

THERMOSTAT ISOLATION MODULE

Cat. No. 29A00-1

Installation Instructions and User's Guide

LEVITON[®]

PK-93294-10-00-0AAR2243
(29100)

INSTALLATION

ENGLISH

WARNINGS AND CAUTIONS

- Read and understand all instructions. Follow all warnings and instructions marked on the product.
- Do not use this product near water - e.g., near a tub, wash basin, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.
- Never push objects of any kind into this product through openings, as they may touch dangerous voltages.
- SAVE THESE INSTRUCTIONS.

WARNINGS AND CAUTIONS

- Never install communications wiring or components during a lightning storm.
- Never install communications components in wet locations unless the components are designed specifically for use in wet locations.
- Never touch uninsulated wires or terminals unless the wiring has been disconnected at the network interface.
- Use caution when installing or modifying communications wiring or components.

DESCRIPTION

The Leviton Model 29A00 Thermostat Isolation Module (TIM) is designed to isolate an Leviton Model RC-80 series (Rc-8x) thermostat from the heating and cooling system it is controlling. This module is used when there is an incompatibility between the RC-8x thermostat and the controlled HVAC system. Since the RC-8x is a "power stealing" thermostat, there must be sufficient current available in the unused circuit (i.e. the heating circuit if the thermostat is calling for cooling) to drive the thermostat electronics. The RC-8x draws very little current, about 10 mA on average. However, it requires an uninterrupted power supply. Even a momentary interruption in power to the RC-8x will cause it to reset (showing all segments of the display and resetting the power on delay timer). Most heating and cooling systems are designed with power stealing thermostats in mind, and are fully compatible with the RC-8x without the TIM. In the case of incompatibility, the TIM assures a continuous and adequate supply of current to the RC-8x, while eliminating any current draw from the heating and cooling system. The TIM also makes the RC-8x compatible with systems using voltages other than 24 VAC, such as millivolt systems or DC controlled systems.

This module can also be used when the heating and cooling system has separate transformers. RH is for heating and RC is for cooling. These terminals are isolated from each other on this module.

The TIM should be used when the following conditions apply:

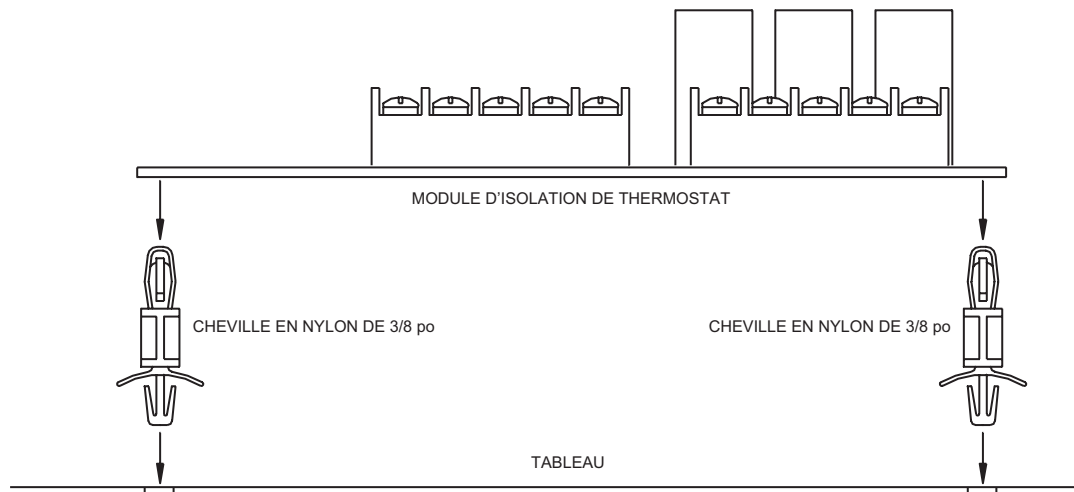
1. The RC-8x "resets" (as evidenced by all segments on the display illuminating for several seconds) when calling for heat or cool.
2. The RC-8x is used to control millivolt heating systems or other systems, which do not use 24 volts AC for the thermostat circuit.
3. The RC-8x is used to control heating and cooling systems with separate transformers.

The TIM is mounted on or near the heating and cooling equipment. Only 4 conductors are used to the RC-8x: R, G, W and Y. The C (common) terminal on the RC-8x is not used. The LED indicators on the TIM will indicate which circuits are energized: FAN (G terminal), HEAT (W terminal), and COOL (Y terminal).

