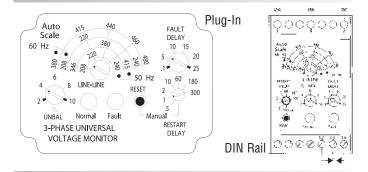
Diversified Electronics



Universal Phase Monitor

ORDERING INFORMATION **MODEL NUMBER DESCRIPTION** SLU-100-ASA Universal Phase Monitor SLU-100-ASD Din Rail Mount Universal Phase Monitor

TOP LABELS



Ser	\\DIMENSIONS (INCHES)	
Phase Voltage Monitors // SLU-100 Ser	3.00	ØA ØB ØC 03 4 5 60 02 0 70
Phase Voltage Mo	2.95	1.77 -
208	DIN Rail	

Phase Monitor Relays (3-Phase Monitors) provide cost-effective protection against premature equipment failure caused by voltage faults on 3-Phase systems (Wye or Delta). The SLU Series multi-mode phase monitoring relay, was designed for the convenience of electrician's, maintenance managers and engineers. A single SLU Phase Monitoring Relay can be easily adjusted for the voltage, imbalance percentage and time delay requirements to protect against unbalanced voltages or single phasing regardless of any regenerative voltages.

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

NOTE: Not recommended for generator or variable frequency drive applications. Call technical support for application assistance.

AUTO RANGING SCALES 60Hz 380, 415, 440, 460, 480 380, 415 330-430 208, 220, 240 200-250 346, 380, 415 330-430 VOLTAGE BAND Drop-out 10nder/Over) Pick-up 10nder/Over) Pick-up 10nder/Over) Pick-up Pick-up 10nder/Over) Pick-up 10nder/Over) Pick-up Pick-up 10nder/Over) Pick-up 10nder/Over) Pick-up 10nder/Over) Pick-up 10nder/Over) Pick-up 10nder/Over) Adjustable Range 200-250 346, 380, 415 330-430 201-250 330-430 201-250 346, 380, 415 330-430 201-250 346, 380, 415 330-430 201-250 201-250 346, 380, 415 330-430 201-250 201-	SPECIF	ICATIONS					
RANGING SCALES		Frequency					
SCALES SOHz 208, 220, 240 200-250 346, 380, 415 330-430 VOLTAGE BAND Pick-up ±10% of Range Setting (Under/Over) MAXIMUM VOLTAGE PHASE SEQUENCE ABC (Will Not Operate On CBA Sequence) PHASE SHIFT 13° Drop-out, 12° Pick-up (Ø-Loss) FREQUENCY SHIFT Automatic or Manual Mode RELAY SPDT, 10A @ 240VAC OUTPUT Resistive, 1/2 HP @240VAC Fault (Red LED) Active Energized Fault Delay Active Energized Fault Delay Active De-energized Power Up 2.5 S Minimum Fault Delay 0.1 to 25 S, Adjustable Restart Automatic or Phase Reversal) Restart Constant Constant Constant Consta	AUTO	60Hz	208, 220, 240	200-250			
VOLTAGE BAND Drop-out 10% of Range Setting (Under/Over)			380, 415, 440, 460, 480				
VOLTAGE BAND Drop-out ±10% of Range Setting (Under/Over) Pick-up ±7% of Range Setting (Under/Over) MAXIMUM VOLTAGE PHASE SEQUENCE POWER REQUIRED PHASE UNBALANCE PHASE SHIFT 13° Drop-out, 12° Pick-up (Ø-Loss) FREQUENCY SO/60 Hz FREQUENCY SHIFT Pick up ± 3% RESET Automatic or Manual Mode RELAY OUTPUT Resistive, 1/2 HP @240VAC Normal (Green LED) Fault (Red LED) Fault (Red LED) Fault Delay RESPONSE TIMES RESPONSE TIMES RESPONSE TIMES REST REPEAT ACCURACY TERMINALS (DIN) Style "A" LEXAN® Dust Cover ENCLOSURE Drop-out 110% of Setting (Under/Over) ### 10% of Range Setting (Under/Over) ### 10% of Range Setting (Under/Over) ### 10% of Range Setting (Under/Over) ### 170% of Satting ### 10% of Setting ### 10%		50Hz	208, 220, 240	200-250			
