Connecticut Electric CH270

Connecticut Electric CH270 Type CH Circuit Breaker User Manual

Model: CH270 | Brand: Connecticut Electric

1. Introduction

The Connecticut Electric CH270 is a 70 Amp, 2-pole, 120/240 Volt Type CH circuit breaker designed for use in Cutler-Hammer load centers. This device provides essential overcurrent protection for electrical circuits, safeguarding wiring and equipment from damage due to overloads and short circuits. It is a plug-on type breaker, ensuring straightforward installation in compatible panels.

This manual provides important information regarding the safe installation, operation, and maintenance of your CH270 circuit breaker. Please read it thoroughly before attempting any installation or service.

2. Safety Information

WARNING: Risk of electrical shock, fire, or explosion. Installation and service of this circuit breaker must be performed by qualified personnel only. Failure to follow these instructions can result in serious injury or death.

- Always disconnect power at the main service panel before working on any electrical circuit or equipment.
- Verify that the power is off using a voltage tester before touching any wires or terminals.
- Ensure that the circuit breaker rating (amperage and voltage) matches the requirements of the circuit and the electrical panel.
- Comply with all national and local electrical codes and regulations.
- Do not use this circuit breaker if it appears damaged or has been dropped.
- Never attempt to bypass or tamper with the circuit breaker's protective mechanisms.

3. Setup and Installation

The CH270 circuit breaker is designed for plug-in mounting in compatible Cutler-Hammer Type CH load centers. Follow these steps for safe installation:

1. **Prepare the Panel:** Ensure the main power to the load center is completely disconnected. Open the load center cover.
2. **Identify Slot:** Locate an available slot in the bus bar of your Cutler-Hammer Type CH load center.
3. **Connect Wires:** Connect the circuit wires to the appropriate terminals on the circuit breaker. For a 2-pole breaker, connect the two hot wires to the screw terminals. Ensure all connections are tight and secure. Refer to your load center's wiring diagram for specific guidance.
4. **Mount the Breaker:** Position the circuit breaker so that its clips align with the bus bar stabs in the load center. Firmly press the breaker onto the bus bar until it is securely seated.
5. **Secure Cover:** Once installed, ensure all wires are neatly routed and the load center cover can be closed without pinching wires.
6. **Restore Power:** Close the load center cover. Restore main power to the load center.

This image shows the front view of the Connecticut Electric CH270 Type CH Circuit Breaker, highlighting its compact design and labeling.

4. Operating Instructions

The CH270 circuit breaker operates as an automatic protective device. It has two primary states: ON and OFF/TRIPPED.

- **ON Position:** When the handle is fully pushed to the ON position, power is supplied through the breaker to the connected circuit.
- **OFF Position:** Pushing the handle fully to the OFF position manually disconnects power to the circuit.
- **TRIPPED Position:** If an overload or short circuit occurs, the breaker will automatically trip. The handle will move to an intermediate position, typically between ON and OFF, or fully to the OFF position depending on the specific design. This indicates that the breaker has interrupted the circuit to prevent damage.

Resetting a Tripped Circuit Breaker

If the circuit breaker trips, follow these steps:

1. **Identify Cause:** Determine the cause of the trip. This is often due to too many appliances on one circuit or a faulty appliance. Disconnect or turn off any devices that may have caused the overload.
2. **Reset:** Firmly push the breaker handle all the way to the OFF position first. You may feel a click.
3. **Turn ON:** Then, push the handle firmly to the ON position.
4. **Monitor:** If the breaker immediately trips again, do not attempt to reset it repeatedly. There may be a persistent fault or short circuit that requires professional attention.

5. Maintenance

Circuit breakers generally require minimal maintenance. However, periodic inspection by a qualified electrician is recommended to ensure continued safe operation.

- Keep the load center area clean and free from obstructions.
- Ensure the load center cover is always securely closed.
- Do not paint over circuit breakers or their labels.
- If you notice any signs of damage, discoloration, or burning smells from the load center or breaker, immediately disconnect power and contact a qualified electrician.

6. Troubleshooting

Breaker Trips Frequently

- **Overload:** The most common cause. Too many devices are drawing power from the circuit. Unplug some devices or redistribute loads to other circuits.
- **Short Circuit:** A direct connection between hot and neutral/ground wires. This can be caused by damaged appliance cords, faulty wiring, or internal appliance issues. Disconnect all devices from the circuit and try resetting. If it still trips, contact an electrician.
- **Ground Fault:** Similar to a short circuit, but current flows to the ground. Often requires a Ground Fault Circuit Interrupter (GFCI) to detect.
- **Faulty Appliance:** A specific appliance might be drawing excessive current. Try to isolate which appliance causes the trip.

Breaker Does Not Reset

- **Persistent Fault:** There is still an overload, short circuit, or ground fault on the line. The breaker is functioning correctly by refusing to reset. Do not force it.

- **Damaged Breaker:** The breaker itself may be faulty or damaged. If you've ruled out circuit issues, the breaker may need replacement. This should be done by a qualified electrician.

If troubleshooting steps do not resolve the issue, or if you are unsure about any electrical problem, always consult a qualified electrician.

7. Specifications

Feature	Specification
Brand	Connecticut Electric
Model Number	CH270
Current Rating	70 Amps
Voltage	120/240 Volts
Number of Poles	2
Circuit Breaker Type	Standard
Mounting Type	Plug-In Mount
Product Dimensions (D x W x H)	3.59" x 4.55" x 3.59"
Item Weight	9 ounces
Material	Plastic
Manufacturer	Cutler Hammer

8. Warranty and Support

Warranty Information

This Connecticut Electric CH270 circuit breaker comes with a**1-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

The warranty does not cover damage resulting from improper installation, misuse, abuse, unauthorized modifications, or acts of nature.

Customer Support

For technical assistance, warranty claims, or further information regarding your Connecticut Electric CH270 circuit breaker, please contact the manufacturer or your authorized dealer. Always refer to the model number (CH270) when seeking support.

Note: Due to the nature of electrical products, all support and service should be handled by qualified professionals.