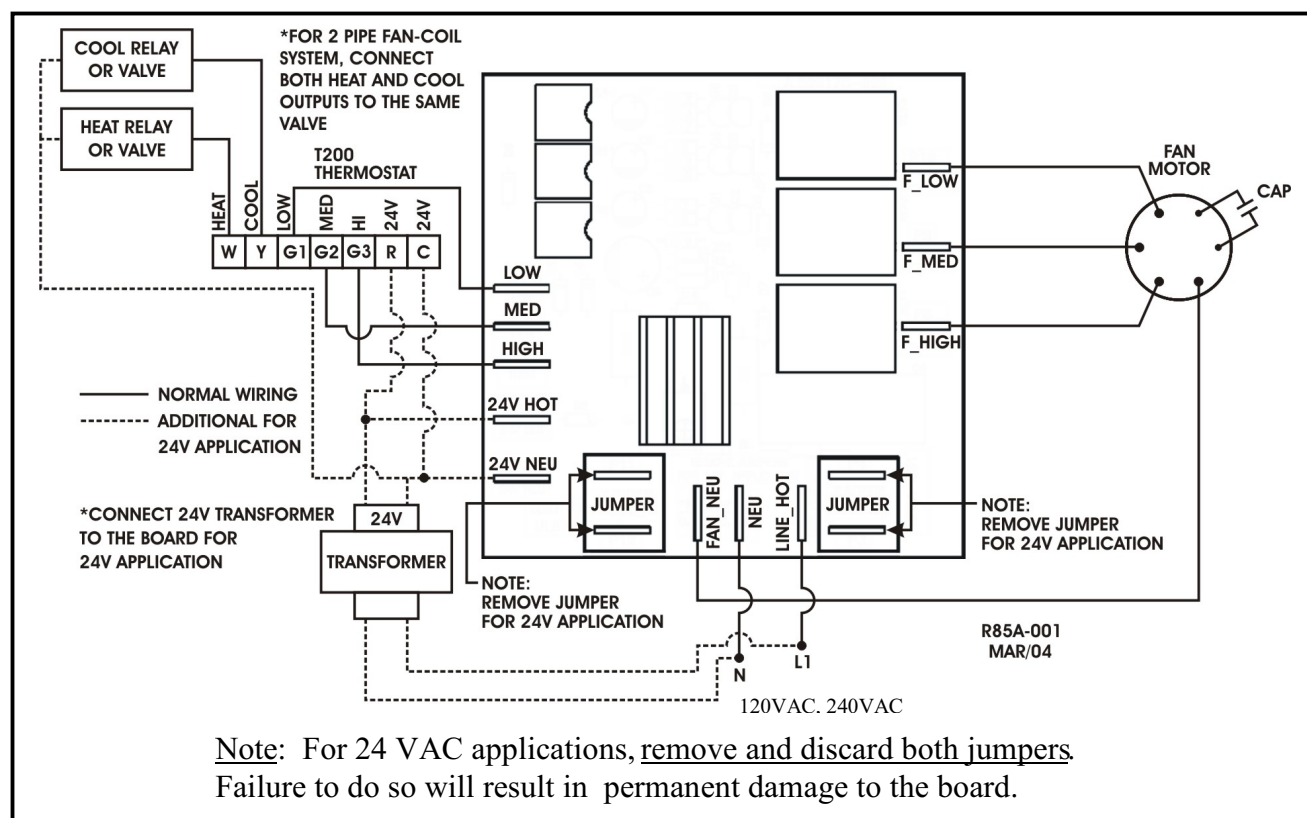


Figure 1a. Wiring Diagram – 24VAC inputs.

