

SCR POWER CONTROL PANELS

Avatar Instruments offers a wide range of both standard and custom engineered SCR power panels. From 100 watts to mega-watts, Avatar Instruments can build an SCR system to meet your needs.

Avatar Instruments' standard line of SCR power control panels are engineered with safety and ease of installation in mind. The control panels are prewired and tested on name plate voltage. Customer needs only to install incoming power wires, outgoing heater wires and thermocouple input connections. Standard panel sizes are 20, 30, 60, 100, 150, 200, 250, 350 and 600 Amps. 24 to 600VAC.

Standard features include:

- SCR Power Controller – Single or Three Phase; Phase Angle Fired or Zero Voltage Switched
- NEMA 12 enclosure. Fan cooled or air conditioned
- Input power circuit breaker or fused disconnect with door interlock
- Definite purpose power contactor in front of SCR
- Power On-Off selector switch
- E-Stop button
- Power on indication (lamp)
- Load branch fusing with box style connections to the heaters
- Temperature controller. Separate over temperature controller
- Fused control transformer
- Drawings and bill of materials for your records

Options include:

- PLC, HMI control w/Ethernet
- Power monitoring (volts, amperes, watts)
- Chart recorder
- Heater on indicator (lamp)
- Alarm indicators (lamps)
- Manual reset button
- Annunciation flashing beacon and/or audible horn
- Thermocouple outlet(s)
- Ground Fault Interruption
- NEMA 3, 3R, 4 and 4X enclosures, for outdoor use or wash down environments.
- Door interlock shut down; main contactor shut down when door is open.
- Remote aux input to main circuit breaker
- Fused 120V convenience outlet



Avatar Instruments uses Honeywell, Omron, Red Lion, Fuji, Partlow and Yokagawa temperature controllers. PLC platforms include Siemens, Red Lion and Allen Bradley. Any major brand of temperature control can be designed into a system upon the customer's request.

Our UL508A panel shop can provide design and process documentation utilizing AutoCAD, PADs, ProE, Protel, Solidworks or other applicable software platforms. Email your system requirements to Avatar Instruments to Systems@AvatarInstruments.com for review.

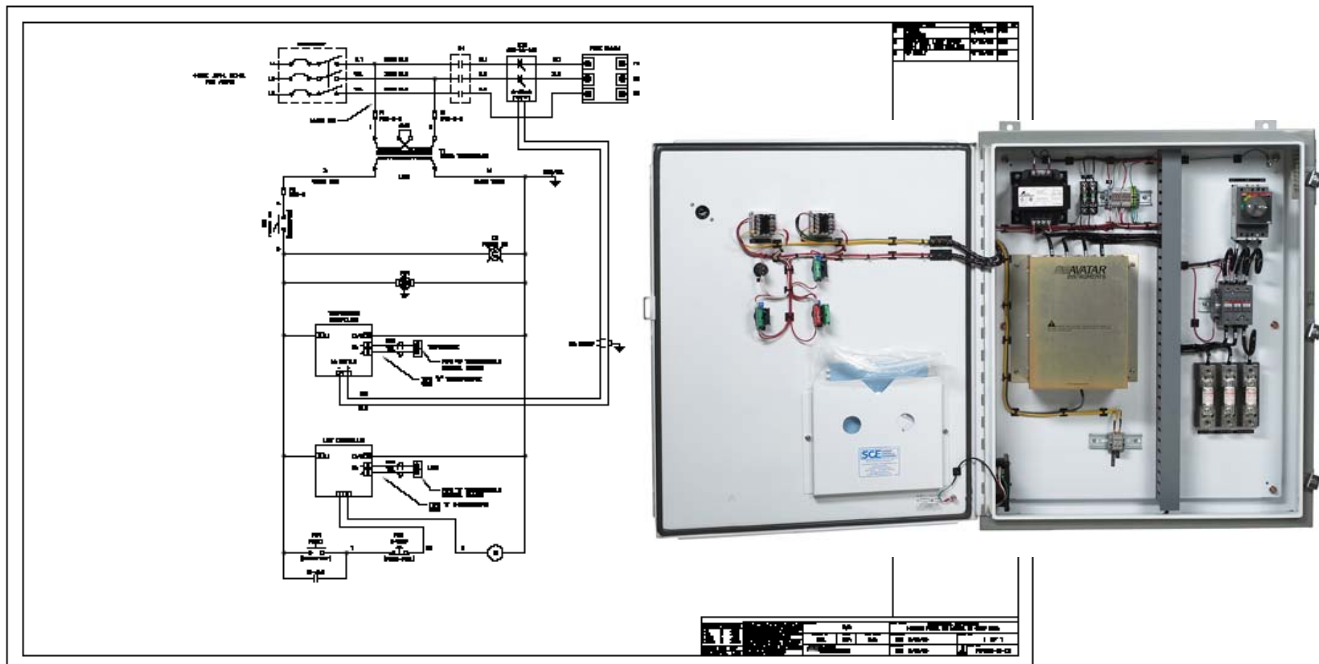
Standard SCR Power Control Panels

Avatar Instruments panels are engineered and built for safety, strength and reliability in real world industrial environments. The system shown has these standard features:

- Avatar Instruments "A" Series SCR
- Digital temperature controller
- Dedicated over temperature limit
- E-Stop
- Manual reset button
- Load branch fusing
- Circuit breaker w/lockout handle
- NEMA 12 enclosure w/fan kit
- Definite purpose contactor interlocked with control logic circuits



480V 100Amp 3PH SCR Control Panel



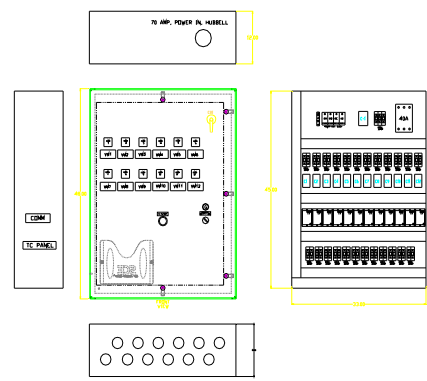
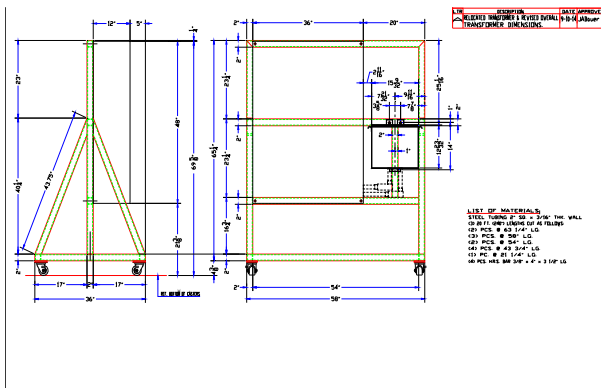


Left and below:
720,000 Watt 20 Zone System.
AC unit built on enclosure.
Each zone has PID control,
custom temp limit and
computer communications.
Crated and delivered across
1,000 miles on a Friday for
delivery 18 hours later on
Saturday morning.





Above: 12 Zone system for use at NASA. Each zone has PID control, computer communications and voltage output monitoring. A custom frame was built so system could be mobile. Custom step down transformer was installed.





Left and below left:
10 Zone 800 Amp System for
PECO experimental wind
turbine power station.



Below: 480V 350A 3 Phase transformer primary driver. System has remote power monitoring transducers, as well remote command and control signals to and from a PLC. System used outdoors, NEMA 4 w/ Air Conditioning unit. Petrochemical application.

