# INSTALLATION INSTRUCTIONS

# **PMRR & PMRRL SERIES**

PHASE MONITOR RELAYS

901-0000-286 Rev A

#### June 2009

# READ INSTRUCTIONS BEFORE INSTALLING OR OPERATING THIS DEVICE. KEEP FOR FUTURE REFERENCE.

Warning Potentially hazardous voltages are present. Turn off all power supplying this equipment before connecting or disconnecting wiring.

# **Protection Provided:**

(s)ense

Product	Phase Reversal	Phase Loss	Undervoltage (75-95%)
PMRR-1C-480A	Х		
PMRRL-1C-208A			
PMRRL-1C-240A	Х	х	Х
PMRRL-1C-480A			

#### Installation and Setup

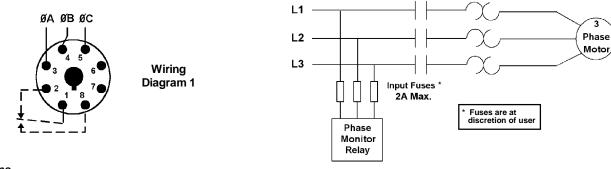
- NOTE: The Line Voltage connected to Pins 3, 4 & 5 must not exceed 110% of the Nominal Voltage rating on the product nameplate (NOTE: for the PMRR-1C-480A product, the voltage must not exceed 110% of 480VAC, or 528VAC).
- 1. Mount an appropriate 8 pin octal socket (70169-D or 750-2C-SKT) in an enclosure, NOTE: Requires 600V Rated socket when used on a system greater than 300V.
- 2. (For PMRRL only) Set UNDERVOLTAGE dial to 75% (minimum). NOTE: when setting the undervoltage value, use the appropriate dial indicator: Solid Line for 60hz; Dashed Line for 50Hz (see right).
- 3. Connect the 3-phase line voltage to terminals 3, 4 & 5 (see Wiring Diagram 1 on back). DO NOT connect output terminal wires until later (Step 6). Plug the unit into the socket.
- Apply Line Voltage. The LED indicator should illuminate RED. If not, a fault condition exists and must be corrected. Check to see if all phases are 4. present. REMOVE LINE VOLTAGE, and switch any two of the line voltage connections to insure the phase rotation is correct. Reapply line voltage to check for correct phase rotation. (For PMRRL only) Check to see if line voltage is at least 75% of the nominal voltage.

#### (Continued on Back)

#### Installation and Setup (Continued)

- 5. (For PMRRLonly) Set the UNDERVOLTAGE dial. This setting should be the same as the minimum operating voltage for the equipment to be adequately protected.
- 6. Connect the output terminal wires.
- 7. Apply Line Voltage. The LED indicator will illuminate RED, the internal relay will energize, and the 3-phase system will become operational.
- 8. If the LED does not illuminate RED during regular operation, a fault condition has occurred. REMOVE LINE VOLTAGE, and check for proper phase rotation, presence of all three phases, and (For PMRRL only) low voltage conditions. Correct if necessary. Re-energization is automatic upon correction of the fault condition.

# Wiring Diagrams/Typical Connections



#### **Specifications**

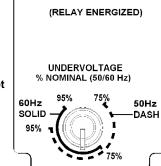
Temperature: -28° to 65° C (-18° to 149° F) Output Contacts: 10A Resistive SPDT@240V AC, 1/3HP@120/240V AC (N.O), 1/6HP@120/240V AC (N.C.)

#### Troubleshooting

If the unit fails to operate properly, check that all connections are correct per the appropriate Diagram 1. If you still need assistance, please call us at 770-844-4200. Our Technical Support Group is glad to work with you in answering your questions. They are available Monday through Friday from 9:00 A.M. to 6:00 P.M. Eastern Standard Time.

#### Warranty

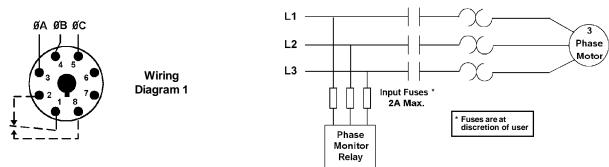
These products are warranted to be free from defects in workmanship or material under normal service and use for a period of five (5) years from date of manufacture.



# Installation and Setup (Continued)

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# Automation Direct Inc.

3505 Hutchinson Road, Cumming, GA 30040 + (770) 844-4200 + www.automationdirect.com



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