



Reverse Phase Relay

PLS Series

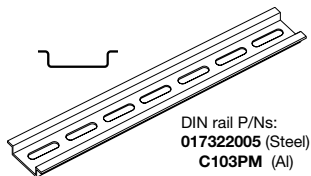
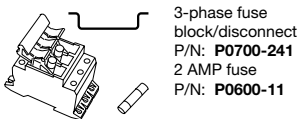
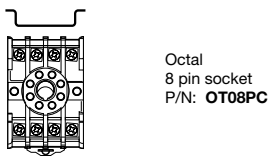
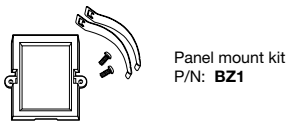
Motor Protector



- Protects Against Phase Reversal
- Low Cost Protection, One Unit for All Sized Motors
- 3 Wire Connection for Delta or Wye Systems
- Octal Base Connection-- Industry Standard Wiring
- SPDT Isolated Relay Contacts
- Factory Calibrated--No Adjustments Required

Approvals:  

Accessories



See accessory pages for specifications.

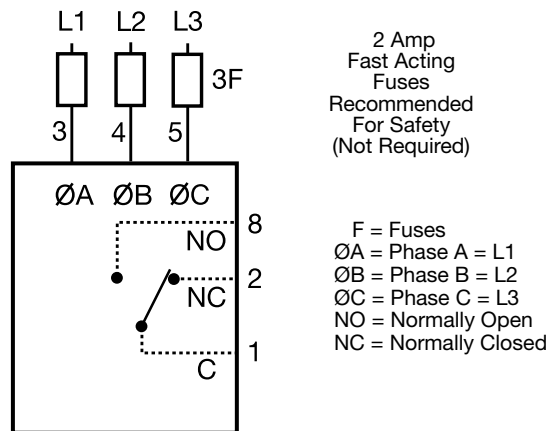
Description

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.

Connection



Relay contacts are isolated. Dashed lines are internal connections.

Ordering Table

Voltage	Part Number
120 V AC	PLS120A
208/240 V AC	PLS240A
380/415 V AC	PLS380A
440/480 V AC	PLS480A

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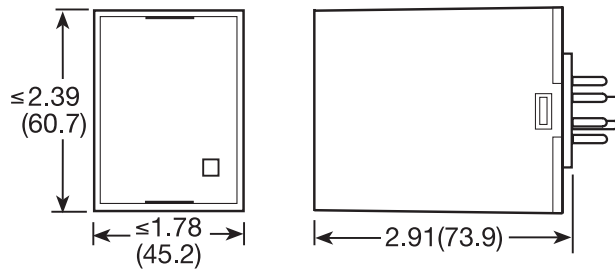
Voltage
Monitors

Technical Data

Line Voltage		3-phase Delta or Wye with no connection to neutral		
Type		Nominal Voltage	Minimum Voltage	Maximum Voltage
		120 V AC	95 V AC	135 V AC
		208/240 V AC	175 V AC	255 V AC
		380/415 V AC	310 V AC	430 V AC
		440/480 V AC	380 V AC	530 V AC
Frequency		50 ... 60 Hz		
Phase Sequence		ABC		
Response Times				
Pull-in		≤ 300 ms		
Drop-out		≤ 50 ms		
Output		Electromechanical relay, energized when the phase sequence is correct		
Type		Isolated SPDT		
Form		10 A resistive at 240 V AC		
Rating	120 & 240 V AC	8 A resistive at 240 V AC; 1/4 Hp at 120 V AC		
	380 & 480 V AC	5 A resistive at 240 V AC; 1/4 Hp at 120 V AC		
	500 to 530 V AC	250 V AC		
Maximum Voltage				
Protection				
Isolation Voltage	120 & 240 V AC	≥ 1500 V RMS input to output		
	380 & 480 V AC	≥ 2500 V RMS input to output		
Mechanical		Plug-in socket		
Mounting		8 pin, octal plug		
Termination				
Environmental				
Operating Temperature		-40°C ... +55°C		
Storage Temperature		-40°C ... +85°C		
Weight		≅ 6 oz (170 g)		

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Mechanical View



Inches (Millimeters)