VOLTAGE BAND Pick-up Pick-up #7% of Range Setting (Under/Over) MAXIMUM VOLTAGE PHASE SEQUENCE POWER REQUIRED PHASE UNBALANCE PHASE SHIFT 13° Drop-out, 12° Pick-up (Ø-Loss) 50/60 Hz FREQUENCY Pick up #3% RESET Automatic or Manual Mode RELAY OUTPUT Resistive, 1/2 HP @240VAC OUTPUT RESISTIVE, 1/2 HP @240VAC Fault (Red LED) Fault (Red LED) REST Power Up #4 % Fault Delay Active Fault (Red LED) Restart Delay Active Power Up #4 % For pe-nergized Power Up #4 % For pe-nergized Power Up #4 % For pe-nergized Fault (Red LED) #4 % For pe-nergized Fault (Red LED) For pe-nergized For pe-nergized Power Up #4 % For pe-nergized For pe-nergized Power Up #4 % #4 % For pe-nergized For pe-nergized For phase-Loss, Unbalance #4 or phase-Loss, Unbalance #4 or phase-Loss, Unbalance #4 or phase Reversal) TEMPERATURE #4 Operate #4 Soron #4 Outpus #4 Soron #4 Outpus #4 Normal #4 Normal #4 Outpus #4 Normal #4 Outpus #4 Normal #4 Outpus #4 Normal #4 Normal #4 Outpus #4 Normal #			346, 380, 415	330-430			
MAXIMUM VOLTAGE PHASE SEQUENCE POWER REQUIRED PHASE SHIFT 13° Drop-out, 12° Pick-up (Ø-Loss) 50/60 Hz FREQUENCY SHIFT Automatic or Manual Mode RELAY OUTPUT REsistive, 1/2 HP @240VAC INDICATORS Fault (Green LED) Fault Delay (Red LED) RESPONSE TIMES RESPONSE TIMES RESPONSE TIMES Prick-up Restart R		Drop-out	(Under/Over)				
VOLTAGE PHASE SEQUENCE POWER REQUIRED PHASE UNBALANCE PHASE SHIFT SO/60 Hz FREQUENCY SHIFT FREQUENCY SHIFT FREQUENCY SHIFT In the property of the property	BAND	Pick-up	±7% of Range Setting (Under/Over)				
ABC (Will Not Operate On CBA Sequence) POWER REQUIRED POWER REQUIRED PHASE UNBALANCE PHASE SHIFT 13° Drop-out, 12° Pick-up (Ø-Loss) 50/60 Hz Drop-out ± 4% Pick up ± 3% RESET Automatic or Manual Mode RELAY OUTPUT SPDT, 10A @ 240VAC Resistive, 1/2 HP @240VAC Flashing Normal (Green LED) Fault Delay (Red LED) Fault Restart Delay (Red LED) Active Power Up Fault Delay Active Power Up Fault Delay RESPONSE TIMES RESPONSE TIMES REST REST AUTOMATION (Phase-Loss, Unbalance or Phase Reversal) Restart Operate 32° to 131°F (0° to +55°C) REPEAT ACCURACY TERMINALS (DIN) Slotted Screw Terminal Clamps, 12AWG Max. DIN Symm DIN Rail, 14 Term Polycarbonate Housing	VOLTAGE	550 VAC (Line-to-Line)					
PHASE 2% to 10%, Adjustable Drop-out UNBALANCE Hysteresis 10% of Setting PHASE SHIFT 13° Drop-out, 12° Pick-up (Ø-Loss) 50/60 Hz FREQUENCY SHIFT Drop-out ± 4% Pick up ± 3% RESET Automatic or Manual Mode RELAY SPDT, 10A @ 240VAC OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous	SEQUENCE	ABC (Will Not Operate On CBA Sequence)					
UNBALANCE PHASE SHIFT 13° Drop-out, 12° Pick-up (Ø-Loss) 50/60 Hz Drop-out ± 4% Pick up ± 3% RESET Automatic or Manual Mode RELAY OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous Normal (Green LED) Fault (Red LED) Fault (Red LED) Fault Delay RESPONSE TIMES Power Up 2.5 S Minimum Fault Delay De-energized Power Up 2.5 S Minimum Fault Delay Continuous Restart Fault Restart Delay Active Poe-energized Power Up 2.5 S Minimum Fault Delay Continuous Restart Poe-energized Power Up Continuous Relay De-energized Power Up Continuous Relay De-energized Power Up Continuous Restart Collay Continuous Restart Collay Continuous Relay De-energized Power Up Continuous Relay De-energized Relay De-energized Relay De-energized Power Up Continuous Relay Continuo	U11// 1/12V						
