

# 3-PHASE PLUG-IN VOLTAGE MONITOR

## INSTALLATION

- 1. Disconnect or turn off power.
- Tap off the main 3-phase line voltage and run field-installed wires to the ICM408 control.
- 3. Connect the field-installed wires to the L1, L2 and L3 connections.
- 4. Set the DOM time delay to a minimum for testing purposes.
- Break one line of your control circuit and connect to the COM and N.O. connections on the ICM408.
- 6. The N.C. connection can be used as an alarm output.
- 7. Reapply or reconnect power.
- After the DOM time delay, the unit should energize and the green (load) LED should light.
- If the red (status) LED is on solid, reverse any 2 line voltage wires at the ICM408. DO NOT CHANGE THE WIRING SEQUENCE TO THE UNIT.
- If the red (status) LED is flashing, make sure the voltage and unbalance levels are set correctly.

#### MODE OF OPERATION

The ICM408 continuously monitors the incoming line voltage for errors. When the line voltage is appropriate, the ICM408 closes a set of N.O. contacts and lights a green LED. When the incoming voltage is outside of the user-set parameters, the N.O. contacts open and the red LED will flash a code for the particular fault present. The control will also interrogate the line voltage during the fault condition to avoid short cycling and nuisance trips.

### STATUS LED INDICATORS

- GREEN LED = Load ON
- RED LED:
  - · Solid = Phase reversal
  - 1 flash = DOM time
  - 2 flashes = Low voltage
  - · 3 flashes = High voltage
  - · 4 flashes = Unbalance voltage

#### SPECIFICATIONS

User Selectable Universal Voltage: 190-480 VAC Operating Frequency: 50-60 Hz

User Selectable Unbalance Voltage: 2 to 8% (trips after 6 seconds of unbalance condition)

Power/Phase Loss Detection: Within 100 mS High/Low Voltage Cut-out: ± 12% - Detects within 100 mS

Phase Reversal Detection: Detects phase reversal condition on power-up User Selectable Delay on Make (staggered start) Timer: .1 to 5 minutes User Selectable Anti-Short Cycle/Delay on Break Timer: .1 to 5 minutes Heavy Duty SPDT Relay Output: 10A output to operate control circuitry.

Relay Contact Ratings: N.C. contacts: 10A resistive @ 250VAC, N.O. contacts: 10A resistive @ 250VAC

Connection Terminals: Screw down terminals on plug in base provide easy hookup for both line voltage and control circuit wires

control circuit wires.

Conformal Coated Circuit: Conformal coated circuit provides protection in extreme environmental conditions.

Storage Temperature Range: -40  $^{\circ}\text{C}$  to +85  $^{\circ}\text{C}$ 

Maximum Operating/Storage Relative Humidity: 95% non-condensing

