### **Diversified Electronics**

## **SLA Series**

# The ATC Diversified SLA Series is designed to protect 3-phase equipment against **PHASE LOSS, UNDER VOLTAGE**, and **PHASE REVERSAL** conditions.

With normal operating voltages applied in the proper ABC sequence, the internal relay will energize (PICK-UP). When incorrect phase sequence or phase loss occurs or the three-phase voltages fall below the drop out voltages, the relay will de-energize (DROP-OUT). On models featuring indicators, the LED glows when all line conditions are normal.

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

For UL Listed units, with field wiring terminals, copper wire with 60°/75°C rating must be used for control circuitry connections.

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. However, with the exception of lightly loaded motors, enough change is detected by the SLA to provide the required protection when properly adjusted.

### SPECIFICATIONS

		-				
DROP-OUT VOLTAGE	1 Ø Low	83% of Nominal				
VOLTAGE	3 Ø Low 90% of Nominal					
	Models Up to 300 VAC					
	Operate	250 mSEC				
RESPONSE TIMES STYLE "A" & "E"	Release	0.5 SEC				
	Models Over 300 VAC					
	Operate	1.0 SEC				
	Release	2.0 SEC				
RESPONSE TIMES	Operate	60 mSEC				
STYLE "N"	Release	0.5 SEC				
	Style "A"	3 VA (approx.)				
POWER REQUIRED	Style "E"	Models up to 300 VAC: 3 VA (max.) Models over 300 VAC: 7 VA (max.) Models over 500 VAC: 3 VA (max.)				
	Style "N"	3 VA (max.)				
OPERATING VOLTAGE	See Ordering Information					
RESET	Automatic (Manual Optional)					
INDICATOR LED	Glows when all conditions are Normal (On Applicable Models)					
OUTPUT RATING	SPDT (style "A" and "N") DPDT (style "E")					
PHASE SEQUENCE	ABC (Will N	ABC (Will Not Operate CBA)				
	Operate	32° to +131°F (0° to +55°C)				
TEMPERATURE RATING	Storage	-49° to 185°F (-45° to +85°C)				
U.S. PATENT NUMBER	3,611,050					
	Style "A"	NET: 2.24 oz Shipping: 2.56 oz				
WEIGHT	Style "E"	NET: 4.8 oz Shipping: 5.76 oz				
	Style "N"	NET: 5.3 oz Shipping: 5.6 oz				



