

# PF1 SSR SERIES

## POWER CONTROLS

The PF1 SSR Series are single-phase, phase-fired SCR Power Controls designed to deliver maximum power control with all of the features normally found in much larger units. Utilizing only two frame sizes, these units are conservatively engineered for years of trouble free service while providing the benefits of precise, reliable control of for your electronic process.

The PF1 SSR Series accepts all standard voltage and current command signals or remote potentiometer input. Standard operating voltages are 120, 240, 400, 480 & 575 Vac, 50/60Hz. Other voltages are available. Solidstate Relay type controllers are not recommended for driving transformers.

Multi-turn Zero and span adjustments are provided for matching the SCR power control to the command signal. The command signal indicator's (green) brilliance is proportional to the output voltage.

### Applications:

Primarily used to control dynamic resistive loads.

- High temperature furnaces
- Large ovens, kilns, heaters
- IR Heating

**15-70 Amperes  
Single-phase  
Phase-fired**



- 5 year "No Hassle" warranty
- Electrically Isolated Heatsink
- Conservative Thermal Design
- Compact size
- Voltage Squared Linearity
- Line voltage compensation
- Transient voltage Protection (MOV)
- Soft Start
- Command Signal Indicator
- Multi-Turn Zero & Span Adjustments
- UL, cUL Listed, CE Compliant



**100kA  
SCCR**



**ISO  
9001  
QUALITY  
ASSURANCE**

**AMETEK®**  
HDR POWER SYSTEMS

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[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

**Line Frequency:** 50 / 60 Hz

**Current Ratings:** 15, 25, 40, 70 Amperes

**Command Signal:** Most standard process signals

**Adjustments:** Zero and Span, multi-turn

**Isolation:** 2500 volts rms from power circuit to ground

**Ambient Temperature:** Operating: 0 °C to 50 °C

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

## HOW TO ORDER:

Make a selection from each of the tables below. Place the selection in the corresponding boxes to build your model.

PF1 -  -  -  -

VOLTAGE*		CURRENT		OPTIONS		COMMAND	
120 Vac	<input type="text" value="120"/>	15 A	<input type="text" value="15"/>	N.O. Thermostat	<input type="text" value="NO"/>	4-20 mA	<input type="text" value="01"/>
240 Vac	<input type="text" value="240"/>	25 A	<input type="text" value="25"/>	N.C. Thermostat	<input type="text" value="NC"/>	0-10 Vdc	<input type="text" value="02"/>
400 Vac	<input type="text" value="400"/>	40 A	<input type="text" value="40"/>	Current Limit	<input type="text" value="CL"/>	0-5 Vdc	<input type="text" value="03"/>
480 Vac	<input type="text" value="480"/>	70 A	<input type="text" value="70"/>	Over Current Trip	<input type="text" value="OC"/>	Manual Pot Input <sup>^</sup>	<input type="text" value="05"/>
575 Vac	<input type="text" value="575"/>			Fuse Kit	<input type="text" value="FK"/>	Others	<input type="text" value="06-99"/>
				24 Vac Transformer $\diamond$	<input type="text" value="TX"/>		

\* Other voltages available

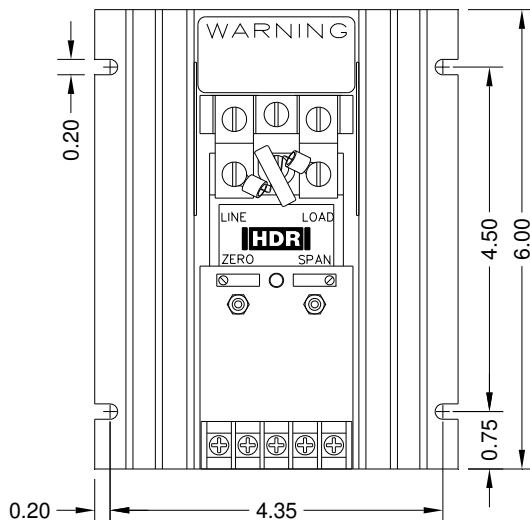
Multiple options may be selected

<sup>^</sup> Requires external potentiometer (5 k $\Omega$ )

$\diamond$  Required

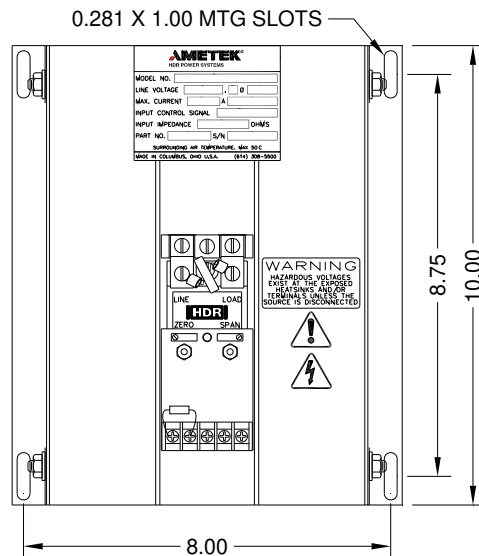
## OUTLINES:

15 thru 40 A



Depth: 3.01 in  
Weight: 1.2 lbs

70 A



Depth: 3.01 in  
Weight: 3 lbs