

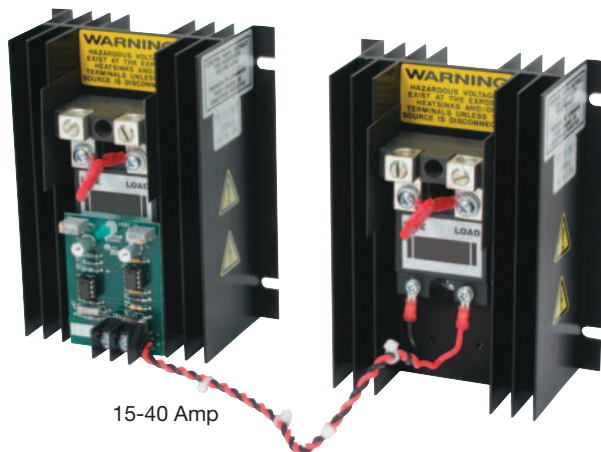


### SCR Power Controller "C" Series — Three Phase 15 through 70 Amp (2-Leg – Zero Cross)

#### Design Features

- \* Electrically Isolated Heat Sink
- \* Conservative Thermal Design
- \* Voltage Squared Linearity
- \* Transient Voltage Protection
- \* Multi-Turn Zero & Span Adjustments
- \* UL, cUL, CE Compliant
- \* Ideal for: Electric Ovens, Furnaces and Kilns, Environmental Chambers and Extruders

The "C" Series SCR Power Controllers are two-leg zero cross SCR power controllers that linearly control, proportional to the command signal, the power applied to a 3-phase electrical load. The controller consists of a master and slave assembly. Each assembly consists of a heat sink and an SCR module. The master assembly contains the control circuit card which controls the on-off cycles for both assemblies.



#### Specifications

- Command Signals:** 4-20mA; 0-5 VDC; 0-10 VDC; potentiometer  
**Control Mode:** Distributive Zero Cross  
**Load Current:** 15, 25, 40 or 70 Amps  
**Line Voltage:** 208, 240, 277, 480 or 575 VAC; 10% to 20% 50/60 Hz  
**Zero and Span:** Factory pre-set. User adjustable over a range of 20% of span.  
**Transient Voltage and dv/dt:** 500 volts/microsecond minimum.  
 Uses a dv/dt snubber and a metal oxide varistor (MOV).  
**Control Range:** 0 to 100% of line voltage  
**Linearity:** Average load voltage is linear within 1% of the command signal.

- Temperature**  
**Operating:** 32 to 122°F (0 to 50°C)  
**Storage:** 14 to 158°F (-10 to 70°C)  
**Cooling:** Convection  
**Mounting:** Panel mount with heat sink fins vertical  
**Dimensions**  
**15-40 Amp units—Overall:** 9.61"W × 6.0"H × 3.1"D  
**Mounting Centers:** 4.35"W × 4.5"H (each heat sink)  
**70 Amp units—Overall:** 17.25"W × 10"H × 5"D  
**Mounting Centers:** 8.0"W × 8.75"H (each heat sink)

- Weight**  
**15-40 Amp units:** 2.5 lbs      **70 Amp units:** 5.7 lbs



**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.

"C" 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:** **SRTC** - 1 2 3 4 5

#### Control Input BOX 1

- 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 4-20mA.

#### 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

#### Options (up to two) BOXES 4, 5

- E:** Over Temperature Thermostat – N.O. Contacts
- F:** Over Temperature Thermostat – N.C. Contacts
- G:** Load Unbalance Alarm
- H:** SCR Failure Alarm
- N:** None

#### COMMON CONFIGURATIONS — "C" SERIES

240 VAC; 3-phase; 2-leg; Zero cross firing; 4-20 mA input

Load Current:	Part Number
15 Amp	SRT01101
25 Amp	SRT01102
40 Amp	SRT01103
70 Amp	SRT01104

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

**Multi-Tap Transformer** **Input:** 120/240V, 400V, 480V or 575V  
**Output:** 24V  
 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).

(800) 323-6859 • Email: [sales@tempco.com](mailto:sales@tempco.com)