PHASE SHIFT 13° Drop-out, 12° Pick-up (Ø-Loss) 50/60 Hz Drop-out ± 4% Pick up ± 3% RESET Automatic or Manual Mode RELAY OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous							
FREQUENCY SHIFT Drop-out ± 4% Pick up ± 3% RESET Automatic or Manual Mode RELAY OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous Flault Delay Active Fault Delay Relay (Red LED) Fault Delay Active Power Up Fault Delay Active Poe-energized Power Up Fault Delay O.1 to 25 S, Adjustable RESPONSE TIMES Restart Operate Active Poe-energized Power Up Continuous Relay De-energized Power Up Continuous Restart Fault Delay Active Poe-energized Power Up Continuous Restart Fault Delay Active Poe-energized Power Up Continuous Relay De-energized Poe-energized Power Up Continuous Fault Delay Active Poe-energized Power Up Continuous Fault Delay Active De-energized Poe-energized Power Up Continuous Fault Delay De-energized Poe-energized Power Up Continuous Fault Delay De-energized Poe-energized		,					
Pick up ± 3% RESET Automatic or Manual Mode RELAY SPDT, 10A @ 240VAC OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous	PHASE SHIFT						
RESET Automatic or Manual Mode RELAY OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous	ERECLIENCY						
RESET Automatic or Manual Mode RELAY OUTPUT SPDT, 10A @ 240VAC OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous			± 4%				
RELAY OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous							
OUTPUT Resistive, 1/2 HP @240VAC Flashing Continuous Normal (Green LED) Fault Delay Active Energized Fault (Red LED) Active De-energized Power Up 2.5 S Minimum Fault Delay 0.1 to 25 S, Adjustable RESPONSE TIMES Restart Delay De-energized Power Up 2.5 S Minimum Fault Delay 0.1 to 25 S, Adjustable Restart Compare Reversal (Auto Reset) TEMPERATURE Operate 32° to 131°F (0° to +55°C) REPEAT ACCURACY TERMINALS (DIN) Style "A" LEXAN® Dust Cover DIN Style "A" LEXAN® Dust Cover DIN Somm DIN Rail, 14 Term Polycarbonate Housing							
Normal (Green LED) Fault Delay Active Energized				Resistive, 1/2 HP @240VAC			
INDICATORS (Green LED) Active Energized Fault (Red LED) Restart Delay De-energized Power Up 2.5 S Minimum Fault Delay 0.1 to 25 S, Adjustable Severe Fault 100mS (Phase-Loss, Unbalance or Phase Reversal) Restart 0.5 to 300 S, Adjustable (Auto Reset) TEMPERATURE ACTINGS Storage -49° to 131°F (0° to +55°C) REPEAT ACCURACY TERMINALS (DIN) Style "A" LEXAN® Dust Cover DIN 35mm DIN Rail, 14 Term Polycarbonate Housing		SPDT, 10A @ 240 Resistive, 1/2 HP	@240VAC				
