

## SCR POWER CONTROLLER



### **Main Features:**

SCR power regulators are widely used in different power regulation equipment in the industry, such as kilns, thermal treatment furnaces, electric heating furnaces, electroplating equipment, launching machines, extruders, and high cycle machines etc. The power regulators of the company are applicable to various kinds of equipment in different control modes to meet the requirement of clients.

### **Characteristics:**

Sealed IC Circuit boards of SCR power modules are used

Full electronics safety devices (quicker than high rate fuses), in the time of passing current, it automatically cuts off the trigger devices to protect the controlled silicon.

Exceptional interference resistance, capable of being used for transformer load, high frequency device earlier stage voltage regulators.

With current feedback applicable to negative resistance load such as silicon molybdenum rods, platinum hearers

Capable of performing different control changes (e.g. fixing current & voltage)

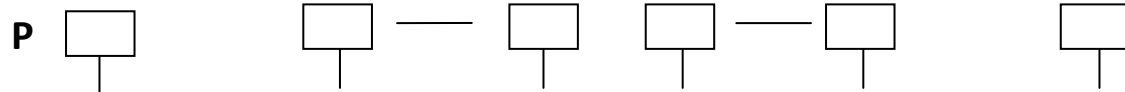
Easy for installation, not easy to be impacted with high control accuracy

### **Appendix Forms:**

$$1\emptyset \text{ Current} = \frac{KAV \times 1000}{\text{Line Voltage}}$$

$$3\emptyset \text{ Current} = \frac{KAV \times 1000}{\sqrt{3}\text{Line Voltage}}$$

**Ordering Code Illustration:**



Power Supply	Code	Control Mode	Code	Power Voltage	Current	Protective mode	Code	Feedback control	Code
1-Phase	1	Phase Control	P	110V	40A-1200A	NO	0	NO	0
3-Phase	3	Zero Crossover	D	220V		Fuses	1	Current	1
				380V		High Speed Electronic Switch	2	Voltage	2
				440V					

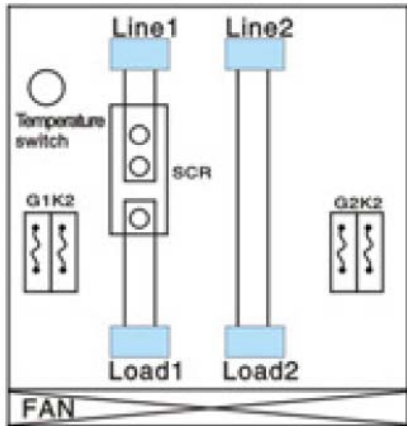
**Technical Parameters:**

- ✦ **Control Input Signals:**
  - Current input: 4-20Ma, DC input impedance: 250
  - Voltage input: 1-5V
  - Manual input: 5KΩ potentiometer
  
- ✦ **Load rated voltage range:**
  - 110V: 110VAC± 10%50Hz
  - 220V: 220VAC± 10%50Hz
  - 380V: 380VAC± 10%50Hz
  - 440V: 440VAC± 10%50Hz
  
- ✦ **Effective value current & refrigerating mode:**
  - Air cooling mode: 40A, 60A, 80A, 100A, 160A, 200A, 300A, 400A
  - Water cooling mode: 600A-1200A
  
- ✦ **Load connection mode and phase identification (3 Phases)**
  - Load mode: triangular or star type center not to grounding. Phase shift range: 1-1200°
  
- ✦ **Control mode:**
  - Phase control voltage regulation type (non feedback type)
  - Phase control voltage regulation type (current feedback type)
  - Distribution type zero position type (current feedback type)
  
- ✦ **Electronic Protection:**
  - Protective action: when the current exceeds 130% of the rated current (adjustable). The input is disconnected and there will be damage to any parts.
  - Alarm relay action

- Action time :< 10ms
  - Reset: press reset for power on or off or reset
  - Relay contact capacity: 250VAC 3A
- ✦ **Radiator excess temperature protection system**
- Protection action: when the temperature of the radiator exceeds 75°C, the output is disconnected
  - Action time : <20ms
  - Power restarts when the reset failure is removed
- ✦ **Operating ambience:**
- Peripheral temperature range: 0-60°C
  - Peripheral humidity range: ≤ 0-90%RH
- ✦ **Insulating impedance:**
- Minimum 20MΩ 500VDC
- ✦ **Insulation strength:**
- 2000VAC 1 minute (220V) 2500VAC 1 minute (380V)
- ✦ **Material and external coatings:**
- Steel plate/paint coatings

**Structure Size:**

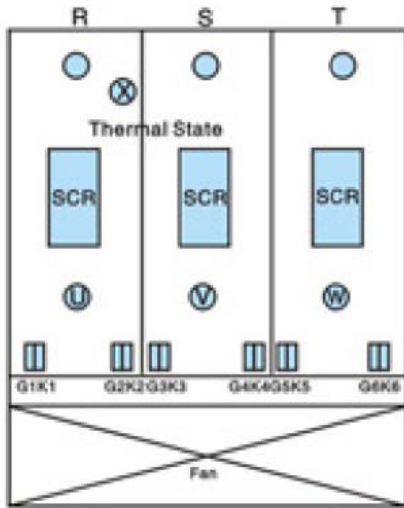
**Single Phase:**



Single Phase	40-100A	160-200A
L	210	250
W	140	140
H	185	180
Weight	4Kg	6Kg

Unit: mm

**3-Phase:**



3- Phase	40-160A	200A-400A	600A-1200A
L	350	415	Maker
W	210	280	Maker
H	215	255	Maker
Weight	12Kg	20Kg	Maker

Unit: mm

**Wiring Caption:**

