



## INSTALLATION, OPERATION & APPLICATION GUIDE

For more information on our complete range of American-made products – plus wiring diagrams, troubleshooting tips and more, visit us at [www.icmcontrols.com](http://www.icmcontrols.com)



**ELECTRICAL SHOCK HAZARD – Before installing this unit, turn off power at the main service panel by removing the fuse or switching the appropriate circuit breaker to the OFF position.**

**ATTENTION: No replaceable or repairable parts;**

**ATTENTION: Aucune pièce remplaçable ou réparable**

### MODE OF OPERATION

The **ICM517A** is UL Rated as a Type 2 device and must be installed before the equipment it is intended to protect. It can be installed at the A/C disconnect or an indoor/outdoor electrical panel. Suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes, 240V max, when protected by a circuit breaker rated 15-60A maximum and 120V minimum. Device wires should be kept at a minimal length to increase response time and effectiveness of the control. Contains no serviceable parts. LED indicates when protect is present.

Limited lifetime product, up to a 3-year \$10,000 connected equipment warranty

### INSTRUCTIONS

- Turn off the main breaker and/or main power to the service disconnect.
- Remove the cover on service disconnect or the electrical panel.
- Mount through conduit connection of electrical panel:
  - Remove one lock nut and sealing ring on the unit.
  - Feed the wires into the electrical panel service disconnect.
  - Re-secure the lock nut and sealing ring (see mounting instructions).
- Route the green wire to the grounding lug and secure.
- Connect the two black wires and one white wire (see wiring for 120 & 240VAC).
  - **For electrical panel:** Connect to closest two-pole breaker (240VAC). Connect to the closest single-pole breaker (120VAC).
  - **For A/C disconnect:** Connect to the disconnect load side terminals.
- Reinstall cover on service disconnect or the electrical panel.
- Restore power; LED should be on with 120 VAC present from black to green and black to white.
- Close electrical panel or cover.

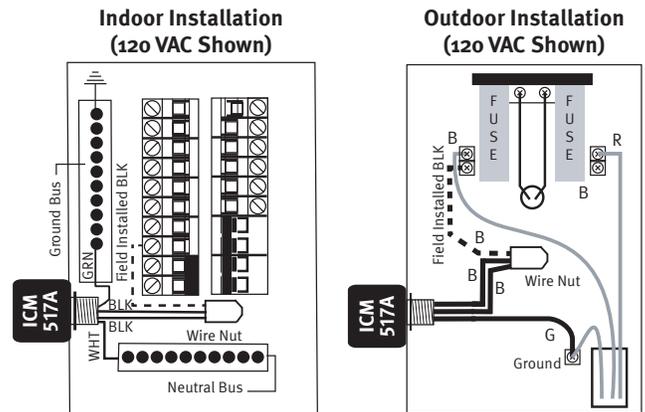
**Device is intended to be connected only to panel connection. All wiring must conform to national, state and local electrical codes. 14AWG wire or larger required. Product contains no serviceable parts.**

**WARNING – SHOCK HAZARD – DO NOT OPEN;**  
**ATTENTION – RISQUE DE CHOC – NE PAS OUVRIR**

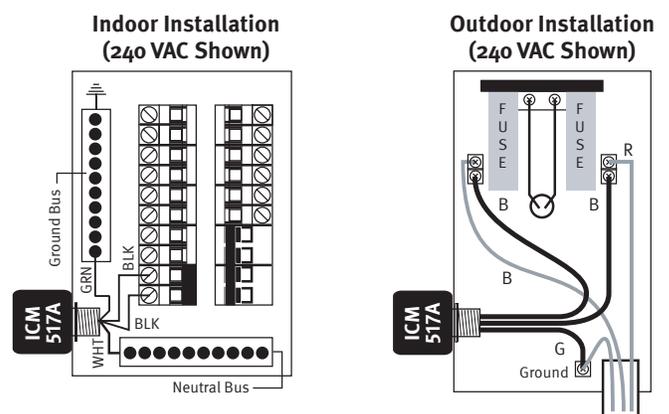
### SPECIFICATIONS

- Service Voltage:** 120/240 volt, single phase
- Maximum Surge Current:** 100,000 amps
- Maximum Energy Dissipation:** 1,020 joules
- Installation Point:** Electrical panel, electrical disconnect
- Diagnostics:** Green light indicates surge suppression present
- Enclosure:** NEMA Type 4X waterproof metal enclosure
- AC Protection Modes:** L-L, L-N, L-G, N-G
- Conduit Connection:** 3/4"
- Dimensions:** 5.0" L x 3.06" W x 1.75" D
- Weight:** 0.55 lbs.

### WIRING DIAGRAM (120 VAC)

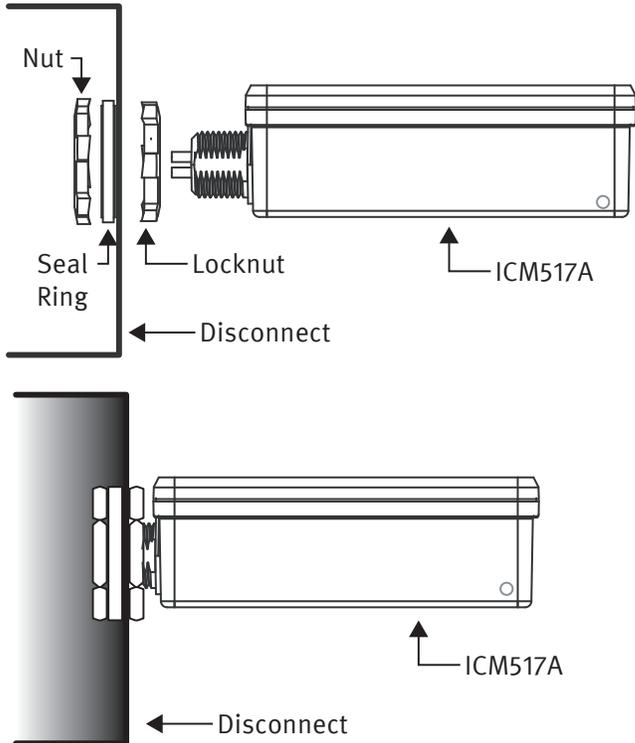


### WIRING DIAGRAM (240 VAC)



## MOUNTING DIAGRAM

1. Thread one lock nut all the way down the ICM517A nipple as far as it will go and remove the second lock nut, setting it aside.
2. Install the ICM517A nipple through the knockout in disconnect box.
3. Install the rubber washer over the nipple on the inside of the disconnect box.
4. Install the second lock nut on the nipple and tighten down until the assembly is secure, adjusting the outer nut if needed to tighten up the assembly.



## STATUS CHECK PROCEDURE

Periodically check the status light on the ICM517A. If this light is not illuminated, check power to the disconnect or breaker where the ICM517A is mounted. If power is present, but no light is illuminated on the ICM517A, replace the ICM517A immediately. If power is not present at the breaker or disconnect, restore power and check the status light on the ICM517A is illuminated.