

The SLD Series is designed to protect 3-phase equipment against **Phase Unbalance, Phase Loss, Under Voltage** and **Phase Reversal** conditions.

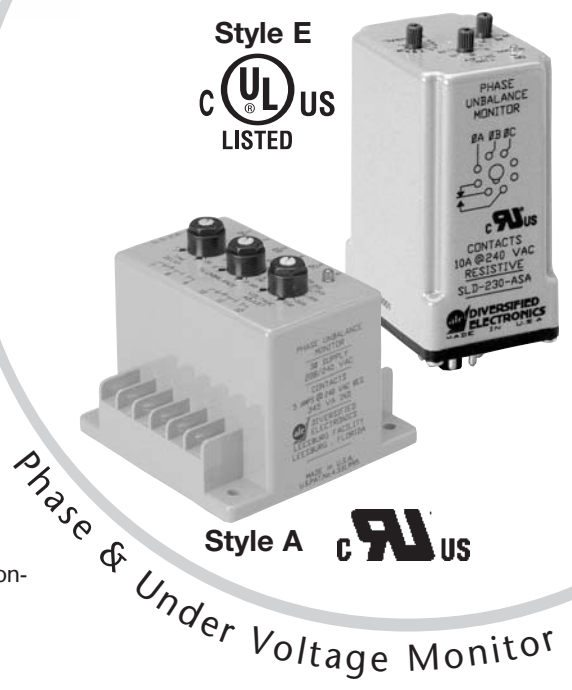
OPERATION

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.

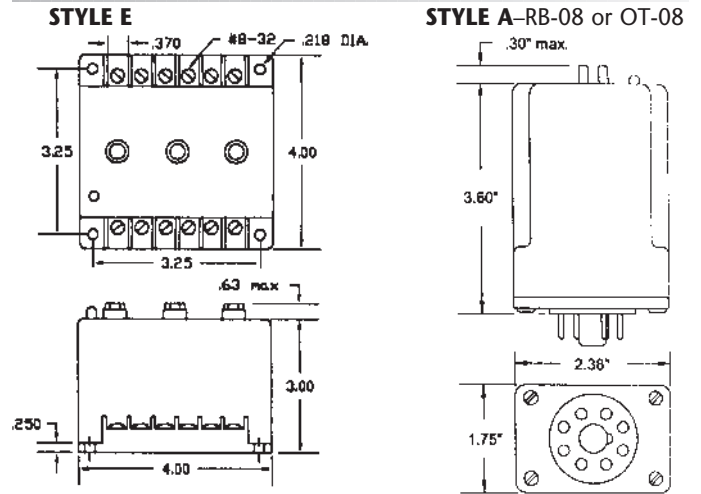
NOTE: When a phase is lost while the motor is running, a condition known as regeneration occurs where a voltage is induced into the open phase nearly equal in magnitude to the normal phase-to-phase voltage. The SLD series is designed to detect this condition when properly adjusted.



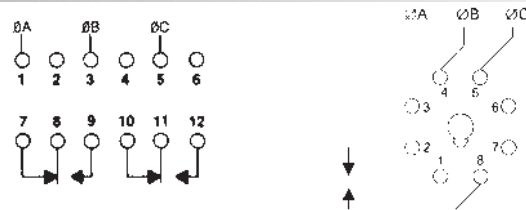
SPECIFICATIONS

OPERATING VOLTAGE	See Table Below	
TRANSIENT PROTECTION	1000 Volts For 8 mSEC	
RESET	Automatic	
PHASE SEQUENCE	ABC (Will Not Operate CBA)	
PHASE UNBALANCE RANGE	2% to 10%, Adjustable	
INDICATORS LED	Glows When All Conditions Are Normal	
RESPONSE TIMES	Operate	30 mSEC
	Release	0.1 to 20 SEC, Adjustable (on Under Voltage only); 100 mSEC on Phase Reversal and Unbalance
TEMPERATURE RATING	Operate	32° to +131°F (0° to +55°C)
	Storage	-49° to 185°F (-45° to +85°C)
U.S. PATENT NUMBER	4,331,995	
WEIGHT	13.5 oz.	

DIMENSIONS (INCHES)



WIRING



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 Max.	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		
SLD-380-ASA	380 VAC	315-390 Adj.		10 VAC		
SLD-440-ASA	440/480 VAC	370-460 Adj.		10 VAC		
SLD-120-ALE	120 VAC	95-115 Adj.	7 VA Max.	5 VAC	DPDT, 5 Amps, Resistive; 345 VA, Inductive @ 240 VAC	E
SLD-230-ALE	208/240 VAC	185-230 Adj.		10 VAC		
SLD-380-ALE	380 VAC	315-390 Adj.		10 VAC		
SLD-440-ALE	440/480 VAC	370-460 Adj.		10 VAC		

All voltage referenced are phase-to-phase.