# Phase Monitors

#### PROTECTS 3-PHASE EQUIPMENT AGAINST:

- Phase Loss
- Under Voltage
- Phase Reversal

### **TYPICAL APPLICATIONS:**

• Several Enclosure Styles

Available up to 480 VAC

• Delta or Wye Systems

• Fixed, Lock Shaft, or Screwdriver Adjustment

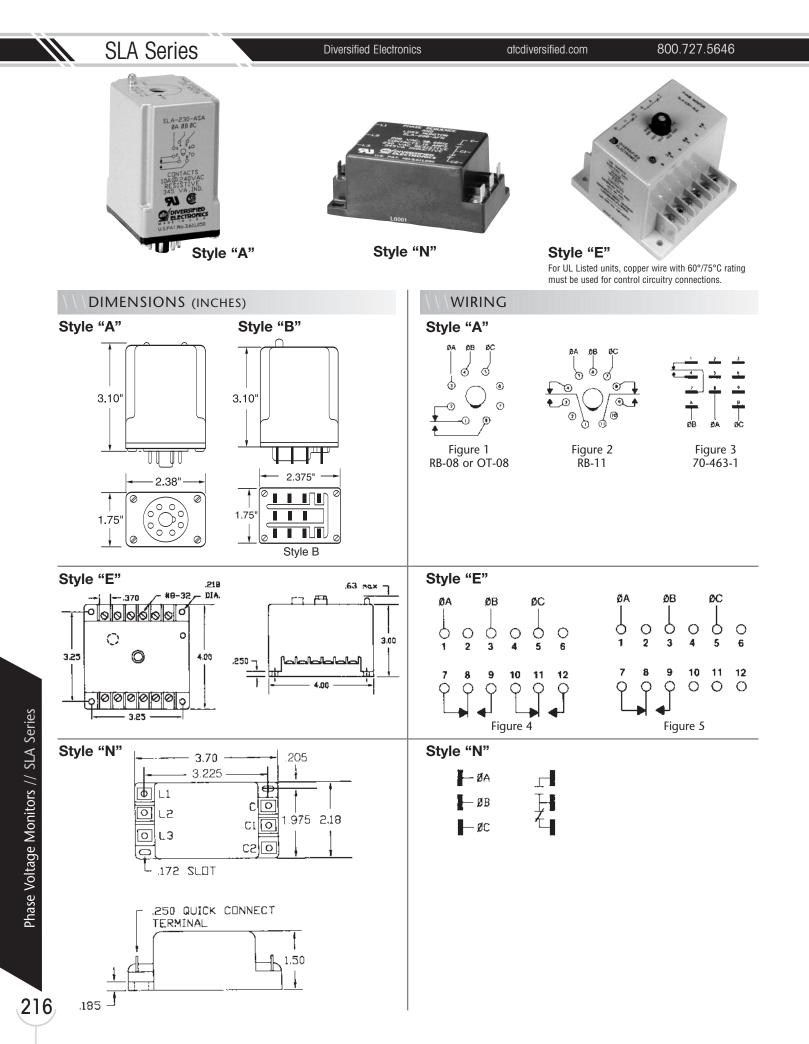
- Air Handlers
- Computer Power Protection
- Conveyor Drive
- Water Waste & Sewage Machinery
- Oil & Gas Pumps
- Sawmill & Woodpump Machinery
- Power Substation

- Automatic Transfer Switching for Monitoring Emergency Power Supplies
- Irrigation Pumps
- Lift Station Pumps
- Robotics Equipment
- Elevator Drives
- Commercial/Industrial Air Conditioning & Refrigeration Compressors

compressors	Compressors						
MODEL NUMBER >>>>> SLA A							
Operating Voltage							
See Ordering Information							
Type of Operation							
Fixed	F						
Lock Shaft Adjusted	L						
Screwdriver Adjusted	S						
Enclosu	re Style						
Octal Plug-In, Dus	t Cover	A					
Blade Plug-In, Dus	t Cover	В					
Surface Mounted, #8 Screw Te	erminals	Ε					
Surface Mounted, 1/4" Quick Disconnect Te	erminals	Ν					
	Opti	ons					
Add R Suffix when manual reset (available only in style "E'							
Plug-In models are UL listed only when RB-08 r	n used w elay socl						

