



Phase Loss Undervoltage & Reversal (Separate Outputs)

PLRO

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

Phase Rotation: A - B - C

Phase Loss:

18% Low Voltage in one phase

Undervoltage Trip:

15% below set point

Phase Imbalance: 5% Typical

Power Consumption: 16VA

Time Delays:

Pick-up: 1.5 Sec., Fixed

Drop-out: 1.5 Sec. Fixed

Output Relays:

10 Amps @ 120VAC

5 Amps @ 240VAC

100,000 Full Load Electrical Cycles

10,000,000 Mechanical Cycles

U.L. Ratings:

7 Amps @ 120VAC, 40°C

5 Amps @ 240VAC, 40°C

Physical

Mounting: Surface

Termination: Screw Terminals

Packaging: Dust Cover

Weight: 8 Oz.

Ambient Temperatures

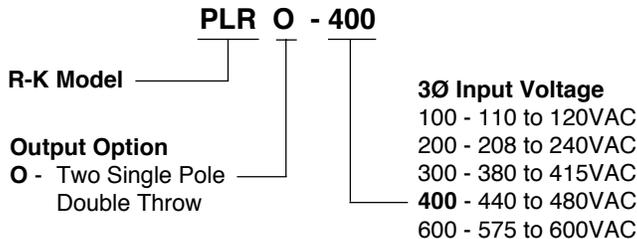
Operating: -20°C to 40°C

Storage: -20°C to 85°C



- **Separate Relay Outputs:**
 - Phase Loss, Undervoltage & Phase Imbalance
 - Phase Rotation
- **Two 10 Amp, SPDT Contacts**
- **Pick-up & Drop-out Delays**
- **LED Indicator**

Ordering Information



DIN Rail Bracket #DRB-3



E71902
Standard 508



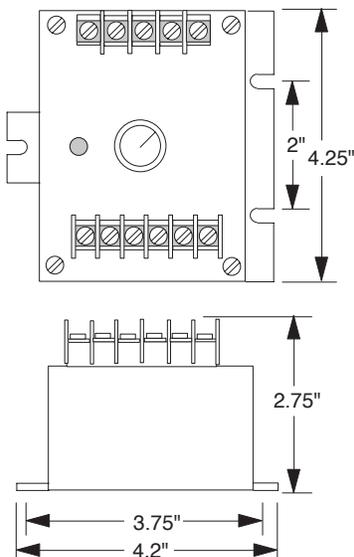
LR43414

Operation

Phase Loss & Undervoltage / Phase Reversal Relay

The PLRO provides a contact output for a loss of phase and undervoltage in addition to a separate contact output for a reversal of phases. If all three phases are present and the phases are in the proper rotation, both relay outputs are energized. If a phase loss or undervoltage condition occurs, only the phase loss relay output will de-energize. If the phases are reversed relative to the sequence on the PLRO, only the phase reversal relay output will de-energize. If there is a total loss of the three phase voltage, both relay outputs will be de-energized.

Dimensions



Connections

The PLRO should be connected to the line voltage on the load side of the last set of fuses on the line side of the starter. (A fire pump control application is shown.)

M = Motor

C = Counter

Fuses = ≤1 amp (optional)

