Schneider Electric HOM115PCAFIC

Instruction Manual

Square D HOM115PCAFIC 15 Amp 120V Homeline Plug-On Neutral Single-Pole CAFCI Circuit Breaker

Brand: Schneider Electric | Model: HOM115PCAFIC

1. Introduction

This manual provides essential information for the safe and proper installation, operation, and maintenance of the Square D HOM115PCAFIC 15 Amp 120V Homeline Plug-On Neutral Single-Pole Combination Arc Fault Circuit Interrupter (CAFCI) Circuit Breaker. This device is designed to protect electrical circuits from dangerous conditions such as arc faults, overloads, and short circuits.
The HOM115PCAFIC circuit breaker continuously monitors the circuit and quickly turns off the power (trips) when a dangerous condition is detected. It is equipped with a diagnostic feature known as Time-Saver Diagnostics, which indicates the type of fault that last occurred on the circuit.

2. Safety Information

WARNING: RISK OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH.

- Installation and maintenance of this equipment must be performed by qualified electrical personnel only.
- Turn off all power supplying this equipment before working on or inside the equipment.
- Always use a properly rated voltage sensing device to confirm that power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.
- Failure to follow these instructions will result in death or serious injury.

This circuit breaker is designed for use in Square D Homeline load centers. Ensure compatibility before installation.

3. Product Overview

The HOM115PCAFIC is a single-pole, 15 Amp, 120 Volt CAFCI circuit breaker. Its key features include:

- **Combination Arc Fault Protection:** Detects both parallel and series arc faults.
- **Overload and Short Circuit Protection:** Standard circuit protection.
- **Plug-On Neutral Design:** Simplifies installation by eliminating the need for a pigtail wire, connecting

directly to the neutral bar.

- **Time-Saver Diagnostics:** Provides an indication of the last fault type (arc fault, overload, or short circuit).
- **UL & CSA Listed:** Meets high safety standards.

Image: Square D HOM115PCAFIC 15 Amp 120V Homeline Plug-On Neutral Single-Pole CAFCI Circuit Breaker. This image shows the front view of the circuit breaker, highlighting its compact design and labeling.

4. Setup and Installation

Tools Required: Screwdriver (appropriate type for terminal screws), wire strippers, voltage tester.

1. **De-energize the Load Center:** Turn off the main breaker in the electrical panel to ensure no power is present. Verify with a voltage tester.
2. **Prepare Wires:** Strip approximately 1/2 inch (13 mm) of insulation from the circuit wire (hot) and the neutral wire.
3. **Connect Hot Wire:** Insert the stripped end of the circuit's hot wire into the terminal marked 'LOAD' on the circuit breaker. Tighten the screw firmly to secure the wire.
4. **Install Breaker:** Position the circuit breaker onto the bus bar in the load center. The Plug-On Neutral design allows the neutral connection to be made automatically when the breaker is properly seated.

Ensure it is fully engaged.

5. **Connect Neutral Wire:** For the HOM115PCAFIC, the neutral connection is made directly to the neutral bar via the plug-on mechanism. No separate pigtail wire connection to the neutral bar is required.
6. **Verify Connections:** Double-check all wire connections for tightness and proper seating.
7. **Restore Power:** Close the load center cover. Turn the main breaker back on.

Consult local electrical codes and a qualified electrician if you are unsure about any step of the installation process.

5. Operating Instructions

Normal Operation: In its normal operating state, the circuit breaker handle will be in the 'ON' position. Power will be supplied to the connected circuit.
Manual Operation:

- To turn off power to the circuit, move the handle to the 'OFF' position.
- To restore power, move the handle to the 'ON' position.

Tripping: If an overload, short circuit, or arc fault occurs, the circuit breaker will automatically trip. The handle will move to a center 'TRIPPED' position. To reset a tripped breaker:

1. Move the handle fully to the 'OFF' position.
2. Then, move the handle to the 'ON' position.

If the breaker immediately trips again, do not attempt to reset it repeatedly. Investigate the cause of the trip.

6. Maintenance

The Square D HOM115PCAFIC circuit breaker requires minimal maintenance. Regular checks include:

- **Visual Inspection:** Periodically inspect the circuit breaker for any signs of physical damage, discoloration, or loose connections.
- **Test Button:** Test the circuit breaker monthly by pressing the 'TEST' button. The breaker should trip immediately. If it does not trip, the breaker may be faulty and should be replaced by a qualified electrician. Reset the breaker after testing.
- **Keep Clear:** Ensure the area around the load center and circuit breakers is clear of obstructions and debris to allow for proper ventilation and access.

7. Troubleshooting

Breaker Trips Frequently:

- **Overload:** The circuit may be drawing too much current. Unplug some devices from the circuit and try resetting the breaker.
- **Short Circuit:** A direct connection between hot and neutral/ground wires. This often causes an immediate trip. Inspect wiring and connected devices for damage.
- **Arc Fault:** Damaged insulation, loose connections, or pinched wires can cause arcing. The CAFCI breaker is designed to detect these.

- **Faulty Appliance:** An appliance connected to the circuit may be defective. Unplug all appliances and reset the breaker. Plug them back in one by one to identify the faulty device.

Time-Saver Diagnostics: The HOM115PCAFIC features a diagnostic LED that indicates the type of fault that caused the last trip. Refer to the specific diagnostic codes provided by Schneider Electric for detailed interpretation. Generally, a specific flash pattern will correspond to an arc fault, overload, or short circuit.
If you cannot identify or resolve the cause of frequent tripping, contact a qualified electrician.

8. Specifications

Specification	Value
Brand	Schneider Electric
Model Number	HOM115PCAFIC
Current Rating	15 Amps
Voltage	120 Volts
Circuit Breaker Type	AFCI (Combination Arc Fault Circuit Interrupter)
Mounting Type	Plug-In Mount
Number Of Poles	1
Product Dimensions	3.9 x 4.5 x 8 inches
Item Weight	1.8 pounds
Material	Copper
Certifications	UL & CSA Listed

9. Warranty and Support

For warranty information and technical support, please refer to the official Schneider Electric website or contact their customer service directly. Warranty terms typically cover manufacturing defects under normal use conditions.
Schneider Electric Customer Support:

- Visit the official Schneider Electric website for the most current support resources, FAQs, and contact information.
- Contact a qualified electrician for installation or troubleshooting assistance if you are not comfortable performing electrical work.