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### ORDERING INFORMATION

STYLE A PLUG-IN						
MODEL	OPERATING	TYPE OF	DROP-OUT VOLTAGE		AGENCY	
NUMBER	VOLTAGE	ADJUSTMENT	1 Ø LOW	3 Ø LOW	APPROVAL	OUTPUT RATINGS
SLA-120-ALA		Lock Shaft	79-108	85-117	_	DPDT, 345 VA Inductive; 10 Amps Resistive @ 240 VAC. Figure 2
SLA-120-ASA	95-130 Adj	Adj Screwdriver			€ <b>9 (</b> 1	SPDT, 345 VA Inductive; 10 Amps Resistive @ 240 VAC, Figure 1
SLA-120-ASB					c <b>RL</b> us	SPDT, 345 VA Inductive; 10 Amps Resistive @ 240 VAC, Figure 3
SLA-230-ALA		Lock Shaft Screwdriver			c <b>FL</b> us	DPDT, 345 VA Inductive; 10 Amps Resistive @ 240 VAC, Figure 2
SLA-230-ASA	190-270 Adj.		158-224	171-243	• <b>H</b> •• <b>(</b>	SPDT, 345 VA Inductive; 10 Amps Resistive @ 240 VAC, Figure 1
SLA-230-ASB					c <b>FL</b> us	SPDT, 345 VA Inductive; 10 Amps Resistive @ 240 VAC, Figure 3
SLA-380-ASA	350-440 Adj.		290-365	315-396		SPDT, 360 VA Inductive; 10 Amps
SLA-440-ASA	430-480 Adj.		357-398	387-432		Resistive @ 240 VAC, Figure 1
SUA-120-ALA	95-130 Adj. Lock Shaft		79-108	85-117 -	. <b>FL</b> . ()	
SUA-120-ALAU*		Lock Shaft		03-117		SPDT, 345 VA Inductive; 10 Amps
SUA-230-ALA		LOCK Share	158-224	171-243 -	• <b>1</b> 1-	Resistive @ 240 VAC, Figure 1
SUA-230-ALAU*	120-270 Auj.					
SUA-380-ASA	350-440 Adj.	Screwdriver	290-365	315-396		SPDT, 360 VA Inductive; 10 Amps
SUA-440-ASA	430-480 Adj.	screwariver	357-398	387-432		Resistive @ 240 VAC, Figure 1
*UL Listed only when	used with RB-08 re	lay socket; 5 Amps	Resistive @ 240 V/	AC. All voltages refer	enced on this page are ph	lase-to-phase.

\*UL Listed only when used with RB-08 relay socket; 5 Amps Resistive @ 240 VAC. All voltages referenced on this page are phase-to-phase. Models also available with fixed operating voltages. Consult factory.

STYLE E SURFACE MOUNTED ENCLOSURE						
MODEL	OPERATING	DROP-OUT VOLTAGE			AGENCY	
NUMBER	VOLTAGE	1 Ø LOW	3 Ø LOW	RESET	APPROVAL	OUTPUT RATINGS
SLA-120-ALE	95-130 Adj.	79-108	08 85-117	Automatic		DPDT, 211 VA Inductive; 10 Amps Resistive @ 120 VAC. Figure 4
SLA-120-ALER	- 95-150 Auj.	79-100		Manual		DPDT, 211 VA Inductive; 10 Amps Resistive @ 120 VAC. Figure 4
SLA-230-ALE	- 190-270 Adj.	158-224	224 171-243	Automatic		DPDT, 345 VA Inductive; 5 Amps Resistive @ 240 VAC. Figure 4
SLA-230-ALER		130-224		Manual		DPDT, 345 VA Inductive; 5 Amps Resistive @ 240 VAC. Figure 4
SLA-380-ALE	- 350-440 Adj.	290-365	315-396	Automatic		DPDT, 360 VA Inductive; 3 Amps Resistive @ 600 VAC. Figure 4
SLA-380-ALER				Manual		SPDT, 360 VA Inductive; 3 Amps Resistive @ 600 VAC. Figure 5
SLA-440-ALE	- 430-480 Adj.	357-398	387-432	Automatic		DPDT, 360 VA Inductive; 3 Amps Resistive @ 600 VAC. Figure 4
SLA-440-ALER				Manual		SPDT, 360 VA Inductive; 3 Amps Resistive @ 600 VAC. Figure 5
SLA-575-ALE	525-625 Adj.	436-519	473-563	Automatic		DPDT, 360 VA Inductive; 3 Amps Resistive @ 600 VAC. Figure 4
All voltage referenced are phase-to-phase.—Models also available with fixed operating voltages. Consult factory.						

### STYLE N EPOXY ENCAPSULATED

MODEL OPERATING			DROP-OUT VOLTAGE		AGENCY
NUMBER	VOLTAGE	TYPE OF OPERATION	1 Ø LOW	3 Ø LOW	APPROVAL
SLA-120-AFN	120	Fixed	100	108	
SLA-208-AFN	208	Fixed	173	187	<b>A</b> 1
SLA-220-AFN	220	Fixed	183	198	c <b>RL</b> us
SLA-240-AFN	240	Fixed	199	216	
All voltage referenced are ph	nase-to-phase.				