

Three Phase **Voltage Relay**

PVCO/L

Specifications

Electrical

Line Voltage:

110VAC to 600VAC, 3Ø

Frequency: 60Hz, 300 Series 50Hz

Line Voltage Ranges:

100 Series - 110VAC to 120VAC, 3Ø 200 Series - 208VAC to 240VAC, 3Ø 300 Series - 380VAC to 415VAC, 3Ø 400 Series - 440VAC to 480VAC, 3Ø 600 Series - 575VAC to 600VAC, 3Ø

Maximum Overvoltage:

10% of highest nominal voltage Maximum Frequency Shift: 0.1Hz Undervoltage: 10% below set point Phase Imbalance: 5% typical Phase Rotation: A - B - C

Phase Loss:

Complete loss to 95% of nominal

Time Delays:

Pick-up: 5 Sec. Fixed Drop-out: 5 Sec. Fixed **Power Consumption: 16VA**

Output Contacts: 7 Amps @ 120VAC 5 Amps @ 240VAC

100.000 Full Load Electrical Cycles 10,000,000 Mechanical Cycles

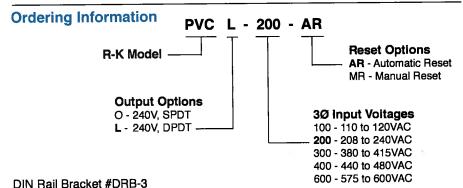
Physical

Mounting: Surface

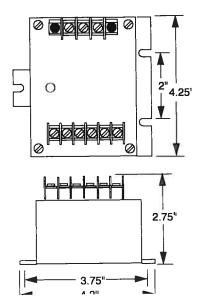
Termination: Screw Terminals Packaging: Dust Cover Weight: 8 Oz. Approx.

Ambient Temperatures

Operating: -20°C to 40°C Storage: -20°C to 85°C



Dimensions

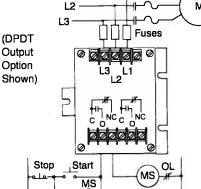


Connections

The PVCs should be connected to the line voltage on the load side on the last line fuse before the motor and on the line side of the starter (MS).

= Motor MS = Motor Starter Fuses = ≤1 amp (optional)

= Overloads MS L2 (DPDT





- 10 Amp Relay
- SPDT or DPDT
- Undervoltage
- Phase Loss (Single Phase)
- Phase Imbalance
- Phase Rotation
- Pick-up & Drop-out **Delays**
- Normal Condition LED



Operation

The PVC's output contacts energize when:

- 1. All the phases are present;
- 2. The voltages are within 10% of the setting:
- 3. The phases are in the proper rotation
- 4. The phases are balanced;
- 5. The frequency is within tolerance. Built into the PVC series is a 5 second pick-up delay to allow the three phase line to stabilize. If any of these conditions shift beyond the setpoints, the output contact will de-energize after a 5 second time delay. Single phase conditions will be detected when the voltage in one phase is 5% different from the voltages in the other two phases (Phase Imbalance).

