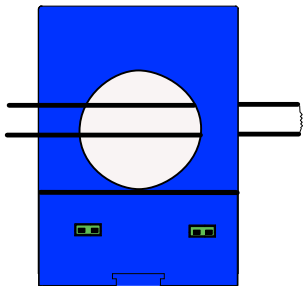
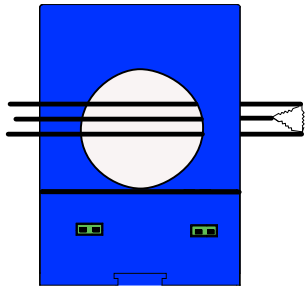




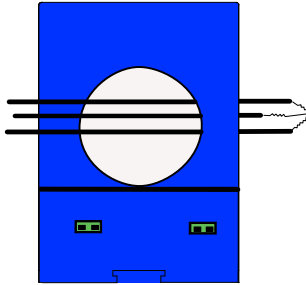
## Installation & Wiring



Single Phase (Phase & Neutral or Phase to Phase)

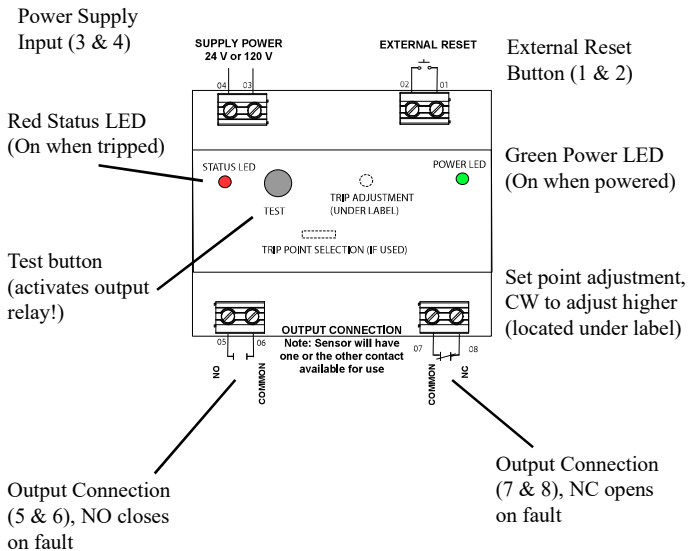


3 Phase Delta (Include neutral if the load uses neutral)



3 Phase Wye (Include neutral if load uses neutral)

Power Supply Input (3 & 4)



AGL Series relays work in the same environment as motors, contactors, heaters, pull-boxes, and other electrical enclosures. They can be mounted in any position or hung directly on wires with a wire tie. Just leave at least one inch distance between relay and other magnetic devices. Run all current carrying conductors through the opening in the relay. (See “Principal of Operation”) Be Sure all wires are oriented so current flows in the same direction.

### Reset Switch

Connect a momentary dry contact to the reset terminals (1 & 2) using an insulated operator. Limit wire run to 200' of 18 AWG or larger wire.

## Operation

AGL Series Latching Ground fault relays operate in one of two states: Reset or Latched. If control power is removed, the relay remains in its last state (latched or reset). The relay will reset if the power supply is cycled off and then on again. To test operation, gently press the TEST button. This simulates a fault and tests the internal switching circuits.

**CAUTION:** Any circuit connected to the relay will be operated. The normally open contact closes on sensed fault current over the set point (or test), and the normally closed contact opens on detected fault.

### Reset

The relay has not detected a fault and the output is in the “normal” position.

For -NOR1 suffix, the contact is normally open in the reset condition.

For -NCR1 suffix, the contact is normally closed in the reset condition.

### Latched

Upon detecting a fault or when the TEST switch is pressed, the output will switch and “latch”. The output will remain latched until the ground fault is removed and the output is reset by a momentary dry contact on Terminals 1 & 2.

### Testing

To test operation, gently press the TEST button. This simulates a fault and tests the internal switching circuits. After the test is complete, reset the relay with a momentary dry contact on Terminals 1 & 2. **CAUTION: Any circuit connected to the relay will be operated.**

### Momentary Reset

The relay will not work properly if the reset terminals are closed (shorted) continuously. Only close the reset terminals momentarily.

### Parallel Reset Connection

Multiple relays may be connected to the same reset switch in

## Wiring

Use up to 22-14 AWG 60°C minimum copper wire and tighten terminals to 5.3 inch-pounds torque. See Diagram.

### Power

Connect power wiring to Terminals 3 & 4. Be sure that the power supply matches the power rating on the relay label. Green LED (Power) will light with power applied.

### Output

Connect output wiring to Terminals 5 & 6 (NO) or 7 & 8 (NC).

parallel. Only the relays that have detected a fault and have latched will be reset. A relay will not reset unless the fault has dropped below setpoint.

The output will also reset if the power supply voltage is cycled off and then on again.

The triple range, field selectable models use a jumper to select the trip point. With the jumper off the pins, the relay will trip at the lowest set point. The jumper can be placed over two pins to set the trip point at the medium level, or the other two pins to be set at the highest trip point.

### Field Setpoint Adjustment

While not as precise as having it set at the factory, the set point can be adjusted in the field through use of the small potentiometer located beneath the label to the right of the test button. Though not recommended, if a field adjustment of setpoint is desired, the suggested steps are as follows:

1. Develop a load of the magnitude at which you want the relay to trip; e.g., a 4000 ohm resistor at 120 VAC should provide a load of 30 mA while 4 watt “night light” bulb would create a load of approximately 33.33 mA.
2. With the load energized and passing through the sensing aperture, turn the potentiometer counterclockwise (CCW) until the relay trips. Then turn the pot back (CW) one eighth of a turn. CW raises the trip point.

**NOTE: The tri-set models cannot be adjusted higher nor lower than the factory settings.**

When used with an external CT, the relay will be set to trip at a point much lower than without the CT. This set point adjustment should be done with the load passing through the CT in that application.