INSTALLATION

1. Locate an area on the panel of the HVAC system large enough to mount the Model 29A00. The area should be free of obstructions both on the front and back of the panel.
2. Place the Model 29A00 against the panel and mark the center of the four mounting holes with a pencil.
3. Drill a 3/16" diameter hole in each location marked.
4. Insert the large end of the 3/8" long nylon standoff into each of the holes drilled as shown in **Figure 1**.

Figure 1 - Mounting the Model 29A00



FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1 800 405-5320**.

LEVITON LIMITED WARRANTY

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that products manufactured by Leviton under the Leviton brand name ("Product") will be free from defects in material and workmanship for the time periods indicated below, whichever is shorter: • **OmniPro II and Lumina Pro**: three (3) years from installation or 42 months from manufacture date. • **OmniLT, Omni IIe, and Lumina**: two (2) years from installation or 30 months from manufacture date. • **Thermostats, Accessories**: two (2) years from installation or 30 months from manufacture date. • **Batteries**: Rechargeable batteries in products are warranted for ninety (90) days from date of purchase. **Note**: Primary (non-rechargeable) batteries shipped in products are not warranted. **Products with Windows® Operating Systems**: During the warranty period, Leviton will restore corrupted operating systems to factory default at no charge, provided that the product has been used as originally intended. Installation of non-Leviton software or modification of the operating system voids this warranty. Leviton's obligation under this Limited Warranty is limited to the repair or replacement, at Leviton's option, of Product that fails due to defect in material or workmanship. Leviton reserves the right to replace product under this Limited Warranty with new or remanufactured product. **Leviton will not be responsible for labor costs of removal or reinstallation of Product.** The repaired or replaced product is then warranted under the terms of this Limited Warranty for the remainder of the Limited Warranty time period or ninety (90) days, whichever is longer. This Limited Warranty does not cover PC-based software products. **Leviton is not responsible for conditions or applications beyond Leviton's control. Leviton is not responsible for issues related to improper installation, including failure to follow written installation and operation instructions, normal wear and tear, catastrophe, fault or negligence of the user or other problems external to the Product.** To view complete warranty and instructions for returning product, please visit us at www.leviton.com.

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WEB VERSION

- Attach the Model 29A00 onto the ends of the four standoffs. They should snap into the holes on the Model 29A00 PCA.
- Wire the Model 29A00 according to **Figure 2** or **Figure 3** depending on the type of HVAC System.

Figure 2 - Connections to Isolate Thermostat from HVAC System

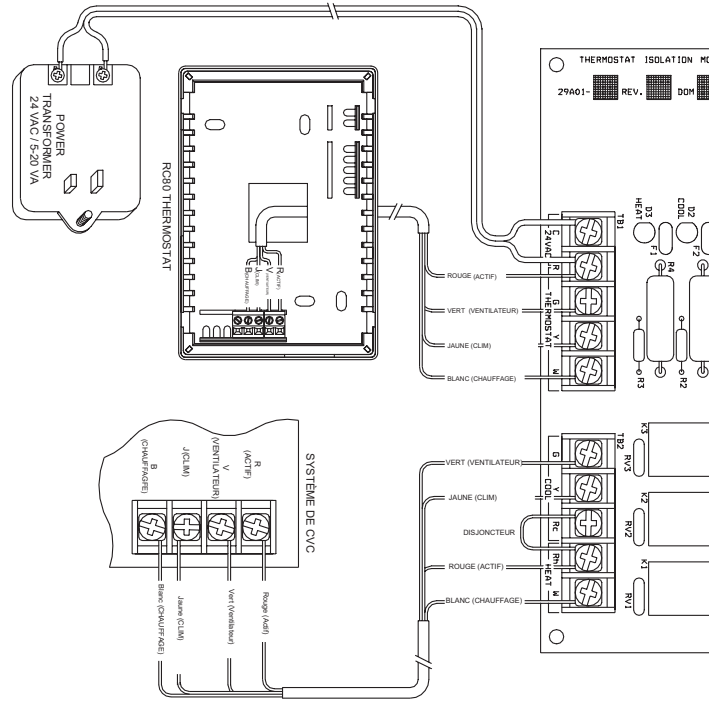


Figure 3 - Connections to Heating and Cooling Systems with Separate Transformers

