

# MODEL RF3 SERIES

## Power Controls

Three-Phase (6 SCR) Phase-Fired Models  
Rated 30 - 1200 Amperes

The **RF3 Series** are three-phase (6 SCR) phase-fired SCR Power Controls designed to deliver maximum power control with all the features normally found in much larger units. Utilizing only four 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 RF3 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 and over-current 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 indicator's (green) brilliance is proportional to the output voltage. The optional blown fuse indicators



## MODEL RF3

- Electrically Isolated Heat Sinks(30-225A)
- Conservative Thermal Design
- Compact Size
- External Voltage Feedback
- Line RF Filter
- Transient Voltage Protection (RC & MOV)
- 1400 PIV SCRs
- Semiconductor (<sup>1</sup>/<sub>2</sub>t) Fuse
- Diagnostic Indicators
- Optically Isolated Input Command Signal (4-20 mA)
- Multi-Turn Zero & Span Adjustments
- Silkscreen Printed Circuit Boards
- 5 year "No Hassle" warranty
- Fan Cooled (90A and higher)

## Applications:

Primarily used to control transformer coupled RF induction loads.

**AMETEK**<sup>®</sup>

HDR POWER SYSTEMS  
Toll Free: 1-888-PWR-CNTL

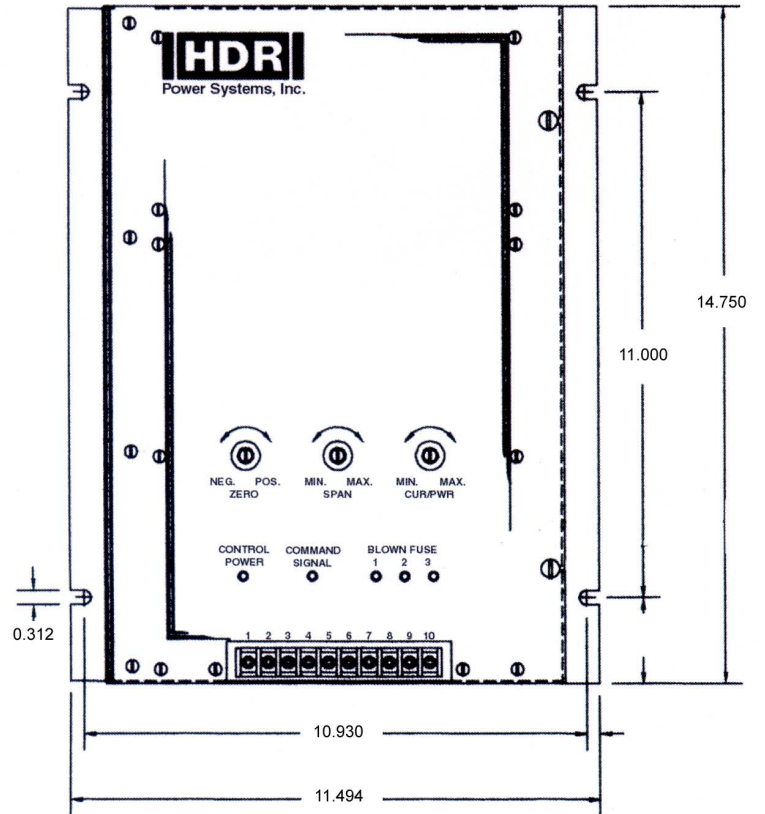
1-888-797-2685

Fax: 1-614-308-5506

Web: [www.hdrpower.com](http://www.hdrpower.com)

