

# SLD SERIES



**DIMENSIONS**  
INCHES

Phase Unbalance, Phase Loss, Under Voltage and Phase Sequence (Surface)



Style A

Style E

## FEATURES

- User Selectable Phase Unbalance
- Easy Installation
- Low Cost
- Surface Mount or Plug-In

## OPERATION

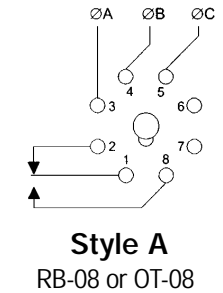
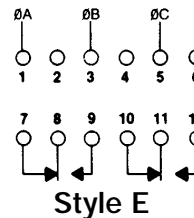
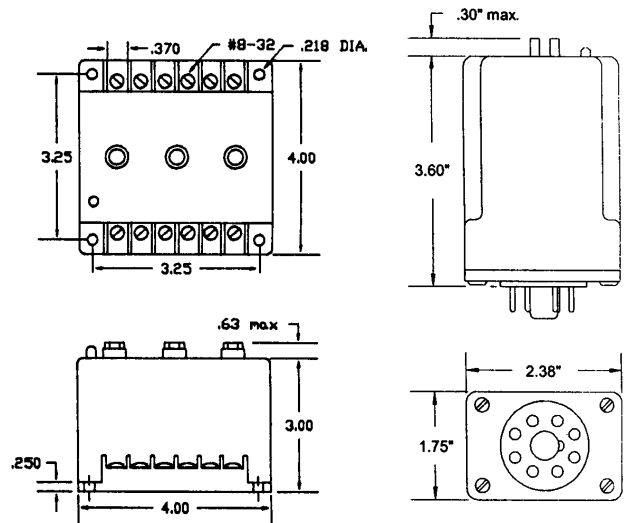
The SLD Series is designed to protect three-phase equipment against Phase Unbalance, Phase Loss, Under Voltage and Phase Reversal conditions.

With normal operating voltage present on all three phases in the proper phase sequence, the internal relay will energize (PICK-UP). When an incorrect phase sequence or phase loss occurs or the three-phase line voltages fall outside the preset unbalance or under voltage settings, the internal relay will de-energize (DROP-OUT). When all conditions return to normal, the relay will reset.

The Adjustable Release delay is provided to ignore momentary voltage fluctuations that cause nuisance tripping.

Both Delta and Wye systems may be monitored. In Wye Systems, connections to neutral are not required.

*NOTE: When a phase is lost while the motor is running, a condition known as regeneration occurs where a voltage is induced into the open phase nearly equal in magnitude to the normal phase-to-phase voltage. The SLD series is designed to detect this condition when properly adjusted.*



## SPECIFICATIONS

<b>OPERATING VOLTAGE:</b>	See Table Below
<b>PHASE SEQUENCE:</b>	ABC (Will Not Operate CBA)
<b>PHASE UNBALANCE RANGE:</b>	2% to 10% Adjustable
<b>RESPONSE TIMES</b>	
Operate:	30 Milliseconds
Release:	0.1 to 20 Seconds, Adjustable (on Under Voltage only); 100 Milliseconds on Phase Reversal and Unbalance
<b>TEMPERATURES</b>	
Operate:	32°F to +131°F (0°C to +55°C)
Storage:	-49°F to 185°F (-45°C to +85°C)
<b>INDICATOR LED:</b>	Glows When All Conditions Are Normal
<b>TRANSIENT PROTECTION:</b>	1000 Volts for 8 Milliseconds
<b>RESET:</b>	Automatic
<b>U.S. PATENT NUMBER:</b>	4,331,995

MODEL NUMBER	OPERATING VOLTAGE	UNDER VOLTAGE DROP-OUT RANGE	POWER REQUIRED	HYSTERESIS	OUTPUT RATING	ENCLOSURE
SLD-120-ASA	120 VAC	95-115 Adj.	3 VA Maximum	2.5 VAC	SPDT, 10 Amp, Resistive @ 240 VAC 1/2 Hp @ 240 VAC	A
SLD-230-ASA	208/240 VAC	185-230 Adj.		5.0 VAC		A
SLD-380-ASA	380 VAC	315-390 Adj.		10 VAC		A
SLD-440-ASA	440/480 VAC	370-460 Adj.		5 VAC		A
SLD-120-ALE	120 VAC	95-115 Adj.	7 VA Maximum	5 VAC	DPDT, 5 Amps, Resistive; 345 VA, Inductive @ 240 VAC	E
SLD-230-ALE	208/240 VAC	185-230 Adj.		10 VAC		E
SLD-380-ALE	380 VAC	315-390 Adj.		5 VAC		E
SLD-440-ALE	440/480 VAC	370-460 Adj.		10 VAC		E

All voltages referenced on this page are phase-to-phase.