

# MODEL PF1 SERIES

## Power Controls

Single-Phase Phase-Fired Models  
Rated 15 - 70 Amperes

The **PF1 Series** are single-phase, phase-fired Solidstate Relay (SSR) Power Controls designed to deliver maximum power control with the reliability 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 for your electrical process.

The PF1 Series accepts all standard voltage and current command signals or a remote potentiometer input. Standard operating voltages are 120, 240, 400, 480 & 575 Vac, 50/60 Hz. 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 input command signal.



**MODEL PF1**

- Electrically Isolated Heat Sinks
- 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
- Silkscreen Printed Circuit Boards
- UL,cUL Listed, CE Compliant
- 5 year "No Hassle" warranty

## Applications:

Primarily used to control dynamic resistive loads.

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

**AMETEK**<sup>®</sup>  
HDR POWER SYSTEMS

**George R. Peters Associates** ENGINEERING SALES REPRESENTATIVES

(248) 524-2211 • Fax (248) 524-1758

Web Site: [www.grpeters.com](http://www.grpeters.com)

# SPECIFICATIONS:

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

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

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

**Command Signal:** Most standard process signals

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

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

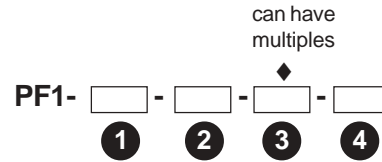
**Ambient Temperature:** Operating: 0° to 50° C  
Storage: -10° to 70° C

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

**Weights:** 15 thru 40A - 1.2 lbs.  
70A - 3.0 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"/>
70 Amps	<input type="text" value="70"/>

## 3 OPTION TABLE

N.O. Thermostat	<input type="text" value="NO"/>
N.C. Thermostat	<input type="text" value="NC"/>
Current Limit	<input type="text" value="CL"/>
Over Current Trip	<input type="text" value="OC"/>
Fuse Kit	<input type="text" value="FK"/>
<sup>Δ</sup> 24 Vac Transformer	<input type="text" value="TX"/>

<sup>Δ</sup> REQUIRED

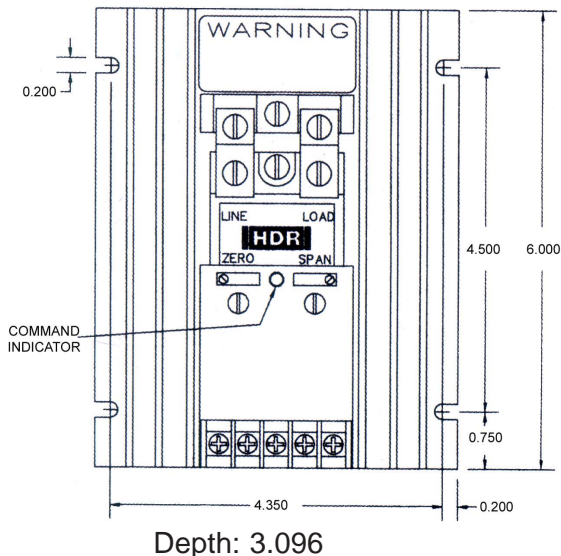
## 4 COMMAND SIGNAL TABLE

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:

## 15 thru 40A



Specifications subject to change without notice

## 70A

