

Eaton BRH2125

Eaton Cutler-Hammer BRH2125 Circuit Breaker Instruction Manual

Model: BRH2125

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Eaton Cutler-Hammer BRH2125 Circuit Breaker. The BRH2125 is a 2-pole, 125 Amp circuit breaker designed for 120/240V AC/CA systems, featuring a common trip mechanism and HACR type rating. Please read this manual thoroughly before proceeding with any installation or operation.

2. IMPORTANT SAFETY INFORMATION

WARNING: Risk of electric shock or electrocution. Installation and servicing of this circuit breaker must be performed by qualified electrical personnel only. Always disconnect power at the main service panel before working on electrical circuits.

- Ensure all power is OFF before installation or maintenance.
- Use appropriate personal protective equipment (PPE).
- Verify voltage and current ratings match your electrical system requirements.
- Do not use this device if it appears damaged.
- Follow all local and national electrical codes.

3. INSTALLATION INSTRUCTIONS

The BRH2125 is a plug-in mount circuit breaker. Ensure the load center or panelboard is compatible with BR type breakers.



This image shows the Eaton Cutler-Hammer BRH2125 circuit breaker from an angled top-down view, highlighting the 'On/I' and 'Off/O' indicators, the 125 Amp rating, and the product labeling including 'Cutler-Hammer Type BRH2125', '120/240 V AC/CA', and '2 Pole'.

Installation Steps:

1. **Disconnect Power:** Turn off the main power supply to the electrical panel at the utility meter or main disconnect. Verify power is off using a voltage tester.
2. **Remove Panel Cover:** Carefully remove the cover of the electrical panel.
3. **Identify Slot:** Locate an available slot in the panelboard that is compatible with a 2-pole BR type circuit breaker.
4. **Install Breaker:** Position the BRH2125 circuit breaker so its clips align with the bus bar stabs in the panel. Firmly press the breaker onto the bus bar until it is securely seated.
5. **Connect Wiring:** Connect the load wires (typically two hot wires for a 2-pole breaker) to the appropriate terminals on the circuit breaker. The BRH2125 is compatible with both copper (Cu) and aluminum (Al) wiring. Ensure connections are tight according to torque specifications (refer to panel label or breaker markings).
6. **Replace Panel Cover:** Once wiring is complete and secure, replace the electrical panel cover.
7. **Restore Power:** Turn the main power supply back on.

4. OPERATING THE CIRCUIT BREAKER

The BRH2125 circuit breaker features a toggle switch for manual operation and a common trip mechanism for safety.



This close-up image displays the operating labels on the circuit breaker, clearly showing the 'On/I' and 'Off/O' positions for each pole, along with the '125' amp rating. The 'Common Trip' label is also visible, indicating that both poles trip simultaneously.

Operating Positions:

- **ON (I):** Pushing the toggle switch to the 'On/I' position connects power to the circuit.
- **OFF (O):** Pushing the toggle switch to the 'Off/O' position disconnects power from the circuit.
- **TRIPPED:** If an overload or short circuit occurs, the breaker will automatically move to a central, tripped position (often indicated by the toggle being between ON and OFF, or fully OFF with a red indicator). This is the 'Common Trip' feature, meaning both poles disconnect simultaneously.

Resetting a Tripped Breaker:

1. **Identify Cause:** Before resetting, identify and correct the cause of the trip (e.g., unplug overloaded

appliances).

2. **Full OFF:** Push the breaker handle firmly to the full 'Off/O' position. You may hear a click.
3. **Reset to ON:** Then, push the handle firmly to the 'On/I' position.

5. MAINTENANCE

The Eaton Cutler-Hammer BRH2125 circuit breaker requires minimal maintenance. Regular inspection is recommended to ensure proper function and safety.

- **Annual Inspection:** Periodically inspect the circuit breaker for any signs of physical damage, discoloration, or loose connections.
- **Cleaning:** Keep the area around the circuit breaker clean and free of dust and debris. Use a dry, non-abrasive cloth for cleaning. Do not use liquids or sprays.
- **Testing:** While not typically required for residential breakers, some applications may necessitate periodic testing by a qualified electrician.

6. TROUBLESHOOTING

If your circuit breaker trips frequently or fails to operate correctly, consider the following:

- **Frequent Tripping:** This often indicates an overloaded circuit or a short circuit. Disconnect some appliances from the circuit or investigate for faulty wiring/appliances.
- **Breaker Won't Reset:** If the breaker immediately trips again after being reset, there is likely a persistent overload or short circuit. Do not force the breaker. Consult a qualified electrician.
- **No Power, Breaker Not Tripped:** Check the main service panel for a tripped main breaker. If other circuits are working, the issue might be with the wiring to the specific circuit or a faulty appliance.
- **Physical Damage:** If the breaker shows signs of burning, melting, or other damage, it must be replaced immediately by a qualified electrician.

For persistent issues, always consult a qualified electrician.

7. TECHNICAL SPECIFICATIONS

Specification	Value
Brand	Eaton / Cutler-Hammer
Model Number	BRH2125
Current Rating	125 Amps
Voltage Rating	120/240 Volts AC/CA
Number of Poles	2
Circuit Breaker Type	Standard, HACR Type
Mounting Type	Plug-In Mount

Specification	Value
Wire Compatibility	Cu/Al
Material	Copper (internal components)
Item Weight	13.1 ounces
Dimensions	3.7 x 3.35 x 2.24 inches
Manufacturer	CUTLER HAMMER
UPC	696505474691

8. WARRANTY AND SUPPORT

This Eaton Cutler-Hammer BRH2125 Circuit Breaker is covered by the manufacturer's standard warranty. For specific warranty details, claims, or technical support, please refer to the official Eaton website or contact their customer service directly. Keep your purchase receipt as proof of purchase.

Eaton Customer Support: www.eaton.com/us/en/support.html