RESPONSE TIMES RESPONSE TIMES RESPONSE TIMES RESPONSE TIMES Restart CAURACY RESPONSE TEMPERATURE RATINGS REPEAT ACCURACY TERMINALS (DIN) Style "A" Restart Delay 0.1 to 25 S, Adjustable 100mS (Phase-Loss, Unbalance or Phase Reversal) 0.5 to 300 S, Adjustable (Auto Reset) (Auto Reset) 100 to +55°C) 100 TEMPERATURE RATINGS 100 Storage -49° to 185°F (-45° to +85°C) REPEAT ACCURACY TERMINALS Slotted Screw Terminal Clamps, 12AWG Max. Style "A" LEXAN® Dust Cover DIN Style "A" LEXAN® Dust Cover DIN Rail, 14 Term Polycarbonate Housing		Resistive, 1/2 HP	@240VAC Flashing				
RESPONSE TIMES Fault Delay O.1 to 25 S, Adjustable Severe Fault OPhase Reversal Restart O.5 to 300 S, Adjustable (Auto Reset) TEMPERATURE RATINGS Storage -49° to 131°F (0° to +55°C) REPEAT ACCURACY TERMINALS (DIN) Slotted Screw Terminal Clamps, 12AWG Max. ENCLOSURE DIN Style "A" LEXAN® Dust Cover BIN Rail, 14 Term Polycarbonate Housing	OUTPUT	Resistive, 1/2 HP Normal (Green LED)	@240VAC Flashing Fault Delay Active	Relay Energized			
RESPONSE TIMES Severe Fault 100mS (Phase-Loss, Unbalance or Phase Reversal) Restart 0.5 to 300 S, Adjustable (Auto Reset) TEMPERATURE Operate 32° to 131°F (0° to +55°C) RATINGS Storage -49° to 185°F (-45° to +85°C) REPEAT ACCURACY TERMINALS (DIN) Slotted Screw Terminal Clamps, 12AWG Max. ENCLOSURE DIN Style "A" LEXAN® Dust Cover DIN 35mm DIN Rail, 14 Term Polycarbonate Housing	OUTPUT	Normal (Green LED) Fault (Red LED)	@240VAC Flashing Fault Delay Active Restart Delay Active	Relay Energized Relay			
TIMES Severe Fault Or Phase Reversal) Restart O.5 to 300 S, Adjustable (Auto Reset) TEMPERATURE RATINGS Storage -49° to 185°F (-45° to +85°C) REPEAT ACCURACY TERMINALS (DIN) Slotted Screw Terminal Clamps, 12AWG Max. ENCLOSURE DIN Style "A" LEXAN® Dust Cover BIN Rail, 14 Term Polycarbonate Housing	OUTPUT	Normal (Green LED) Fault (Red LED) Power Up	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum	Relay Energized Relay De-energized			
TEMPERATURE Operate 32° to 131°F (0° to +55°C) RATINGS Storage -49° to 185°F (-45° to +85°C) REPEAT ACCURACY TERMINALS (DIN) Slotted Screw Terminal Clamps, 12AWG Max. ENCLOSURE DIN Style "A" LEXAN® Dust Cover DIN 35mm DIN Rail, 14 Term Polycarbonate Housing	OUTPUT	Normal (Green LED) Fault (Red LED) Power Up	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju	Relay Energized Relay De-energized			
RATINGS Storage -49° to 185°F (-45° to +85°C) REPEAT ACCURACY TERMINALS (DIN) Slotted Screw Terminal Clamps, 12AWG Max. Style "A" LEXAN® Dust Cover DIN DIN Rail, 14 Term Polycarbonate Housing	OUTPUT INDICATORS RESPONSE	Normal (Green LED) Fault (Red LED) Power Up Fault Delay	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju 100mS (Phase-Loor Phase Reversa	Relay Energized Relay De-energized stable oss, Unbalance			
REPEAT ACCURACY TERMINALS (DIN) Slotted Screw Terminal Clamps, 12AWG Max. Style "A" LEXAN® Dust Cover ENCLOSURE DIN 35mm DIN Rail, 14 Term Polycarbonate Housing	OUTPUT INDICATORS RESPONSE	Normal (Green LED) Fault (Red LED) Power Up Fault Delay Severe Fault	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju 100mS (Phase-Loor Phase Reversa 0.5 to 300 S, Adj (Auto Reset)	Relay Energized Relay De-energized istable oss, Unbalance l) justable			
