

White-Rodgers RBM-184

White-Rodgers RBM-184 Relay Instruction Manual

1. PRODUCT OVERVIEW

The White-Rodgers RBM-184 Relay, also identified by part numbers 90-372 and 184-917, is an essential electrical component designed for various HVAC and furnace applications. This relay functions as an electrical switch, allowing a low-power signal to control a higher-power circuit. It is commonly used in heating, ventilation, and air conditioning systems to manage the operation of motors, compressors, and other electrical loads.

2. SAFETY INFORMATION

WARNING: Electrical Shock Hazard

- Always disconnect power to the appliance or system before installing, servicing, or removing the relay. Failure to do so can result in serious injury or death.
- Installation and servicing should only be performed by a qualified technician.
- Ensure all wiring connections are secure and comply with local electrical codes.
- Do not operate the relay if it appears damaged.

3. INSTALLATION

Follow these general guidelines for installing the RBM-184 Relay. Always refer to the specific wiring diagram of your appliance for correct connections.

1. **Power Disconnection:** Turn off all power to the HVAC system or furnace at the main circuit breaker or fuse box. Verify power is off using a voltage tester.
2. **Old Relay Removal:** Carefully disconnect the wires from the existing relay, noting their positions and labels. Remove the old relay from its mounting.
3. **New Relay Mounting:** The RBM-184 Relay features a DIN Rail Mount design. Securely attach the new relay to the designated mounting location.
4. **Wiring Connections:** Connect the wires to the appropriate screw terminals on the RBM-184 Relay.

Ensure each connection is tight and correct according to the appliance's wiring diagram. The relay has 6 terminals for various connections.

5. **Power Restoration:** Once all connections are secure and verified, restore power to the system.
6. **Testing:** Test the system to ensure the relay operates correctly.



Figure 1: White-Rodgers RBM-184 Relay with its original packaging. The box displays model numbers 90-372 and 184-917, and UPC 0786710036392. The relay itself shows specifications such as 'COIL: 120 VAC' and contact ratings.

