

MODEL SHPF3 SERIES POWER CONTROLS

Three-Phase (6 SCR) Phase-Fired Models Rated 15 - 225 Amperes

The SHPF3 Series is designed to deliver maximum power control with all 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 for your electrical process.

The SHPF3 Series accepts all standard voltage and current command signals or a remote potentiometer input. The 4-20 mA command signal is optically isolated. Standard operating voltages are 120, 240, 400, 480 & 575 Vac, 3 Phase, 50/60 Hz. Other voltages are available.

Multi-turn zero and span adjustments are provided for matching the SCR power control to the command signal. Control power, command signal and blown fuse indicators are provided as a means for trouble shooting. The control power indicator (red) indicates power has been applied to the unit. The command signal's (green) brilliance is proportional to the output voltage. The blown fuse indicators (3-yellow) light if a fuse is cleared (60-225A).

Applications:

Primarily used to control dynamic resistive or transformer coupled loads.

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



Model SHPF3

- Electrically Isolated Heat Sink
- Compact Size
- Conservative Thermal Design
- Voltage Squared Linearity
- Line Voltage Compensation
- Transient Voltage Protection (RC & MOV)
- 1400 PIV SCRs
- Semiconductor (I²t) Fuse
- Diagnostic Indicators
- Optically Isolated Input Command Signal (4-20 mA)
- Multi-Turn Zero & Span Adjustments
- Silkscreened Printed Circuit Boards
- UL, cUL Listed, CE Compliant
- 5 year "No Hassle" warranty
- Fan Cooled (90A and higher)

SPECIFICATIONS:

Control Method: phase-firing of six back-to-back SCRs (3-leg Control)

Voltage Rating: 120, 240, 400, 480, 575 Vac, 3 phase, 50/60 Hz

Current Ratings: 15, 25, 30, 60, 90, 120, 180, 225 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

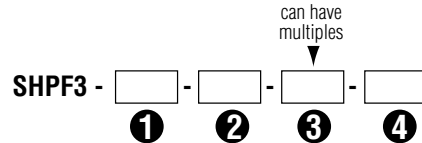
Ambient Temperature: Operating: 0° to 50°C
Storage: 10° to 70°C

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

Weights: 15, 25A - 11 lbs.; 30 thru 225A - 33 lbs.

HOW TO ORDER:

Make one selection from each of the four tables below. 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 Arms	<input type="text" value="15"/>
25 Arms	<input type="text" value="25"/>
30 Arms	<input type="text" value="30"/>
60 Arms	<input type="text" value="60"/>
90 Arms	<input type="text" value="90"/>
120 Arms	<input type="text" value="120"/>
180 Arms	<input type="text" value="180"/>
225 Arms	<input type="text" value="225"/>

3 OPTIONS TABLE^Δ

N.O. Thermostat	<input type="text" value="NO"/>
N.C. Thermostat	<input type="text" value="NC"/>
RMS Current Limit/OC	<input type="text" value="CL"/>
RMS Current Reg/OC	<input type="text" value="CR"/>
Over Current Trip	<input type="text" value="OC"/>
True Power Reg/CL	<input type="text" value="PR"/>
Load Unbalance Alarm	<input type="text" value="UB"/>
SCR Failure Alarm	<input type="text" value="SF"/>
*Phase Zero Adaptor	<input type="text" value="PZA"/>

^ΔThermostat included above 60A
Specify N.O. or N.C.

*Not UL approved

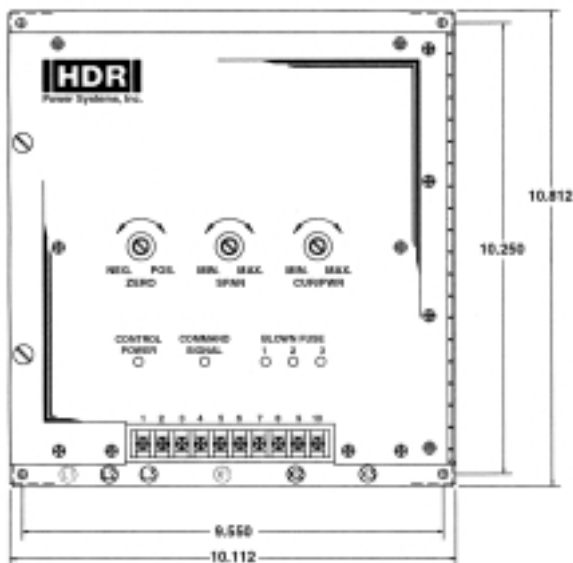
4 COMMAND SIGNAL TABLE

4-20 mA	<input type="text" value="01"/>
0-10 Vdc	<input type="text" value="02"/>
0-5 Vdc	<input type="text" value="03"/>
Auto/Man	<input type="text" value="04"/>
*Manual Pot Input	<input type="text" value="05"/>
Others	<input type="text" value="06 to 99"/>

*Requires external potentiometer (5k)

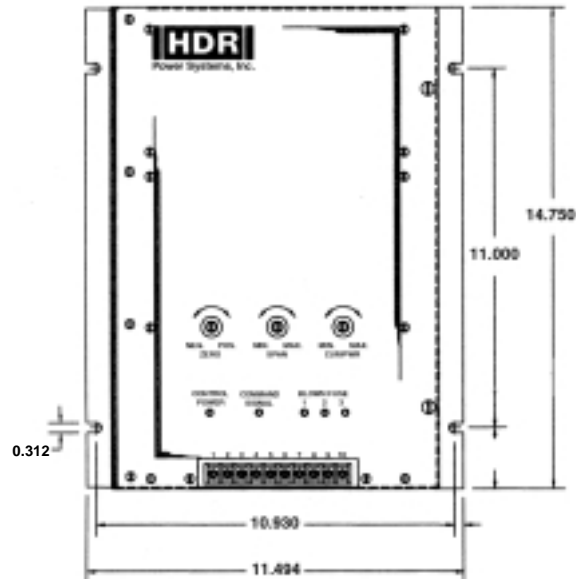
DIMENSIONS:

15, 25 A



Depth: 6.376

30 thru 225 A



Depth: 9.508