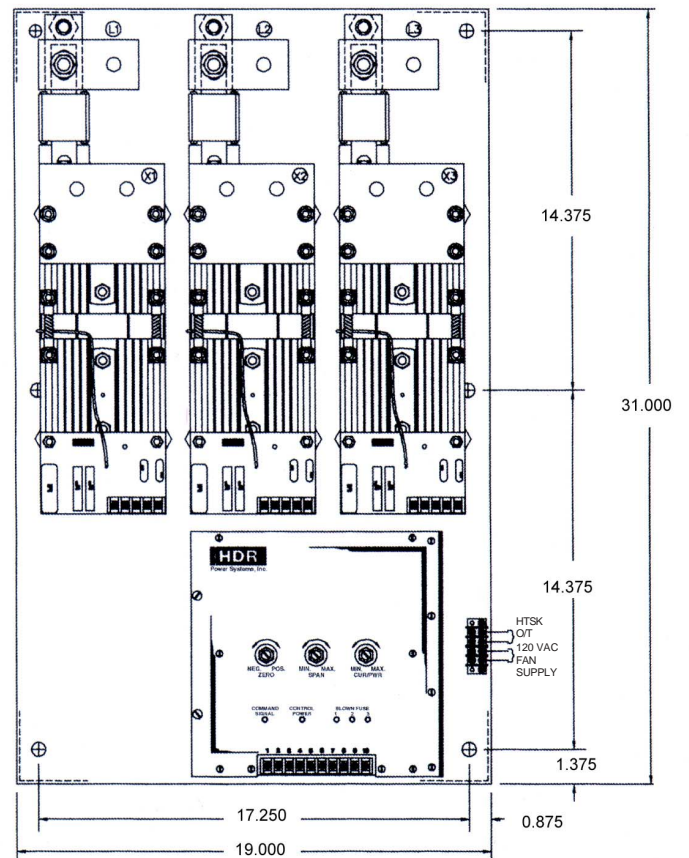
# Model RF3 30-225A

Depth: 9.508

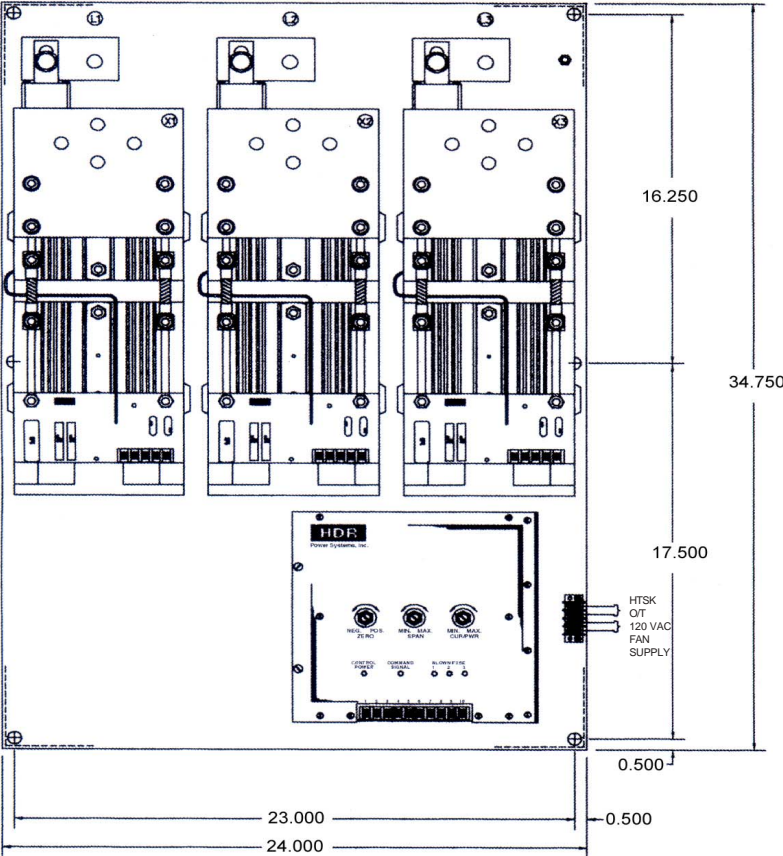


# Model RF3 350-500A

Depth: 8.500

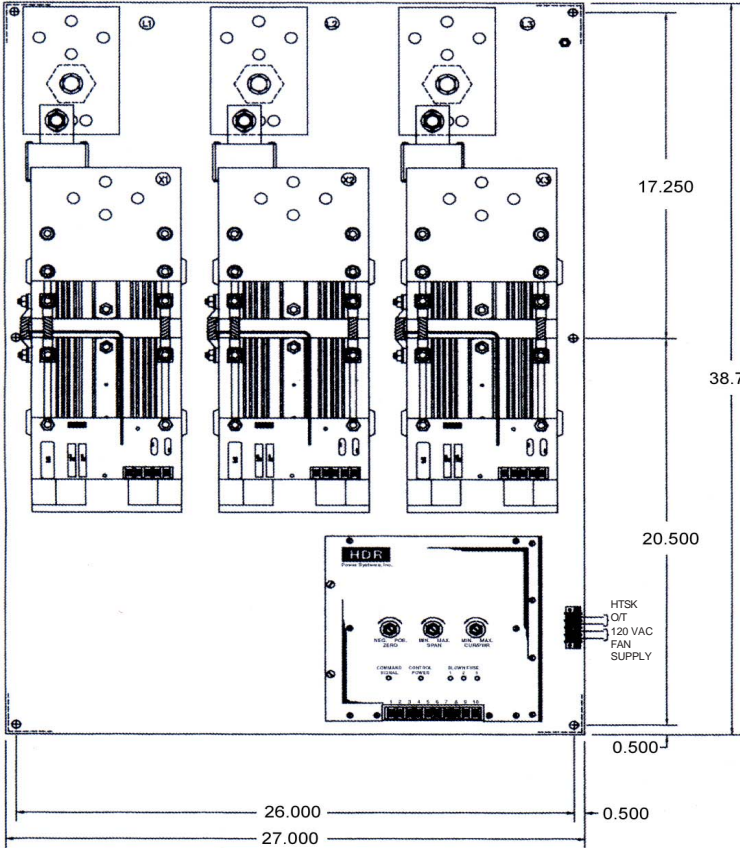


# Model RF3 650A



Depth: 11.250

# Model RF3 800-1200A



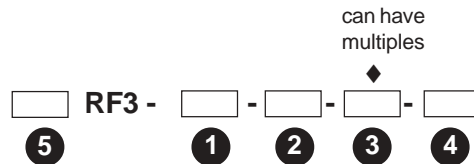
Depth: 11.750

# SPECIFICATIONS:

<b>Control Method:</b>	Phase-firing of six back-to-back SCRs (3 leg Control)	<b>Isolation:</b>	2500 volts rms from power circuit to command signal and to ground
<b>Voltage Rating:</b>	120, 240, 400, 480, 575 Vac, 50/60 Hz,	<b>Feedback:</b>	0-10 VDC externally supplied
<b>Current Ratings:</b>	30, 60, 90, 120, 180, 225, 350, 500, 650, 800, 1000, 1200 Amperes	<b>Adjustments:</b>	Zero, span and over-current multi-turn
<b>Command Signal:</b>	Most standard process signals	<b>Ambient Temperature:</b>	Operating: 0° to 50° C Storage: -10° to 70° C
		<b>Relative Humidity:</b>	0 to 95% (non-condensing)
		<b>Weights:</b>	30-225A            33 lbs. 350-500A        60 lbs. 650A              126 lbs. 800-1200A       231 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.



## VOLTAGE TABLE\*

<b>1</b>	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

