

## 1 Application

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

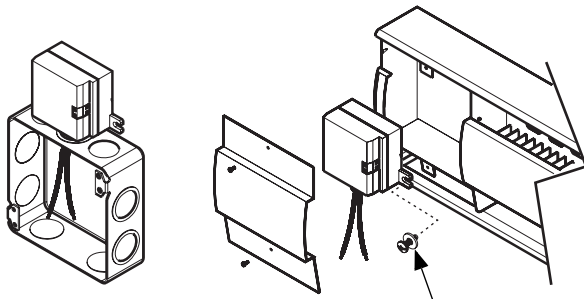
The RC840 operates silently and can be installed in bedrooms, living rooms, or any other occupied area without disturbing occupants. On a call for heat, the relay is immediately activated; there is no delay. This increases temperature control and comfort.

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

## 2 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 or a distribution panel or inside the wiring compartment of an electric baseboard.



For proper installation, use a screw and a washer.

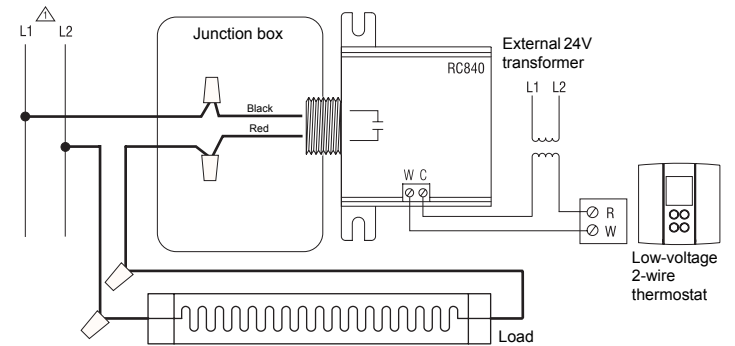
On the side of an electrical box

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.

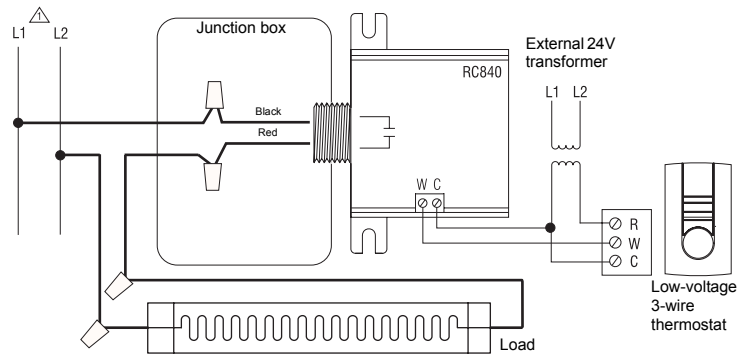
- 1 Secure relay to the mounting surface using the two mounting brackets. Use the supplied lock nut to secure the relay to the junction box.
- 2 Wire the relay and connect according to typical wiring diagrams (refer to figures 1, 2 and 3).
- 3 Once mounting and wiring have been completed, return power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

## 3 Typical Wiring Diagrams



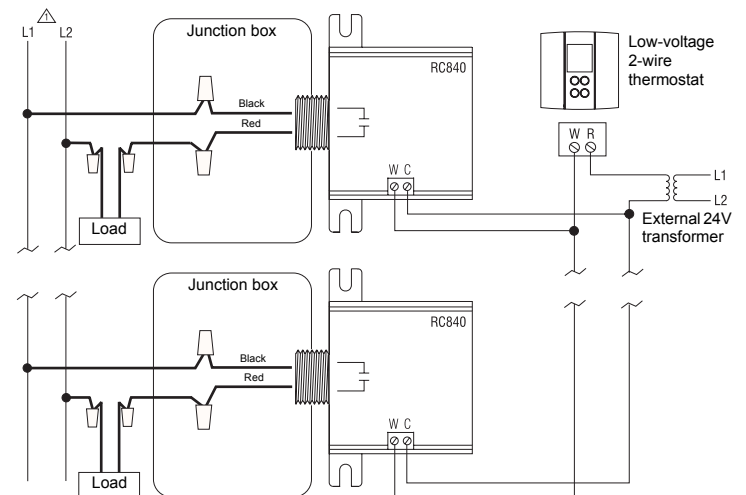
1 You must provide an overload protection and disconnect as required.

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



1 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



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Transformer VA output = RC840 Quantity x 1.2 VA

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

## 4 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	13	12		
<b>LRA</b>	42				
<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)

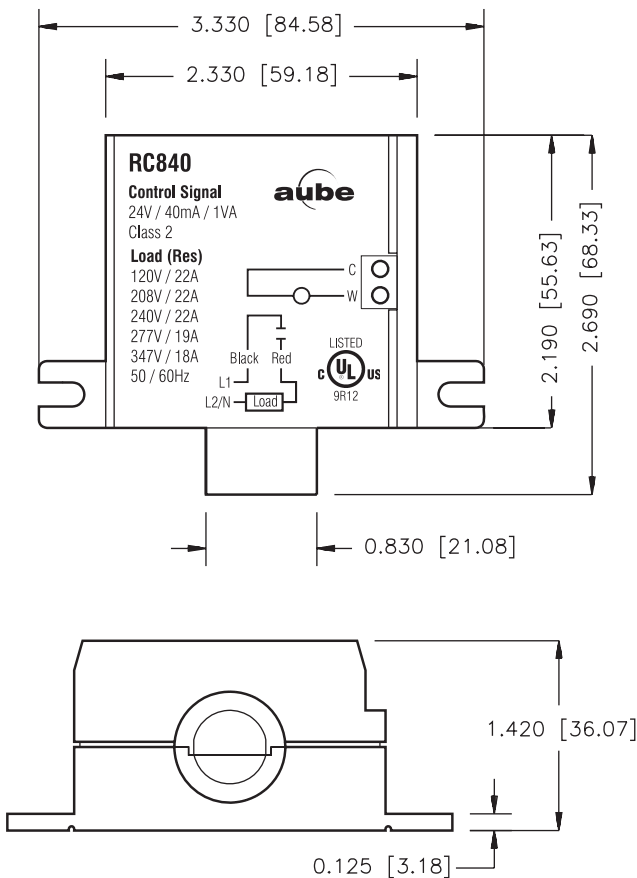
**Humidity limits:** 0 to 95% non-condensing

**Net weight:** 7 oz. (198 g)

**Terminal wire size:** 12 AWG

**Certification:** 

## 5 RC840 Dimensions



Dimensions are expressed in INCHES [MM]

## ✓ Warranty

AUBE warrants this product, excluding battery, to be free from defects in the workmanship or materials, under normal use and service, for a period of three (3) years from the date of purchase by the consumer. If at any time during the warranty period the product is determined to be defective or malfunctions, AUBE shall repair or replace it (at AUBE's option).

If the product is defective,

- (i) return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it, or
- (ii) contact AUBE. AUBE will make the determination whether the product should be returned, or whether a replacement product can be sent to you.

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by AUBE that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

AUBE's sole responsibility shall be to repair or replace the product within the terms stated above. AUBE SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some provinces, states or regions do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY AUBE MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE THREE-YEAR DURATION OF THIS WARRANTY. Some provinces, states or regions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from one province, state or region to another.

## Customer Assistance

If you have any questions on the product installation or operation, contact us at:

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Saint-Jean-sur-Richelieu, Quebec  
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Canada  
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Toll-free: 1-800-831-AUBE  
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For more information on our products, go to  
[www.aubetech.com](http://www.aubetech.com)