

## Max VI Multi-Zone Power Controller

- Conservative Thermal Design
- Isolated Bonded Fin Heatsink
- 25 - 75 Amp ratings
- 42 - 600 VAC operational voltage
- Zero Cross and Phase Fired
- Control Inputs:
  - 4 - 32 VDC
  - 24 - 275 VAC
  - 24 - 190 VDC
  - 4 - 20mA
- Self-Lifting Terminals
- LED Status Indicator
- IP20 Touch Protection Cover
- Single Phase
  - Zero Fire and Phase Control
- Three Phase, 2-Leg
  - Zero Fire Only
- Three Phase, 3-Leg
  - Zero Fire Only



### *Description*

The Chromalox MAX VI Multi-Zone SCR Power Controller consists of (6) SCR's mounted on a highly efficient, fan cooled heatsink. The MAX VI heatsink features an all-metal bonded-fin design. Bonded-fin heatsinks have up to three times the cooling area of a conventional aluminum extrusion and therefore can dissipate more heat. Additionally, bonded-fin heatsinks offer a much smaller footprint. The MAX VI offers the flexibility for (6) Single Phase Zero-Cross or Phase Fired Controllers. Additionally, the Zero-Cross mode can be configured into (3) Three Phase 2-leg controllers, or (2) Three Phase 3-leg controllers. The MAX VI offers current ratings of 25, 50, and 75 amps at 40°C and Voltage ratings up to 600 VAC.

The MAX VI unit is fan cooled and provides up to 450 Amps of control power with a footprint dimension of 14.75" L x 9" W x 6.5" D. The MAX VI easily bolts to a chassis plate and all load wiring can dress down one side of the heatsink and all control wiring can dress down the other side. Each SCR incorporates a LED status indicator and IP20 touch protection removable cover.

The benefits from Chromalox MAX VI SCR controller are quick and low cost installation, reduced panel space, increased heater life due to fast cycling, and easy replacements for mechanical and mercury contactors.

### *Applications*

- Electric Ovens
- Plastics Machinery
- Packaging Equipment
- Food and Beverage Processing Equipment
- Platen Heaters
- Transformer coupled loads
- Resistance Heating
- Contactor Replacement
- Mercury Relay Replacement

## Max VI Multi-Zone Power Controller *(cont'd.)*



### Specifications

**Control Modes:** Single Phase, Three-Phase 2-Leg or Three-Phase 3-Leg Zero-cross, On/Off or Time Proportional, Phase Angle Single Phase Only

**Command Signals:** On/Off:  
4.5 - 32 VDC  
24 - 265 VAC  
24 - 190 VDC  
Linear:  
4 - 20mA

**Line Voltage:** 42 - 600 VAC  
Zero-Cross Mode; 230 or 600 VAC Phase Angle Mode

**Line/Load** Self Lifting Terminals. Connections: Output terminals can handle cables up to #6AWG

**Load Current:** 25, 50, 75 Amps @ 40°C (104°F)

**Cooling:** Forced Air, Fan Cooled 120 VAC, 17 VA. Terminal provided for separate fan power

**Mounting:** Panel Mount, any orientation.

**Weight:** 11.5kg (12 lbs.)

### Model **MAXVI** Multi-Zone Power Controller

#### **MAXVI**

The MAX VI Multi-Zone SSR power pak consists of (6) SSR's mounted on a highly efficient, fan cooled heatsink. The MAX VI can be configured as (6) single-phase, (3) three-phase 2-leg or (2) three-phase 3-leg controllers. MAX VI offers On/Off, Time Proportional, and Single-Phase, Phase Fired configurations. The Chromalox MAX VI offers the following standard features: 40°C Ambient Rating, Zero-Voltage Turn-On or Phase Angle Fired designs, LED Status Indicator, IP20 Touch Protection, Operational Ranges up to 600 VAC, Self-Lifting Terminals, and dv/dt protection.

#### Code Current @ 40°C (104°F) Ambient

Code	Current	Per SSR	Total
25	25 Amp	Per SSR	150 Amp Total
50	50 Amp	Per SSR	300 Amp Total
75	75 Amp	Per SSR	450 Amp Total

#### Code Input Control Voltage

1	4.5 - 32 VDC (DC logic Zero Cross Fired)
2	24 - 265 VAC or 24 - 190 VDC (AC/DC logic Zero Cross Fired)
3	4 - 20 mA, 7.6 VDC Minimum (Time Proportioning Single Phase Zero Cross Fired)
4	4 - 20 mA, 15.2 VDC Minimum (Time Proportioning Three Phase 2-Leg Zero Cross Fired)
5	4 - 20 mA (Single Phase, Phase Angle Fired 90-280 VAC)
6	4 - 20 mA (Single Phase, Phase Angle Fired 330-660 VAC)

#### **MAXVI** 25 1 Typical Model Number

**Note:** Fan Requires 120 VAC Power