WIRING DIAGRAM : LINE VOLTAGE INPUTS

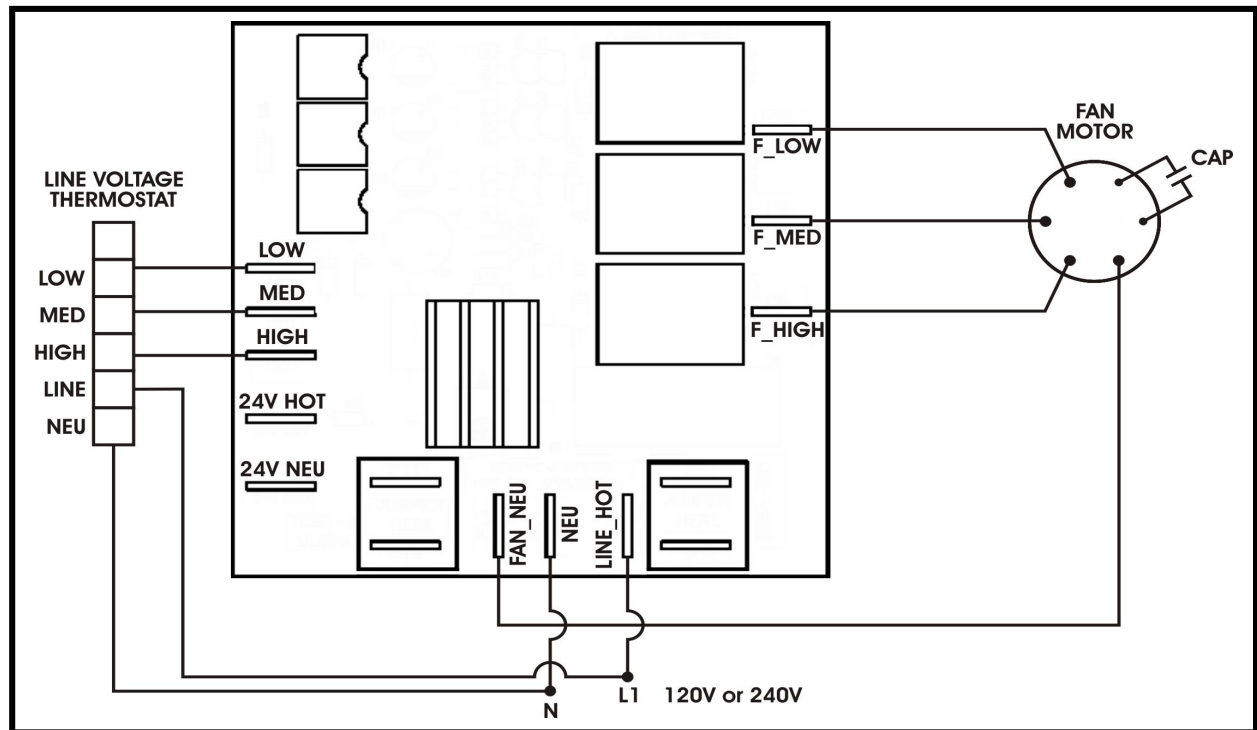


Figure 1b. Wiring Diagram - Line voltage inputs.

INSTALLATION

⚠ This device must be installed inside an electrical enclosure with minimum clearances to grounded metal accordance with UL 1995 to reduce the risk of unintentional contact with an uninsulated live part. It must be protected by a maximum of 20A fuse or circuit breaker.

Mark and drill 4 mounting holes with the same diameter and distance as described below. Align board and the plastic spacers over the holes, firmly push the board until all spacers snap into the mounting holes.

- For line voltage fan speed input, the two jumpers must be in place.
- For 24 VAC fan speed input, remove and discard the two jumpers and connect the 24 VAC transformer to the 24 VAC **Hot** and **Neutral** terminals.

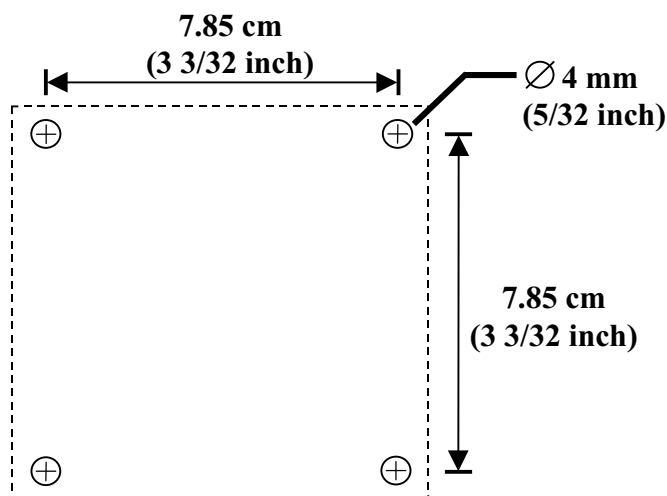


Figure 2. mounting dimension.

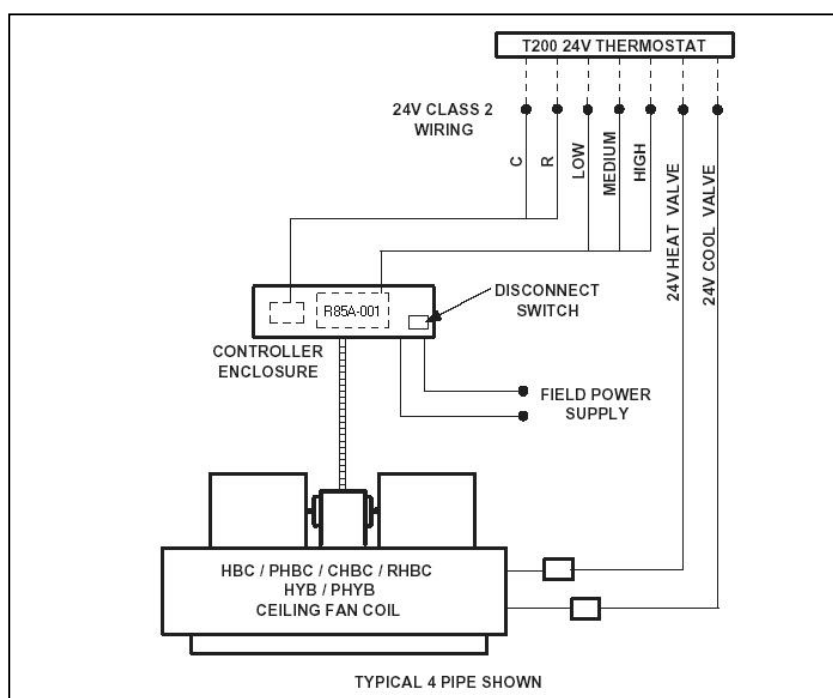


Figure 3. Typical Equipment Wiring.