

# MODEL SCPF1 SERIES Power Controls

## Single-Phase Phase-Fired Models

Rated 15 - 65 Amperes

The **SCPF1 Series** single-phase, phase-fired SSR (Solidstate Relay) Power Controls are designed for the exacting needs of the ceramic and semiconductor

industries as well as standard resistance heating applications.

Nearly any application\* requiring phase-firing can use the SCPF1 SCR Power Control. The "Touchsafe" chassis and many available options make the SCPF1 Series the perfect choice for lower current applications.

The optional Load Failure (LF) Alarm includes non-isolated 0-5 VDC signals proportional to the output voltage and current.

A Power On indicator (red) and a Command Signal indicator (green) are provided to help trouble shooting. The inclusion of a control transformer and I<sup>2</sup>T fuse sets it apart from most SSR type power controls.

\* Not recommended for inductive or transformer coupled loads.



## MODEL SCPF1

- Electrically Isolated Heat Sinks
- Conservative Thermal Design
- Compact Size
- Voltage Squared Linearity
- Line Voltage Compensation
- Transient Voltage Protection
- Diagnostic Indicators
- Accepts All Standard Command Signals
- Multi-Turn Zero & Span Adjustments
- "Touchsafe" Chassis
- UL,cUL Listed, CE Compliant
- 5 year "No Hassle" warranty

## Applications:

Primarily used to control dynamic resistive, non-inductive loads.

- Ceramics
- Semiconductors
- Resistance Heating
- IR Heating

**AMETEK**<sup>®</sup>  
HDR POWER SYSTEMS  
Toll Free: 1-888-PWR-CNTL  
1-888-797-2685  
Fax: 1-614-308-5506  
Web: [www.hdrpower.com](http://www.hdrpower.com)

# SPECIFICATIONS:

**Control Method:** Phase-firing of back-to-back SCRs

**Voltage Rating:** 120, 240, 400, 480, 575 Vac  
50/60 Hz

**Current Ratings:** 15, 25, 40, 65 Amperes

**Command Signal:** Most standard process signals

**Isolation:** 2500 Vac rms from power circuit to input command signal and to ground

**Linearity:** Voltage squared

**Adjustments:** Multi-turn, Zero and span potentiometers

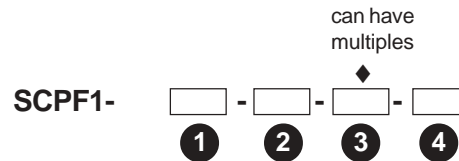
**Ambient Temperature:** Operating: 0° to 50° C  
Storage: -10° to 70° C

**Relative Humidity:** 0 to 95% (non-condensing)

**Weights:** 6.0 lbs.

# HOW TO ORDER:

Make one selection from each of the tables shown. Place the selections in the corresponding boxes to build your model number.



## 1 VOLTAGE TABLE

120 Vac	<input type="text" value="120"/>
240 Vac	<input type="text" value="240"/>
400 Vac	<input type="text" value="400"/>
480 Vac	<input type="text" value="480"/>
575 Vac	<input type="text" value="575"/>

Other voltages available

## 2 CURRENT TABLE

15 Amps	<input type="text" value="15"/>
25 Amps	<input type="text" value="25"/>
40 Amps	<input type="text" value="40"/>
65 Amps	<input type="text" value="65"/>

## 3 OPTION TABLE

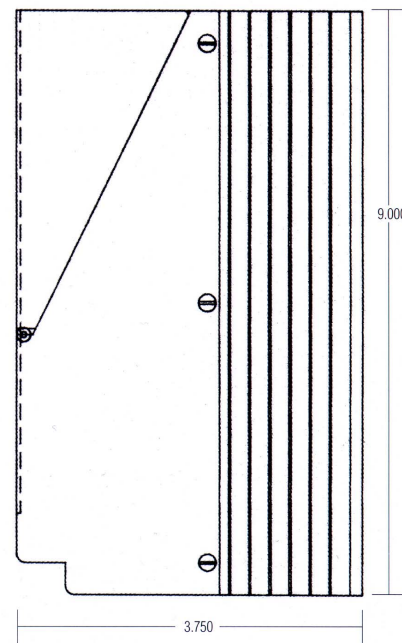
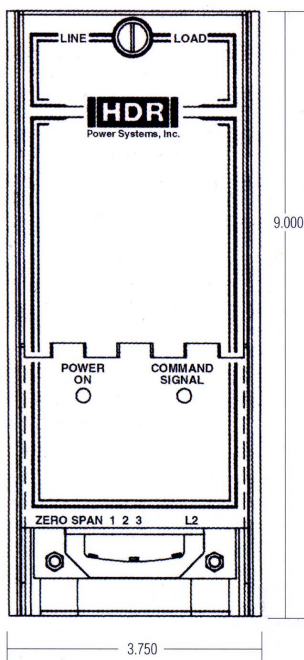
N.O. Thermostat	<input type="text" value="NO"/>
N.C. Thermostat	<input type="text" value="NC"/>
RMS Current Limit	<input type="text" value="CL"/>
Over Current Trip	<input type="text" value="OC"/>
Load Failure Alarm	<input type="text" value="LF"/>

## 4 COMMAND SIGNAL TABLE

4-20 mA (Self Powered)	<input type="text" value="01"/>
0-10 VDC	<input type="text" value="02"/>
0-5 VDC	<input type="text" value="03"/>
*Manual Pot Input	<input type="text" value="05"/>
Others	<input type="text" value="06-99"/>

\*Requires external potentiometer (5k)

# DIMENSIONS:



Specifications subject to change without notice