DIVERSIFIED ELECTRONICS

SLU 600

Universal Phase Monitor/Relay

FEATURES

- **Adjustable Phase Unbalance**
- **Adjustable Restart Delay**
- **Adjustable Fault Delay**
- **Manual or Automatic Reset**
- **Adjustable Operating Range: 200-630VAC 3 Phase Nominal**

NEW!

c UL us LISTED

Part #SLU-600-ASTDS

PROTECTS AGAINST

- **Phase Loss**
- **Phase Reversal**
- **Over/Under Voltage**
- **Phase Unbalance**
- **Over/Under Frequency**
- **Phase Shift**
- **Rapid Cycling**

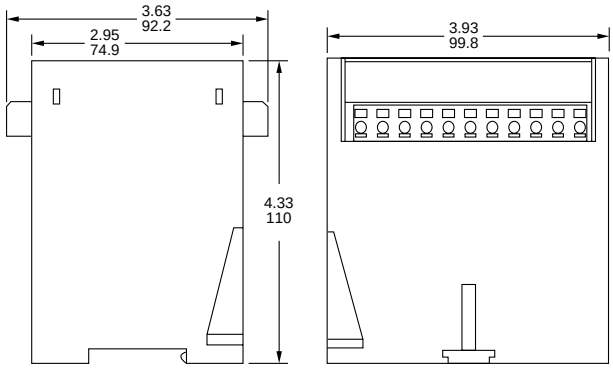
DESCRIPTION

The Line-to-Line voltage adjustment is set to the appropriate nominal voltage and frequency scale. When 120VAC control voltage is applied and normal operating voltage is present on all three phases in the proper sequence, the internal relay energizes and the Auto-Scale locks-in. Auto-scale will only re-activate by removal and re-application of control voltage. When an incorrect phase sequence phase loss, under voltage, over voltage, frequency shift, or unbalance energize (drop-out) after the fault Response Time has expired. When all conditions return to normal, the relay will energize when the adjustable Restart Delay has expired.

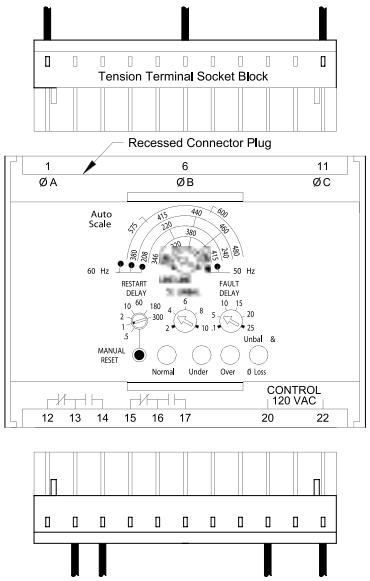
Both Delta and Wye systems may be monitored. In Wye systems, connections to neutral are not required.

DIMENSIONS

INCHES
MILLIMETERS



TOP LABEL



SPECIFICATIONS

Auto Ranging Scales:	See Table Below	
3-Phase Voltage Band **Drop-out:** **Pick-up:**	 ±10% of Range Setting (Under/Over) ±7% of Range Setting (Under/Over)	
Control Voltage:	120 VAC ±10%, 50/60 Hz	
Maximum Voltage:	700 VAC (Line-to-Line)	
Phase Sequence:	ABC (Will Not Operate On CBA Sequence)	
Power Required:	90VA Maximum	
Phase Unbalance:	2% to 10%, Adjustable Drop-out	
Phase Shift:	13° Drop-out, 12° Pick-up (Phase-Loss)	
Response Times **Power Up:** **Fault Delay:** **Severe Fault:** **Restart:**	 2.5 S Minimum 0.1 to 25 S, Adjustable 100mS (Phase-Loss, Unbalance or Phase Reversal) 0.5 to 300 S, Adjustable (Automatic Reset)	
Rapid Cycling:	5 Cycle Lockout, 30-Minute Cycle Count Reset	
Reset:	Automatic or Manual Mode	
Hysteresis:	10% of Setting	
Relay Output:	DPDT, 10A @ 240VAC Resistive	
Frequency Shift:	±4% Drop-out, ±3% Pick-up 50 or 60 Hz	
Indicators	**Flashing**	**Continuous**
Normal (Green LED):	Fault Delay Active	Relay Energized
Under (Red LED):	Restart Delay Active	Relay De-energized
Over (Red LED):	Restart Delay Active	Relay De-energized
Unbal/Phase Loss (Red LED):	Restart Delay Active	Relay De-energized
Temperatures **Operate:** **Storage:**	 0°C to +55°C -45°C to +85°C	
Repeat Accuracy:	1% @ Fixed Condition	
Terminals:	Plug and Socket Term Block with Spring Pressure Wire Retention, 12AWG Max.	
Enclosure:	35mm DIN Rail or Surface Mount, Polycarbonate	

AUTO RANGING SCALES

Frequency	Nominal Line-to-Line Voltages	Adjustable Range
50Hz	**208, 220, 240**	**200-250**
50Hz	**346, 380, 415**	**330-430**
60Hz	**208, 220, 240,**	**200-250**
60Hz	**380, 415, 440, 460, 480**	**360-500**
60Hz	**575, 600**	**550-630**

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 SLU protects against this condition by Phase Shift detection.

AUTOMATIC TIMING & CONTROLS
DIVERSIFIED ELECTRONICS DIVISION

1511 East Street
Leesburg, FL 34748
Phone: 352-787-7259
800-874-0619
Fax: 352-787-8798

1827 Freedom Rd.
Lancaster, PA 17601
Phone: 717-295-0500
800-441-8245
Fax: 717-295-9536

www.ATCDiversified.com
Email: info@ATCDiversified.com