# Phase Loss & Reversal Relay

# PRR/O/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
**Phase Rotation:** A - B - C
**Phase Loss:**
18% Low Voltage in one phase
**Time Delays:**
Pick-up: 5 Sec. Fixed
Drop-up: 5 Sec. Fixed
**Power Consumption:** 16VA

**Output Relay:**
PRR - 7 Amps @ 240VAC
2 Amps @ 600VAC
PRRO/L- 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:** 0°C to 40°C
**Storage:** -10°C to 85°C

## Ordering Information

**PRR O - 400**

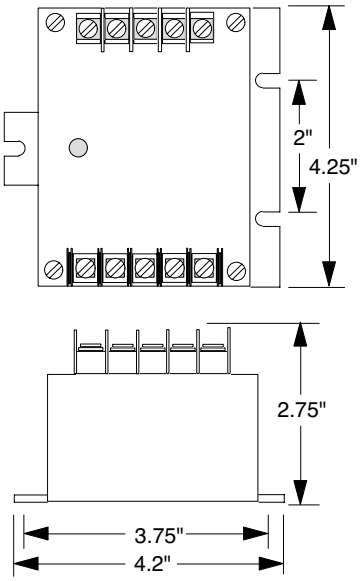
**R-K Model**

**Output Options**
_ - 600V, 1NO+SPDT
**O** - 240V, SPDT
L - 240V, DPDT

**3Ø Input Voltages**
100 - 110 to 120VAC
200 - 208 to 240VAC
300 - 380 to 415VAC
**400** - 440 to 480VAC
600 - 575 to 600VAC

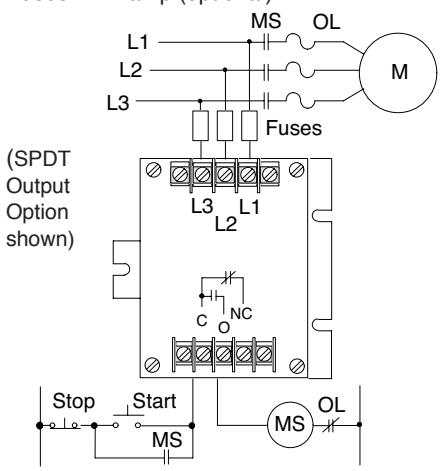
DIN Rail Bracket #DRB-3

## Dimensions




## Connections

The PRRs should be connected to the line voltage on the load side of the last line fuse before the motor and on the line side of the starter (MS).
M = Motor
MS = Motor Starter
OL = Overloads
Fuses = ≤1 amp (optional)





- **10 Amp Relay**
- **SPDT or DPDT**
- **Pick-up & Drop-out Delays**
- **Phase Loss**
- **Phase Rotation**
- **240 Volt Control Contact Rating**
- **Normal Condition LED**

c UL us
Listed
42L2

## Operation

Phase Loss & Reversal Sensing
The PRR's output contacts energize when:
1. All the phases are present;
2. The phases are in the proper rotation
3. The frequency is within the tolerance.

If the phase rotation of the incoming three phase lines is reversed, the internal relay will de-energize. Single phase conditions will be detected if there is an 18% loss of voltage in one phase.