

1 Application

The RC840T Electric Heating Relay is designed to control a line voltage resistive load from a low voltage thermostat. The RC840T relay has a built-in 24 V transformer and is compatible with 3-wire (R,C,W) thermostats as well as 2-wire mechanical and battery-operated thermostats.

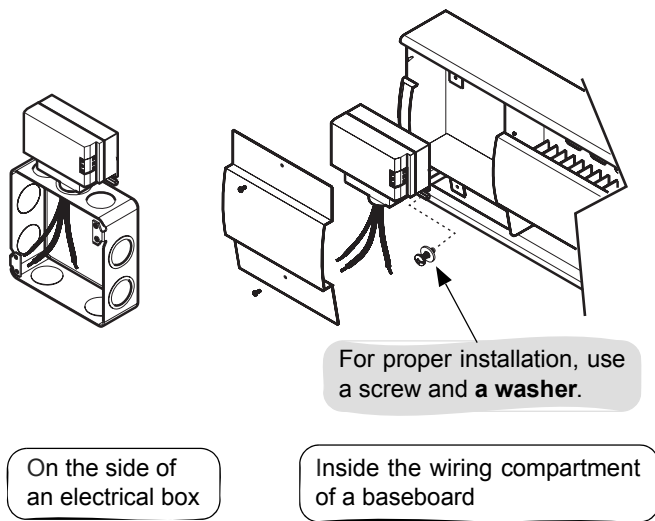
The RC840T operates silently and can be installed in bedrooms, living rooms, or any other occupied area without disturbing occupants. On a call for heat, the relay is immediately activated; there is no delay. This increases temperature control and comfort.

NOTE: Not recommended for fast-cycling modulated regulation. For fast-cycling heating equipment, it is recommended to use the RT850 or RT850T (integrated 24 V transformer) Solid State Relay.

2 Installation

The RC840T must be installed in an area where the temperature is between -4°F and 140°F (-20°C and 60°C).

The RC840T can be installed on the side of an electrical box or a distribution panel or inside the wiring compartment of an electric baseboard.

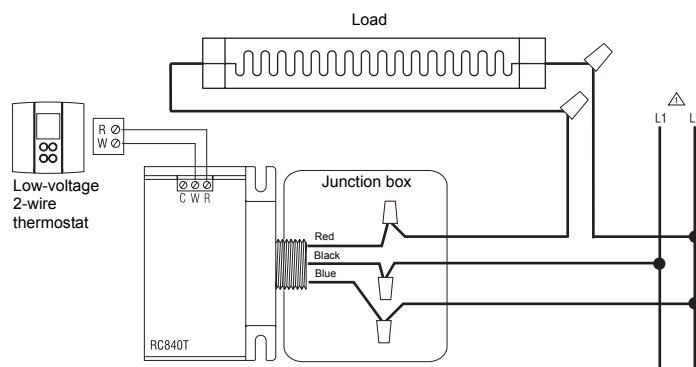


- ▶ All wiring must comply with national and local electrical code regulations.
- ▶ Installation should be carried out by an electrician.
- ▶ Disconnect power supply before installing the relay to prevent electrical shock.

- 1 Secure relay to the mounting surface using the two mounting brackets. Use the supplied lock nut to secure the relay to the junction box.
- 2 Wire the relay and connect according to typical wiring diagrams (refer to figures 1 & 2).

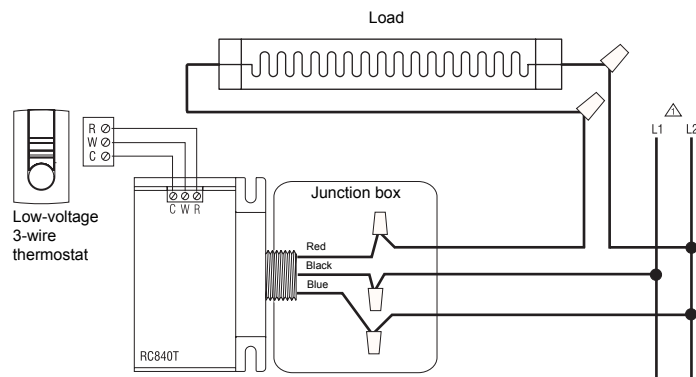
- 3 Once mounting and wiring have been completed, return power to the heating system and test the installation.
- 4 Increase the thermostat temperature to activate the relay. Allow system operation long enough to proof installation. Once installation has been proofed, set temperature to normal setpoint.

3 Typical Wiring Diagrams



⚠ You must provide an overload protection and disconnect as required.

Figure 1 : Connection to a 2-wire low voltage thermostat



⚠ You must provide an overload protection and disconnect as required.

Figure 2 : Connection to a 3-wire low voltage thermostat

4 Electrical Specifications

Ensure ratings are suitable for your application.

Voltage (VAC)	208	240	277	347
Resistive load (A)	22	22	19	18
Inductive load (HP)	1.0	1.5		
FLA	13	12		
LRA	42			
Control signal	24 VAC / 40 mA / 1.2 VA			

Transformer ratings: 24 VAC / 1.2 VA / Class 2

Ambient operating temperature: -4°F to 140°F (-20°C to 60°C)

Ambient storage: -40°F to 175°F (-40°C to 80°C)

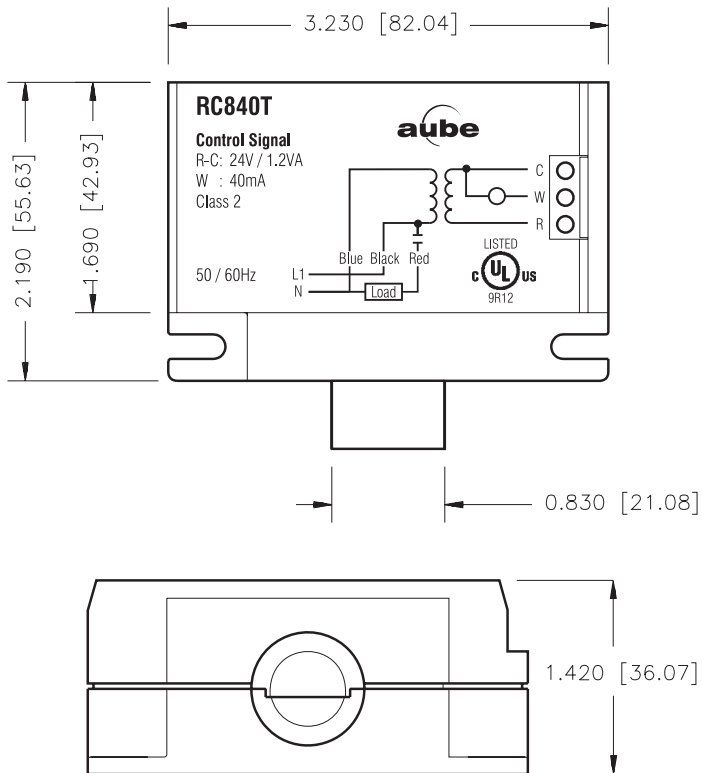
Humidity limits: 0 to 95% non-condensing

Net weight: 11.5 oz. (326 g)

Terminal wire size: 12 AWG

Certification: 

5 RC840T Dimensions



Dimensions are expressed in INCHES [MM]