CUTLER HAMMER GFTCB220

Cutler Hammer GFTCB220 20 Amp 2 Pole GFCI Circuit Breaker Instruction Manual

Model: GFTCB220 | Brand: CUTLER HAMMER

1. Introduction

This manual provides essential information for the safe and effective installation, operation, and maintenance of your Cutler Hammer GFTCB220 20 Amp 2 Pole GFCI Circuit Breaker. Please read all instructions carefully before proceeding with installation or use. This device is designed to protect against electrical shock and leakage current by immediately breaking the circuit when a ground fault is detected.

2. Safety Information

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

- Always disconnect power before installation or maintenance.
- Ensure the circuit breaker rating matches the circuit requirements.
- Do not use this device if it appears damaged.
- GFCI devices are required in applications near water, such as kitchen countertops, bathrooms, swimming pools, hot tubs, and outdoor receptacles.

3. Product Overview

The Cutler Hammer GFTCB220 is a 20 Amp, 2 Pole Ground Fault Circuit Interrupter (GFCI) circuit breaker. It features self-test technology to ensure continuous protection against electrical shock. This model is a direct replacement for the GFCB220 and is designed to fit into BR-style panels.

Figure 1: Cutler Hammer GFTCB220 20 Amp 2 Pole GFCI Circuit Breaker. This image shows the front view of the circuit breaker, highlighting its compact design and labeling.

Key Features:

- Self-test technology for continuous functionality verification.
- 2 Pole, 20 Amp BR style breaker.
- Replaces the GFCB220 model.

4. Installation

This GFCI circuit breaker is designed for plug-in installation in compatible electrical panels. It is crucial to ensure compatibility with your panel type (BR series). This breaker will **not** fit into CH series panels due to design differences.

Installation Steps:

1. **Power Disconnection:** Turn off the main power supply to the electrical panel at the service entrance. Verify power is off using a voltage tester.
2. **Panel Access:** Remove the cover of the electrical panel.
3. **Wire Connection:**

- Connect the load wires (hot and neutral) from the circuit to the appropriate terminals on the GFCI breaker.
- Connect the white coiled pigtail wire from the GFCI breaker to the neutral bus bar in the panel.
- Ensure all connections are tight and secure.

4. **Breaker Installation:** Align the GFCI breaker with the appropriate slot in the panel's bus bar and firmly push it into place until it is securely seated.
5. **Panel Cover:** Replace the electrical panel cover.
6. **Power Restoration:** Restore power to the main service panel.

Note: Refer to your electrical panel's documentation for specific instructions on breaker installation and wiring diagrams. If unsure, consult a licensed electrician.

5. Operating Instructions

Once installed and power is restored, the GFCI circuit breaker is ready for operation.

Testing the GFCI Breaker:

The GFTCB220 features self-test functionality. However, manual testing is also recommended monthly to ensure proper operation.

1. Ensure the breaker is in the "ON" position.
2. Press the "TEST" button located on the front of the breaker.
3. The breaker should immediately trip to the "OFF" position, indicating it is functioning correctly.
4. To restore power, push the handle completely to the "OFF" position, then back to the "ON" position.
5. If the breaker does not trip when the "TEST" button is pressed, it may be faulty and should be replaced immediately.

6. Maintenance

The Cutler Hammer GFTCB220 GFCI circuit breaker requires minimal maintenance. Regular testing is the primary maintenance procedure.

- Perform the manual "TEST" procedure monthly as described in Section 5.
- Keep the electrical panel area clean and free from dust and debris.
- Do not attempt to repair a faulty GFCI breaker; replace it with a new one.

7. Troubleshooting

Problem	Possible Cause	Solution
GFCI trips frequently.	Ground fault in the circuit, overloaded circuit, faulty appliance, or faulty GFCI breaker.	Unplug all appliances on the circuit and reset the breaker. If it holds, plug in appliances one by one to identify the faulty one. If it still trips with no load, the breaker may be faulty and needs replacement.

Problem	Possible Cause	Solution
GFCI does not trip when "TEST" button is pressed.	Faulty GFCI breaker.	Replace the GFCI breaker immediately.
Power does not restore after tripping.	Breaker not fully reset.	Push the breaker handle completely to the "OFF" position, then firmly to the "ON" position.

If troubleshooting steps do not resolve the issue, contact a qualified electrician.

8. Specifications

- **Model:** GFTCB220
- **Brand:** CUTLER HAMMER (Eaton)
- **Current Rating:** 20 Amps
- **Number of Poles:** 2
- **Voltage:** 120 Volts (for 120/240V systems)
- **Circuit Breaker Type:** GFCI (Ground Fault Circuit Interrupter)
- **Mounting Type:** Plug-In Mount (BR Style)
- **Product Dimensions:** 2.75"D x 2"W x 4.5"H
- **Item Weight:** 11.2 ounces
- **UPC:** 786676025959

9. Warranty and Support

For warranty information and technical support, please refer to the official CUTLER HAMMER (Eaton) website or contact their customer service directly. Keep your purchase receipt for warranty claims.
Manufacturer: Eaton Cutler Hammer
Contact: Refer to manufacturer's official channels for the most current support information.