## CURRENT TABLE

<b>2</b>	30 Amps	<input type="text" value="30"/>
	60 Amps	<input type="text" value="60"/>
	90 Amps	<input type="text" value="90"/>
	120 Amps	<input type="text" value="120"/>
	180 Amps	<input type="text" value="180"/>
	225 Amps	<input type="text" value="225"/>
	350 Amps	<input type="text" value="350"/>
	500 Amps	<input type="text" value="500"/>
	650 Amps	<input type="text" value="650"/>
	800 Amps	<input type="text" value="800"/>
	1000 Amps	<input type="text" value="1000"/>
	1200 Amps	<input type="text" value="1200"/>

## 3 OPTION TABLE <sup>Δ</sup>

N.O. Thermostat	<input type="text" value="NO"/>
N.C. Thermostat	<input type="text" value="NC"/>
Lug Kit (greater than 225A)	<input type="text" value="LG"/>
Fuse Kit	<input type="text" value="FK"/>

<sup>Δ</sup> Thermostat included above 60A  
Specify N.O. or N.C.

## 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"/>
Auto/Man	<input type="text" value="04"/>
*Manual Pot Input	<input type="text" value="05"/>
Others	<input type="text" value="06-99"/>

\*Requires external potentiometer (5k)

## 5 WATER COOLING

Specifications subject to change without notice