



# INSTALLATION INSTRUCTIONS PLP SERIES THREE-PHASE MONITOR RELAYS

December 2020 Rev B

901-0000-109

## DANGER!



Potentially hazardous voltages are present. Electrical shock can cause death or serious injury. Installation should be done by qualified personnel following all National, State & Local Codes.



BE SURE TO REMOVE ALL POWER SUPPLYING THIS EQUIPMENT BEFORE CONNECTING OR DISCONNECTING WIRING. READ INSTRUCTIONS BEFORE INSTALLING OR OPERATING THIS DEVICE. KEEP FOR FUTURE REFERENCE.



### IMPORTANT: READ THIS FIRST IF REPLACING A PLP SERIES PRODUCT WITH DATE CODE OF 1414 OR EARLIER

Macromatic has obsoleted the PLP208, PLP240, PLP400 & PLP480 single voltage products and replaced all of them with the PLPU, which works on any line-line voltage from 190-500V. The PLP series functions the same and can be used in place of these older products without any special setup. This change is effective on products manufactured with Date Code of 1415 or later (2nd week of April 2014). For more information, please contact Macromatic.

### Installation, Wiring & Setup

1. Mount the appropriate 8 pin octal socket in a suitable enclosure. **NOTE: a 600V-rated socket such as the Macromatic 70169-D or Custom Connector OT08-PC must be used with these products on applications greater than 300V. When making connections to the socket, make sure to match the terminal numbers on the socket to the ones shown on the wiring diagram (the wiring diagram on the relay is the view looking towards the bottom of the relay vs. the top of the socket).** Use one or two #12-22 solid or stranded copper or copper-clad aluminum conductors with terminals on the above Macromatic or Custom Connector sockets—a terminal tightening torque of 12 in-lbs should be used.
2. Connect the three-phase line-line voltage to terminals 3, 4 and 5 (see Wiring Diagram on the side of the relay or at right). A connection to the neutral or ground is not required in Wye systems. DO NOT connect output wires to terminals 1, 2 and 8 until later (Step 5).
3. Plug the three-phase monitor relay into the socket, making sure the key on the center post is in the proper orientation before insertion. **If the relay must be removed from the socket, do NOT rock the relay back and forth excessively—the center post could be damaged.**

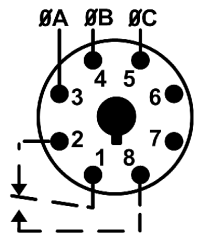


Diagram 23

(Continued on Back)

### Installation, Wiring & Setup (Continued)

4. Apply three-phase voltage. The LED indicator should illuminate solid GREEN. If the LED turns solid RED, a phase reversal (out-of-sequence) condition exists and must be corrected. **REMOVE three-phase voltage and switch any two of the three line connections to ensure the phase sequence (rotation) is correct.** If the LED is flashing Red, a phase loss condition exists. Make sure all three phases are present. Check for a blown fuse or a loose or broken wire.
5. Connect the output terminals to terminals 1, 2 & 8. When all connections are made, apply three-phase line-line voltage.

### Troubleshooting

If the LED is solid Red, a phase reversal (out-of-sequence) condition exists. REMOVE three-phase voltage and switch any two of the three line connections to ensure the phase sequence (rotation) is correct. The LED should be solid Green with the correct sequence.

If the LED is flashing Red, a phase loss condition exists. Make sure all three phases are present. Check for a blown fuse or a loose or broken wire. The LED should be solid Green with all three phases present.

If the unit fails to operate properly, check that all connections are correct per the appropriate wiring diagram on the product.

If problems continue, contact Macromatic at 800-238-7474 or e-mail [tech-support@macromatic.com](mailto:tech-support@macromatic.com) for assistance.

### Warranty

All catalog-listed PLP Series products manufactured by Macromatic are warranted to be free from defects in workmanship or material under normal service and use for a period of five (5) years from date of manufacture.

### Typical Connections

(For Load Side connection, contact Macromatic)