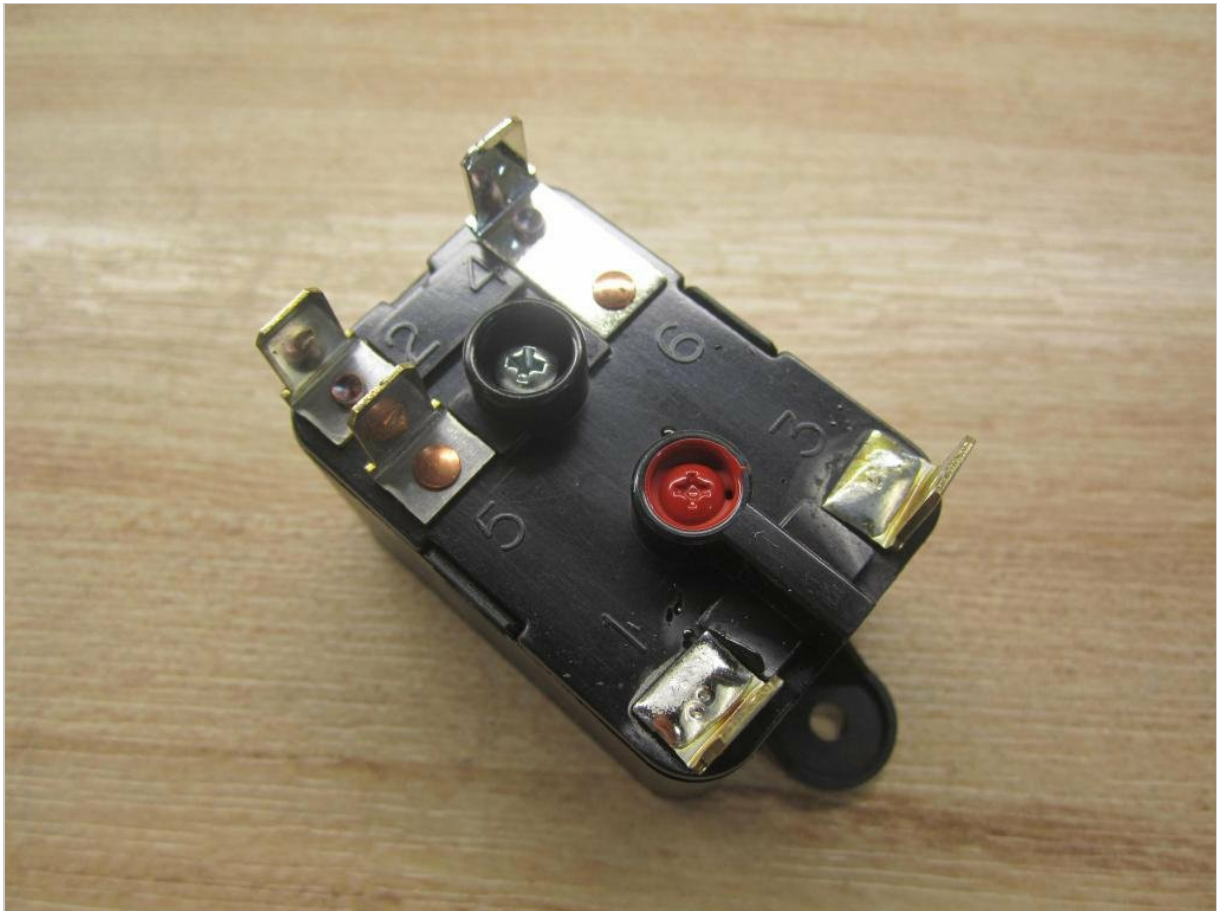


Figure 2: This image provides a bottom-up view of the White-Rodgers RBM-184 Relay, highlighting its screw terminals (numbered 1-6) and the mounting holes. The red and black components are visible, indicating connection points for wiring.



Figure 3: This image shows a side profile of the White-Rodgers RBM-184 Relay. It illustrates the compact black housing and the integrated mounting tabs, designed for secure installation.

4. OPERATION

The RBM-184 Relay operates automatically. When the coil receives the specified control voltage (e.g., 120 VAC), it energizes, causing the internal contacts to switch their state. This action completes or breaks a separate electrical circuit, thereby controlling the connected load. The relay's contact type is 2 normally open (NO) and 2 normally closed (NC), allowing for versatile control applications.

5. MAINTENANCE

The White-Rodgers RBM-184 Relay is designed for reliable, long-term operation with minimal maintenance. However, periodic inspection can help ensure optimal performance:

- **Visual Inspection:** Periodically check the relay for any signs of physical damage, discoloration, or loose connections.
- **Connection Integrity:** Ensure all wire connections to the terminals remain tight and free from corrosion.
- **Environmental Conditions:** Ensure the relay is operating within its specified environmental conditions (temperature, humidity) to prevent premature failure.

6. TROUBLESHOOTING

If the system controlled by the RBM-184 Relay is not functioning as expected, consider the following troubleshooting steps:

- **No Power:** Verify that power is supplied to the relay's coil and that the control circuit is active.
- **Incorrect Wiring:** Double-check all wiring connections against the appliance's schematic to ensure they are correct and secure.
- **Faulty Relay:** If power is present and wiring is correct, but the relay does not switch or the load does not activate, the relay itself may be faulty and require replacement.
- **Load Issues:** Ensure the connected load (e.g., motor, fan) is not faulty, which could prevent proper operation even if the relay is working.

Always disconnect power before performing any troubleshooting that involves touching electrical components.

7. SPECIFICATIONS

Brand:	White-Rodgers
Model Number:	RBM-184
Part Numbers:	90-372, 184-917
Connector Type:	Screw
Contact Type:	2 normally open (NO), 2 normally closed (NC)
Mounting Type:	DIN Rail Mount
Operation Mode:	Automatic

Number of Terminals:	6 (as observed on product)
Item Weight:	2.08 ounces
Manufacturer:	White Rodgers

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact White-Rodgers directly through their official website or customer service channels. Keep your proof of purchase for any warranty claims.