



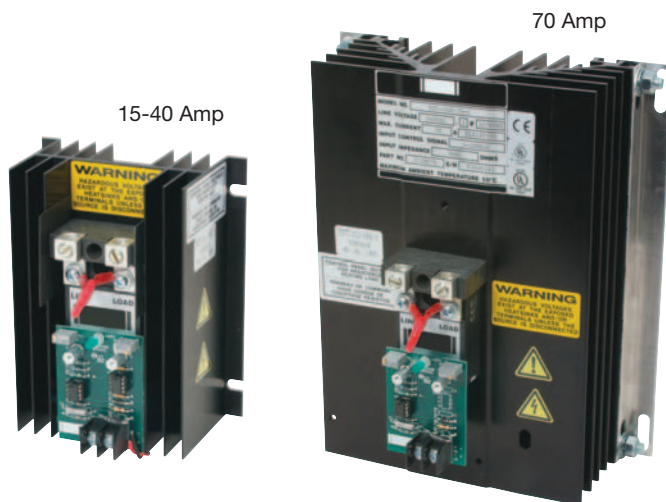
### SCR Power Controller "A" Series — Single Phase 15 through 70 Amp

#### Design Features

- \* Electrically Isolated Heat Sink
- \* Conservative Thermal Design
- \* Voltage Squared Linearity
- \* Transient Voltage Protection
- \* Multi-Turn Zero & Span Adjustments
- \* UL, cUL, CE Compliant

The "A" Series SCR Power Controllers are a compact and economical power control solution for industrial applications that require high reliability and long life. The fast solid state switching provides superior performance over relays, contactors and other slower cycling controllers by reducing temperature variations associated with the longer on-off cycles of those devices. The result is a more precise control of the heating process and extended heater life.

- Fast Cycling Distributive Zero Cross or Phase Angle Firing Control Modes
- Line Voltage Compensation
- Compact Size; Diagnostic LED; Increased Heater Life



#### Specifications

**Command Signals:** 4-20mA; 0-5 VDC; 0-10 VDC; potentiometer

**Control Mode:** Distributive Zero Cross; Phase Angle Firing

**Load Current:** 15, 25, 40 or 70 Amps

**Line Voltage:** 120, 240, 480, or 575 VAC; +10% -20% 50/60 Hz

**Zero and Span:** Factory pre-set. User adjustable over a range of 20% of span.

**Transient Voltage and dv/dt:** 200 volts/microsecond minimum. Uses a dv/dt snubber and a metal oxide varistor. (MOV)

#### Control Range

**Zero Cross:** 0 to 100% of line voltage

**Phase Angle Firing:** 0 to 97% of line voltage

#### Linearity

**Zero Cross:** Linear with respect to the command signal

**Phase Angle Firing:** RMS load voltage is linear within 2% of the command signal.

#### Temperature

**Operating:** 32 to 122°F (0 to 50°C)

**Storage:** 14 to 198°F (-10 to 70°C)

**Cooling:** Convection

**Mounting:** Panel mount with heat sink fins vertical

#### Dimensions

**15-40 Amp units—Overall:** 4.75"W × 6.0"H × 3.1"D

**Mounting Centers:** 4.35"W × 4.5"H

**70 Amp units—Overall:** 8.5"W × 10"H × 5"D

**Mounting Centers:** 8.0"W × 8.75"H

#### Weight

**15-40 Amp units:** 1.2 lb.

**70 Amp units:** 3 lb

**Notes:** Fusing is not included. Class T fuses are recommended.

All control input configurations require 24 VAC power supply except zero cross with 4-20mA input.



"A" Series SCR Power Controllers are offered with the options listed in the worksheet below. Fill in the boxes with the appropriate number and/or letter designation for your requirements and a part number will be assigned.

**Ordering Code:** **SRSA** -

#### Control Mode BOX 1

**Z:** Distributive Zero Cross  
**P:** Phase Angle Fire

#### Load Current BOX 2

**xx:** 15, 25, 40 or 70 Amps

#### Line Voltage BOX 3

**1:** 120 VAC  
**2:** 240 VAC  
**3:** 480 VAC  
**4:** 575 VAC

#### Control Input BOX 4

**A:** 4 to 20 mA  
**B:** 0 to 5 VDC  
**C:** 0 to 10 VDC  
**D:** Potentiometer

**Note:** All control input types require additional 24 VAC power input, except zero cross firing with 4-20mA.

#### Options (up to two) BOXES 5, 6

(for zero cross or phase angle fire models)  
**E:** Over-Temperature Thermostat – N.O. Contacts  
**F:** Over-Temperature Thermostat – N.C. Contacts  
**N:** None  
(for phase angle fire models only)  
**C:** RMS Current Limit  
**J:** Over-Current Trip

#### COMMON CONFIGURATIONS — "A" SERIES 240 VAC; 1-phase; 4-20 mA input

Load Current:	Zero Cross	Phase Angle	Part Number
15 Amp	SRS01101	SRS02101	
25 Amp	SRS01102	SRS02102	
40 Amp	SRS01103	SRS02103	
70 Amp	SRS01104	SRS02104	

**Potentiometer Kit (ordered separately):** 5KΩ potentiometer and knob  
**Part number:** SRS99001

**Multi-Tap Transformer** **Input:** 120/240V, 400V, 480V or 575V  
**Output:** 24VAC  
**Part number:** SRS99002

Standard lead time is 2 to 3 weeks.

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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