ACCURACY TERMINALS (DIN) Slotted Screw Terminal Clamps, 12AWG Max. Style "A" LEXAN® Dust Cover ENCLOSURE DIN 35mm DIN Rail, 14 Term Polycarbonate Housing	OUTPUT INDICATORS RESPONSE TIMES TEMPERATURE	Resistive, 1/2 HP Normal (Green LED) Fault (Red LED) Power Up Fault Delay Severe Fault Restart Operate	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju 100mS (Phase-Lo or Phase Reversa 0.5 to 300 S, Adj (Auto Reset) 32° to 131°F (0°	Relay Energized Relay De-energized istable oss, Unbalance I) justable to +55°C)			
(DIN) Style "A" LEXAN® Dust Cover ENCLOSURE DIN Block Style "A" LEXAN® Dust Cover Block 35mm DIN Rail, 14 Term Polycarbonate Housing	OUTPUT INDICATORS RESPONSE TIMES TEMPERATURE	Resistive, 1/2 HP Normal (Green LED) Fault (Red LED) Power Up Fault Delay Severe Fault Restart Operate	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju 100mS (Phase-Lo or Phase Reversa 0.5 to 300 S, Adj (Auto Reset) 32° to 131°F (0°	Relay Energized Relay De-energized istable oss, Unbalance I) justable to +55°C)			
ENCLOSURE DIN 35mm DIN Rail, 14 Term Polycarbonate Housing	RESPONSE TIMES TEMPERATURE RATINGS REPEAT ACCURACY	Resistive, 1/2 HP Normal (Green LED) Fault (Red LED) Power Up Fault Delay Severe Fault Restart Operate Storage	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju 100mS (Phase-Loor Phase Reversa 0.5 to 300 S, Adj (Auto Reset) 32° to 131°F (0° -49° to 185°F (-4	Relay Energized Relay De-energized istable oss, Unbalance I) justable to +55°C)			
Polycarbonate Housing	RESPONSE TIMES TEMPERATURE RATINGS REPEAT ACCURACY TERMINALS	Resistive, 1/2 HP Normal (Green LED) Fault (Red LED) Power Up Fault Delay Severe Fault Restart Operate Storage 1% @ Fixed Con Slotted Screw Te	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju 100mS (Phase-Lo or Phase Reversa 0.5 to 300 S, Adj (Auto Reset) 32° to 131°F (0° -49° to 185°F (-4) dition	Relay Energized Relay De-energized Istable oss, Unbalance l) justable to +55°C) -5° to +85°C)			
WEIGHT 0.35 to 0.5 lbs.	RESPONSE TIMES TEMPERATURE RATINGS REPEAT ACCURACY TERMINALS (DIN)	Resistive, 1/2 HP Normal (Green LED) Fault (Red LED) Power Up Fault Delay Severe Fault Restart Operate Storage 1% @ Fixed Con Slotted Screw Te	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju 100mS (Phase-Loor Phase Reversa 0.5 to 300 S, Adj (Auto Reset) 32° to 131°F (0° -49° to 185°F (-4) dition rminal Clamps, 12 LEXAN® Dust Cov	Relay Energized Relay De-energized Istable Doss, Unbalance I) Justable To +55°C) Dos To +85°C) ZAWG Max. Ver			
	RESPONSE TIMES TEMPERATURE RATINGS REPEAT ACCURACY TERMINALS (DIN)	Resistive, 1/2 HP Normal (Green LED) Fault (Red LED) Power Up Fault Delay Severe Fault Restart Operate Storage 1% @ Fixed Con Slotted Screw Te Style "A" DIN	@240VAC Flashing Fault Delay Active Restart Delay Active 2.5 S Minimum 0.1 to 25 S, Adju 100mS (Phase-Lo or Phase Reversa 0.5 to 300 S, Adj (Auto Reset) 32° to 131°F (0° -49° to 185°F (-4dition rminal Clamps, 12 LEXAN® Dust Cor 35mm DIN Rail,	Relay Energized Relay De-energized Istable oss, Unbalance l) justable to +55°C) -5° to +85°C) 2AWG Max. ver 14 Term			