Schneider Electric HOM250GFICP

Square D by Schneider Electric HOM250GFICP Homeline 50-Amp Two-Pole GFCI Circuit Breaker User Manual

Model: HOM250GFICP

Product Overview

The Square D by Schneider Electric HOM250GFICP is a Homeline 50-Amp Two-Pole Ground Fault Circuit Interrupter (GFCI) circuit breaker. It is designed to provide protection against ground faults, which can cause electrical shock or fire. This breaker is suitable for use in Homeline load centers and is rated for 120/240 V~ applications.

Figure 1: Square D HOM250GFICP 50-Amp Two-Pole GFCI Circuit Breaker. This image shows the black circuit breaker with two poles, each rated 50 amps. A yellow 'TEST' button is visible on the front. The breaker also displays interrupting rating of 10,000 A and voltage ratings.

Safety Information

WARNING: Risk of electric shock or fire. Installation and servicing must be performed by qualified electrical personnel only. Disconnect power before working on or near electrical equipment. Always follow local electrical codes and regulations.

- Ensure the main power supply to the load center is turned OFF before installation or maintenance.
- Verify voltage and current ratings of the circuit breaker match the application requirements.
- Do not use if the product appears damaged.
- This GFCI circuit breaker is designed to protect against ground faults. It does not protect against overloads or short circuits, which are handled by the circuit breaker's primary function.

Setup and Installation

This section provides general guidelines for installing the HOM250GFICP GFCI circuit breaker. Refer to the specific wiring diagram of your Homeline load center for detailed instructions.

1. **Power Disconnection:** Turn off the main power to the electrical panel at the utility meter or main disconnect. Verify power is off using a voltage tester.
2. **Panel Access:** Remove the cover of the electrical panel.
3. **Breaker Installation:**
   - Locate an available space in the Homeline load center.
   - Hook the rear of the breaker onto the bus bar clips in the panel.
   - Press the front of the breaker firmly until it snaps into place.
4. **Wiring Connections:**
   - Connect the load wires (hot wires) to the appropriate terminals on the breaker. The breaker is a two-pole device, so connect both hot wires from the circuit.
   - Connect the neutral wire from the circuit to the pigtail neutral wire of the GFCI breaker. This pigtail neutral wire must then be connected to the neutral bar in the load center.
   - Ensure all connections are tight and secure. Refer to the wire gauge specifications on the breaker label: #14-#8 AWG AL/Cu (2.5-6mm²) 60/75°C and #6-#4 AWG Al/Cu (13-21 mm²). Torque terminals to 41 lb-in. (4.6 N-m).
5. **Panel Reassembly:** Replace the electrical panel cover.
6. **Power Restoration:** Turn the main power back on.

Operating Instructions

The HOM250GFICP GFCI circuit breaker operates like a standard circuit breaker with added ground fault protection.

- **ON Position:** Push the breaker handle fully to the "ON" position to supply power to the circuit.
- **OFF Position:** Push the breaker handle fully to the "OFF" position to disconnect power from the circuit.
- **TRIPPED Position:** If a ground fault occurs, the breaker handle will move to a center "TRIPPED" position. To reset, push the handle fully to the "OFF" position, then push it to the "ON" position.
- **TEST Button:** The yellow "TEST" button is used to verify the GFCI function. Pressing this button should cause the breaker to trip immediately. If it does not trip, the GFCI is not functioning correctly and should be replaced.

Maintenance

Regular testing of the GFCI circuit breaker is crucial to ensure its proper operation and continued safety.

- **Monthly Test:** Press the yellow "TEST" button on the face of the breaker. The breaker should trip immediately, moving to the center "TRIPPED" position.
- **Reset After Test:** After testing, reset the breaker by pushing the handle fully to the "OFF" position, then to the "ON" position.
- **Failure to Trip:** If the breaker does not trip when the "TEST" button is pressed, or if it fails to reset, it indicates a malfunction. The breaker must be replaced immediately by qualified personnel.
- **Cleaning:** Keep the area around the circuit breaker clean and free from dust and debris. Do not use liquids for cleaning inside the electrical panel.

Troubleshooting

Problem	Possible Cause	Solution
Breaker trips frequently.	Ground fault in the circuit, overloaded circuit, faulty appliance, or faulty breaker.	• Unplug all appliances on the circuit and reset the breaker. Plug them back in one by one to identify the faulty appliance. • Reduce the load on the circuit. • If the problem persists, consult a qualified electrician to check for ground faults in the wiring or a faulty breaker.
Breaker does not trip when TEST button is pressed.	Faulty GFCI mechanism.	The GFCI breaker is defective and must be replaced immediately by qualified personnel.
Breaker will not reset.	Persistent ground fault, short circuit, or internal breaker damage.	• Ensure the handle is pushed fully to the "OFF" position before attempting to reset to "ON". • If it still won't reset, there may be a continuous fault on the circuit. Disconnect all loads and try resetting. If it still won't reset, the breaker may be faulty and needs replacement. Consult a qualified electrician.

Specifications

Feature	Detail
Model Number	HOM250GFICP
Brand	Schneider Electric (Square D)
Current Rating	50 Amps
Number of Poles	2
Voltage Rating	120/240 V~
Frequency	60 Hz
Circuit Breaker Type	GFCI (Ground Fault Circuit Interrupter)
Mounting Type	Homeline load center
Interrupting Rating	10,000 A
Wire Compatibility	#14-#8 AWG AL/Cu (2.5-6mm²) 60/75°C; #6-#4 AWG Al/Cu (13-21 mm²)
Product Dimensions	30 x 8 x 6 inches; 0.16 ounces (as per product data)
Manufacturer	Square D

Warranty Information

Specific warranty details for Square D by Schneider Electric products can typically be found on the manufacturer's official website or included with the product packaging. For warranty claims or inquiries, please refer to the contact information provided in the Support section.

Support and Contact

For technical assistance, product support, or warranty inquiries, please contact Schneider Electric directly:

- **Official Website:** www.se.com/us/en/ (Schneider Electric USA)
- **Customer Service:** Refer to the "Contact Us" section on their official website for phone numbers and online support options.
- **Product Documentation:** Additional documentation and FAQs may be available on the Schneider Electric support portal.