

# Type THQL/THHQL-GFCI and THQB/THHQB-GFCI Class A Group 1 CB3 Ground Fault Circuit Interrupter (GFCI) Circuit Breaker

Only for Systems with 120V ac Line-to-Ground Voltage With or without an Equipment Ground

## Installation Should Be Made Only By A Qualified Electrician

### **INSTALLATION TIPS**

There are several installation peculiarities which may incorrectly indicate a defective CB3 GFCI. The following will aid in correctly identifying a system's problem from a defective device.

Neutral (White) Wire Is Grounded On The Load Side Of The GFCI—This device is designed to trip if the resistance between neutral wire and ground is less than 4 ohms. If the GFCI trips as soon as energized, but with no load on the circuit, this may be the problem, and the neutral ground must be cleared for proper operation of the GFCI.

Equipment Ground and Neutral Connected on Load Side — This type of wiring will cause the device to trip exactly as explained above.

Excessive Leakage to Ground — Leakage currents in excess of the trip level of the GFCI 6 milliamp sensitivity between

live parts of the system wiring and ground, or between the live side of wiring within equipment and its housing, will cause the device to trip.

Multi-Wiring (shared neutral wiring) — When the GFCI neutral wire is common to two or more separate circuits, the GFCI will trip when a load current exists on any of the other sharing circuits. This is an insiduous problem and may not be detected until someone plugs in a receptacle or imposes some other load in some remote part of the building. This can only be corrected by some rewiring. REMEMBER, this GFCI must have its own private circuit.

**Swimming Pool Circuit** — Connect only to swimming pool equipment that has been installed in accordance with the 1965 or later National Electrical Code.

### **WARNINGS**

- Turn Off Power To Panel Before Attempting Installation.
- Observe Markings On CB3 Breaker For Proper Wiring. Do Not Reverse Feed The Breaker.
- Remove All CB3 GFCI's From Circuit Before Performing Any High Voltage Systems Tests.
- 1. Move handle of breaker to "OFF" position.
- Connect the coiled white wire furnished with the GFCI Breaker to a terminal on the neutral on the panel.
- Connect the WHITE insulated neutral load wire of the circuit to be protected to the breaker terminal lug marked "LOAD NEUTRAL."
- Connect the BLACK insulated load wire of the circuit to be protected to the breaker terminal lug marked "LOAD POWER."

Check to assure the CB3 GFCI Breaker is still in "OFF" position and all wires are properly connected.

- 5. Install the wired GFCI Breaker in the panel.
- 6. Restore power to the panel.

Panel Box (Typical)

Wired Into

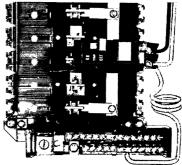
Load Power Lug,
Black Wire

Lug suitable for:
#8-14 CU/AL Solid
#8-10 CU/AL Stranded Only

Coiled White Wire

Connects to

Panel Neutral.



These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

(Continued on Reverse Side)

DISTRIBUTION EQUIPMENT DIVISION PLAINVILLE, CONN. 06062



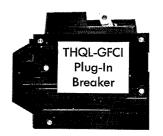
# Instruct occupants of the importance of performing and recording monthly tests.

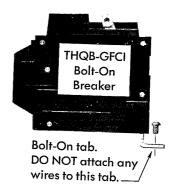
### **FUNCTIONAL CHECKS**

- 7. Move breaker handle to the "ON" position. If the breaker trips, go to step 8. If breaker remains in the "ON" position, go to step 9.
- 8. If handle moved to the TRIP position in Step 7:
  - -First move handle to "OFF" position.
  - -TURN OFF POWER TO PANEL.
  - -Disconnect "LOAD POWER" and "LOAD NEUTRAL" wires from the breaker.
  - -Restore power to panel.
  - -Move breaker handle to the "ON" position.

If handle now remains in the "ON" position, and trips when TEST BUTTON is depressed, GFCI Breaker is operating properly and fault is in the system. Remove fault and again perform installation Step 1 through 7.

- 9. Push TEST BUTTON. If the handle moves to the "TRIP" position and load is disconnected, the GFCI Breaker is operating properly. To reset breaker, move handle to "OFF" and then to "ON" for normal operation.
- 10. After completing installation and assuring proper operation, attach the TEST REMINDER and RECORD CHART to the installation or give to user.





### PROCEDURE FOR ALUMINUM TERMINATIONS

#### **GENERAL**

The following procedure is recommended when connecting aluminum wire.

- 1. Strip the insulation, being careful not to nick the wire.
- 2. Wire-brush the conductor strands.

- Thoroughly coat the stripped conductor with a suitable anti-oxidant compound such as ALNOX or PEN-ETROX A13.
- 4. Insert conductor and tighten connector screw securely.