



# MAGNETIC SPECIALTIES



## PHASE ANGLE CONTROL POWER SUPPLY

The phase angle control (AC) power supplies use a pair of anti-parallel connected silicon-controlled rectifiers (SCRs) to vary the power output of the power supply. A microprocessor is used to gate the SCRs on at a certain point in the incoming voltage sinusoid. The longer the delay in gating the SCRs on, the lower the power delivered to the load. In most cases the SCRs are transformer coupled to the load. These power supplies are commonly used to power the heating elements of an electric furnace.

### FEATURES

- Up to 600V input
- Single zone, two zone (3 to 2 phase output), or multiple zones in one enclosure.
- Output command via analog 4-20mA, 1-5V, or other custom signal to meet control needs
- Microprocessor SCR gating for precise power delivery improves process quality
- Microprocessor operating supervision monitors operating conditions for problems caused by faulty loads and power irregularities
- Easy fault and alarm diagnosis via Internet browser-based configuration. No extra software needed to communicate to the power supply. Just a computer and an Ethernet cable!
- Load matching transformers conservatively designed for long lifespan, even at full power
- Up to 50°C ambient temperature

### OPTIONAL

- Air-conditioned control cabinet for ambient temperatures exceeding 50°C
- Current limiting available for loads that have low resistance at start up
- NEMA 1 (indoor) or NEMA 3R (outdoor) enclosure with ANSI 61 gray powder coat finish
- Output voltage and current feedback optional
- Control cabinet Touchscreen for diagnostics and monitoring operating conditions.
- UL Recognized insulation system (Primary must be 600V or less). MSI UL Insulation systems are available in 130°, 180° and 220°C ratings
- Final Test Reports with optional Certificate of Compliance

Contact us and we will partner with you to design a solution that works seamlessly in your application.

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