PLS SERIES

Wiring Diagram

<table>
<thead>
<tr>
<th>F = Fuses</th>
<th>ØA = Phase A = L1</th>
<th>ØB = Phase B = L2</th>
<th>ØC = Phase C = L3</th>
<th>NO = Normally Open</th>
<th>NC = Normally Closed</th>
</tr>
</thead>
</table>

Relay contacts are isolated
2A fast acting fuses recommended for safety (not required).

Features & Benefits

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous monitoring</td>
<td>Cost effective protection of 3-phase equipment and operators from reverse rotation. Meets reverse rotation protection code requirements.</td>
</tr>
<tr>
<td>Universal motor compatibility</td>
<td>Designed to be compatible with motor overloads or other 3-phase equipment protection devices</td>
</tr>
<tr>
<td>Industry standard 8-pin octal plug connection</td>
<td>Eliminates need for special connectors</td>
</tr>
<tr>
<td>Factory calibrated</td>
<td>Easy to install. No field adjustment needed</td>
</tr>
<tr>
<td>LED indicator</td>
<td>Provides visual indication of relay status</td>
</tr>
</tbody>
</table>

Accessories

- **BZ1 Front Panel Mount Kit**
  Provides an easy method of through-the-panel mounting of 8- or 11-pin plug-in timers, flashers, and other controls.

- **Octal 8-pin Socket**
  8-pin 35mm DIN rail or surface mount. Rated at 10A @ 600VAC. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail.

- **LPSM003ZXID (Indicating), LPSM003Z (Non-indicating) Fuse Holders**
  Littelfuse POWR-SAFE Dead Front holders provide optimum protection to personnel for Class CC and Midget-Style fuses. 600 Vac/500 Vdc

- **0KLK002.T Midget Fuse (2 Amp)**
  10 x 38 fast acting, high-interrupting capacity, current-limiting type fuse. 600 Vac/500 Vdc

- **C103PM (AL) DIN Rail**
  35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.

Description

The PLS Series is a low cost phase sensitive control that provides an isolated contact closure when the proper A-B-C phase sequence is applied. Protects sensitive 3-phase equipment and equipment operators from reverse rotation. Designed to be compatible with motor overloads or other 3-phase equipment protection devices. Protection for equipment control centers where frequent reconnection or electrical code makes reverse rotation protection essential. Examples include: mobile refrigerated containers, construction equipment, hoists, pumps, conveyors, elevators and escalators.

Operation

The internal relay and LED are energized when the phase sequence is correct. The output relay will not energize if the phases are reversed. Reset is automatic upon correction of the fault.

Ordering Information

<table>
<thead>
<tr>
<th>MODEL</th>
<th>LINE VOLTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS120A</td>
<td>120VAC</td>
</tr>
<tr>
<td>PLS240A</td>
<td>208/240VAC</td>
</tr>
<tr>
<td>PLS480A</td>
<td>440/480VAC</td>
</tr>
</tbody>
</table>

If you don’t find the part you need, call us for a custom product 800-843-8848
## Specifications

### Line Voltage

<table>
<thead>
<tr>
<th>Type</th>
<th>Nominal Voltage</th>
<th>Minimum Voltage</th>
<th>Maximum Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-phase delta or wye with no connection to neutral</td>
<td>120VAC</td>
<td>95VAC</td>
<td>135VAC</td>
</tr>
<tr>
<td>208/240VAC</td>
<td>175VAC</td>
<td>255VAC</td>
<td></td>
</tr>
<tr>
<td>380/415VAC</td>
<td>310VAC</td>
<td>430VAC</td>
<td></td>
</tr>
<tr>
<td>440/480VAC</td>
<td>380VAC</td>
<td>500VAC</td>
<td></td>
</tr>
</tbody>
</table>

### AC Line Frequency

50/60Hz

### Phase Sequence

ABC

### Response Times

- **Pull-in**: ≤ 300ms
- **Drop-out**: ≤ 50ms

### Output

- **Type**: Electromechanical relay, energized when the phase sequence is correct
- **Form**: Isolated SPDT

### Rating

- **120 & 240VAC**: 10A resistive @ 240VAC
- **380 & 480VAC**: 8A resistive @ 240VAC
- **Maximum Voltage**: 250VAC

## Protection

### Isolation Voltage

- **120 & 240VAC**: ≥ 1500V RMS input to output
- **380 & 480VAC**: ≥ 2500V RMS input to output

### Mechanical

- **Mounting**: Plug-in socket
- **Dimensions**: H 81.3 mm (3.2”); W 60.7 mm (2.39”); D 45.2 mm (1.78”)
- **Termination**: Octal 8-pin plug-in

### Environmental

- **Operating/Storage Temperature**: -40° to 55°C / -40° to 85°C
- **Weight**: ≅ 6 oz (170 g)

*CAUTION: Select an octal socket rated for 600VAC operation.*