

# RC840 - Installation Instructions

## On/Off Switching Electric Heating Relay

RC840

### Application

The RC840 Electric Heating Relay is designed to control a line voltage resistive load from a 24 V control signal.

The RC840 operates silently and can be installed in bedrooms, living rooms, or any other occupied area without disturbing occupants.

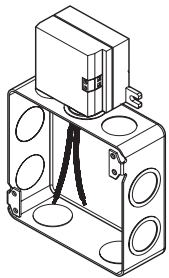
On a call for heat, the relay is immediately activated; there is no delay. This increases temperature control and comfort.

**NOTE:** Not recommended for fast-cycling modulated regulation. For low-cycling heating equipment, we recommend the RT850 or RT850T (integrated 24 V transformer) Solid State Relay.

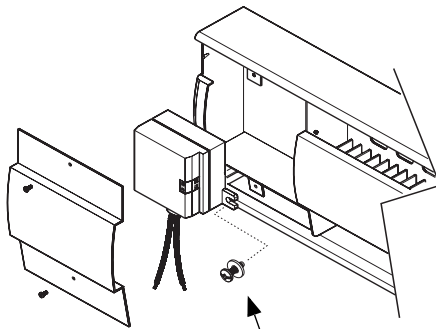
### Installation

The RC840 must be installed in an area where the temperature is between -4°F and 140°F (-20°C and 60°C).

The RC840 can be installed on the side of an electrical box (figure 1) or a distribution panel or inside the wiring compartment of an electric baseboard (figure 2).



**Figure 1:** Installation on the side of an electrical box



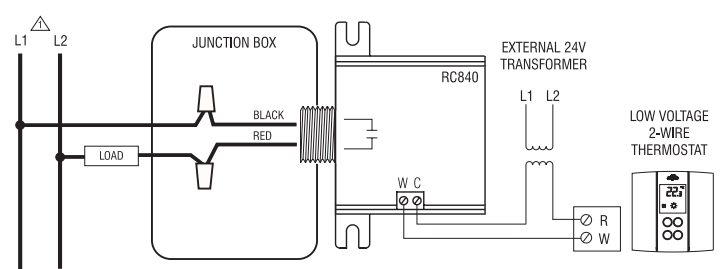
For proper installation, use a screw and a washer.

**Figure 2:** Installation inside the wiring compartment of a 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.

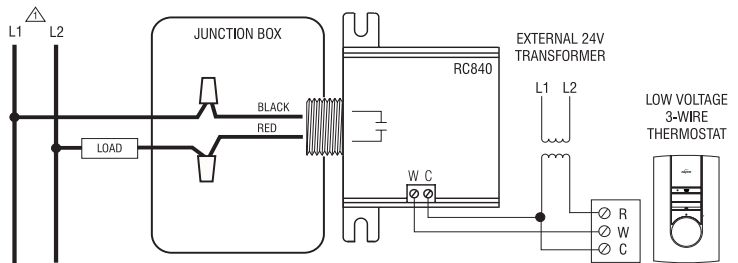
- 1 Secure relay to the mounting surface using the two mounting brackets. Use the supplied lock nut to secure the relay to the junction box.
- 2 Wire the relay and connect according to typical wiring diagrams (refer to figures 1, 2 and 3).
- 3 Once mounting and wiring have been completed, return power 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.

### Typical Wiring Diagrams



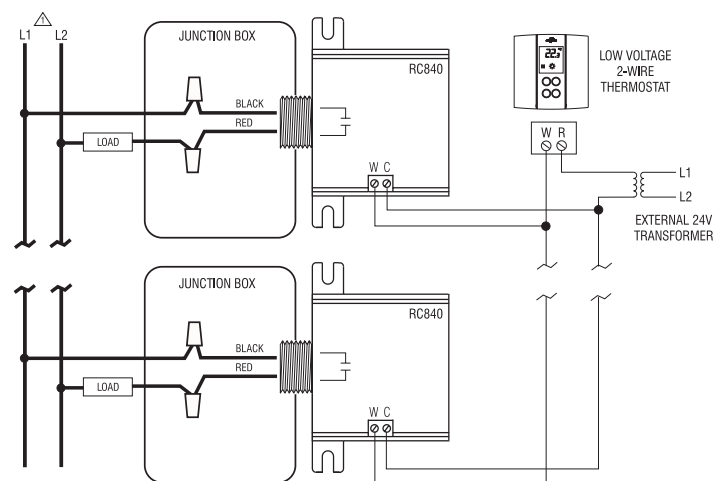
⚠ You must provide an overload protection and disconnect as required.

**Figure 1:** Connection to a 2-wire low voltage thermostat using a 24 V external transformer



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

**Figure 2:** Connection to a 3-wire low voltage thermostat using a 24 V external transformer



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

Transformer VA output = RC840 Quantity x 1 VA

**Figure 3:** Connection to a 2-wire low voltage thermostat using a 24 V external transformer and multiple relays

# Electrical Specifications

Ensure ratings are suitable for your application.

<b>Voltage (VAC)</b>	120	208	240	277	347
<b>Resistive load (A)</b>	22	22	22	19	18
<b>Inductive load (HP)</b>	0.8	1.0	1.5		
<b>FLA</b>	16	12			
<b>LRA</b>	60	50			
<b>Control signal</b>	24 V / 40 mA / 1 VA				

**Ambient operating temp.:** -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:** 7 oz. (198 g)

**Terminal wire size:** 12 AWG

**Certification:** 

# Warranty

AUBE TECHNOLOGIES INC. ONE (1) YEAR LIMITED WARRANTY

This product is guaranteed against workmanship defects for a one year period following the initial date of purchase. During this period, AUBE Technologies Inc. will repair or replace, at our option and without charge, any defective product which has been used under normal conditions.

The warranty does not cover delivery costs and does not apply to products poorly installed or randomly damaged following installation. This warranty cancels and replaces any other manufacturer's express or implied warranty as well as any other company commitment.

AUBE Technologies Inc. cannot be held liable for related or random damages following the installation of this product. The defective product as well as the purchase invoice must be returned to the place of purchase or mailed, prepaid and insured, to the following address:

Aube Technologies Inc.  
705 Montrichard  
Saint-Jean-sur-Richelieu, Quebec, Canada J2X 5K8

# Technical Support

If you have any questions concerning the installation of the RC840 relay, call our technical support team at:

**Phone:** Montreal area: (450) 358-4600  
Canada / U.S.: 1-800-831-AUBE (2823)

**Fax:** (450) 358-4650

**Email:** [service@aubetech.com](mailto:service@aubetech.com)

Monday to Friday from 8:30 AM to 5:00 PM EST.

For more information on our products, visit us at:  
[www.aubetech.com](http://www.aubetech.com)

# RC840 Dimensions

