

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

OPERATION

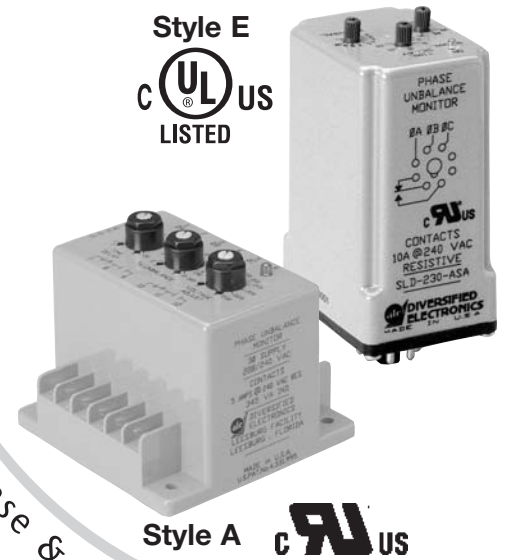
With normal operating voltage present on all three phases in the proper phase sequence, the internal relay will energize (PICK-UP). When an incorrect phase sequence or phase loss occurs or the three-phase line voltages fall outside the preset unbalance or under voltage settings, the internal relay will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

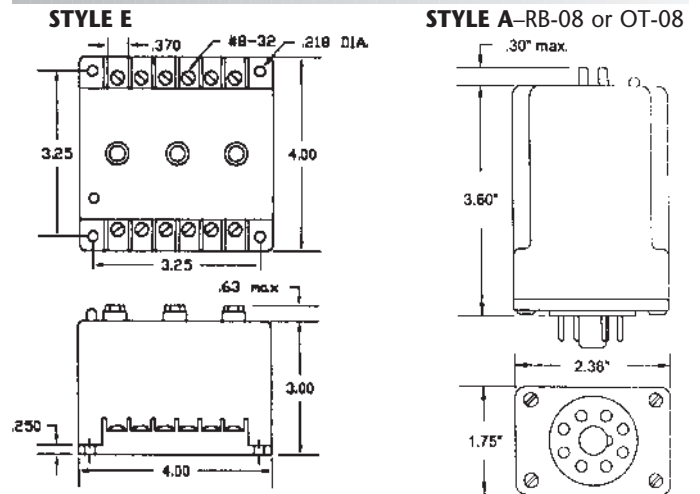
Phase & Under Voltage Monitor



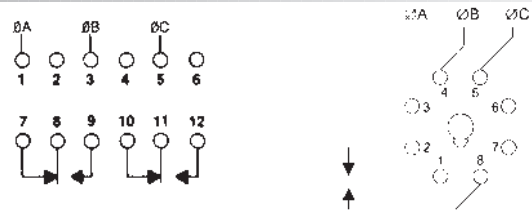
SPECIFICATIONS

| | | |
|-----------------------|--------------------------------------|---|
| 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. | | | | |
| 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. | | | | |
| SLD-440-ALE | 440/480 VAC | 370-460 Adj. | | | | |

All voltage referenced are phase-to-phase.