

# PC-Series ELCI/RCBO Instruction Bulletin



DANGER! Hazardous voltage. Can cause death or serious injury. Turn off and lock out power supply before installing PC-Series ELCI/RCBO.

### **SAFETY INSTRUCTIONS:**

- The ELCI/RCBO will not protect against a line to line fault hazard.
- Do not ground neutral on the Load Side of the ELCI/RCBO.
- Test ELCI/RCBO once a month. See test instructions below
- Not for use in portable or cord-connected applications.
  Use only in permanently installed enclosures.
- Do not subject to megger, high voltage or hi-pot test.
  Remove ground fault circuit breaker before hi-potting occurs on the circuit or system. (Ref. Sect. 550-12, NEC).
- Do not reverse Line and Load connections.

## **INSTALLATION PROCEDURE:**

- The ELCI/RCBO should be installed by a qualified electrician.
- 2. Turn "OFF" and lock out the power to enclosure in which ELCI/RCBO is to be installed.
- 3. Turn "OFF" the ELCI/RCBO actuator.
- Connect the Load Hot and Neutral wires to the Load Terminals of the ELCI/RCBO (See Fig. A for terminal designations).
- 5. Connect corresponding Line source wires directly to the Breaker Line and neutral source Terminals.
- 6. Mount ELCI/RCBO to front panel and mount front panel to enclosure.
- 7. Turn "ON" power and turn "ON" breaker actuator. Test the ELCI/RCBO as per test instructions.
- 8. Place Monthly Test Reminder label in a convenient place near the or on the panel and instruct equipment users on test procedures and the importance of performing and recording monthly tests.

## **TEST INSTRUCTIONS:**

- Turn "OFF" the ELCI/RCBO actuator. Turn on the power to the panel. The green LED should be flashing and the red LED should be off.
- Turn "ON" the ELCI/RCBO actuator. The green "POWER" LED should show steady illumination and the red "LEAKAGE FAULT" LED should remain off.

- Depress the "TEST" button. This will cause the actuator to move to the "OFF" position and the red LED to turn on and show steady illumination, indicating that the ELCI/RCBO is functioning properly. The green LED will also go from steady to off. If the actuator fails to move to the "OFF" position or the red LED fails to illuminate, the unit MUST be replaced.
- Turn the ELCI/RCBO actuator to the "ON" position. The red LED should turn off and only the green LED should be illuminated.
- 5. This test is to be performed on a monthly basis and recorded on the "Monthly Test Reminder" label.

## WHEN ELCI/RCBO TRIPS:

The PC-Series ELCI/RCBO opens the circuit when there is an over current or ground fault condition. If the red LED is continuously illuminated the tripping is due to a ground fault condition. If the green LED is flashing, the tripping is due to an over current:

- Some faults are self-clearing. Try resetting the breaker once.
- If this device is installed as a main breaker, turn off all branch breakers and reset the breaker. If it does not trip, turn branch breakers on one at a time to locate the fault.
- If the breaker continues to trip with the branch breakers off recheck that the neutral is not grounded on the load side of the ELCI circuit breaker.
- 4. If the breaker continues to trip, but no grounding of the neutral is observed, disconnect all load side connections and reset the breaker. If the breaker still trips with no load connections in place, the breaker may be defective.
- 5. If the breaker does not trip with the loads disconnected but does trip when the loads are connected, the device is performing its intended protection function, which means that a hazardous condition could exist. A qualified electrician should be called to evaluate the circuit and perform more advanced troubleshooting if the problem cannot be located.



