# MODEL **ZF1** SERIES Power Controls

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

The **ZF1 Series** are single-phase, zero-fired Solidstate Relay (SSR) Power Controls designed to deliver maximum power control with all 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 ZF1 Series accepts all standard voltage and current command signals or a remote potentiometer input. 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. The command signal indicator's (green) flash rate provides a visual indication of the output voltage.



- Electrically Isolated Heat Sinks
- Conservative Thermal Design
- Compact Size
- Voltage Squared Linearity
- Transient Voltage Protection (MOV)
- 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 static resistive or non-inductive loads.

- Small electric furnaces
- Electric ovens, kilns & heaters
- Extrusion or injection molding

#### **SPECIFICATIONS:**

**Control Method:** Zero-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

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

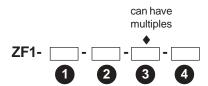
> Storage: -10° to 70° C

**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.



NC

FΚ

ΤX

### **VOLTAGE TABLE\***

120 Vac

240 Vac

400 Vac

480 Vac

575 Vac

120 240 400

480 575 **CURRENT TABLE** 15 Amps 15

25 Amps 25 40 Amps 40 70

70 Amps

**3** OPTION TABLE

N.O. Thermostat N.C. Thermostat

Fuse Kit

24 Vac Transformer

**COMMAND SIGNAL TABLE** NO 4-20 mA (Self Powered)

> 4-20 mA <sup>∆</sup>0-10 VDC

<sup>∆</sup>0-5 VDC

△\*Manual Pot Input Others

<sup>A</sup>Requires 24 Vac transformer

01

02

03

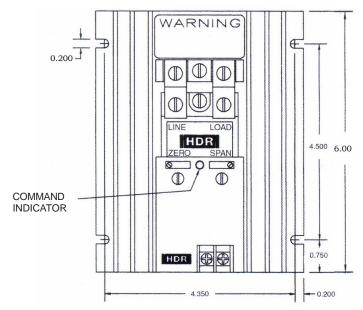
05

06-99

## **DIMENSIONS:**

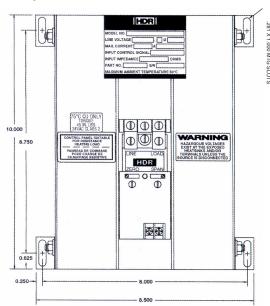
\*Other voltages available

#### 15 thru 40A



Depth: 3.096

#### 70A



Specifications subject to change without notice

Depth: 5.000

<sup>\*</sup>Requires external potentiometer (5k)