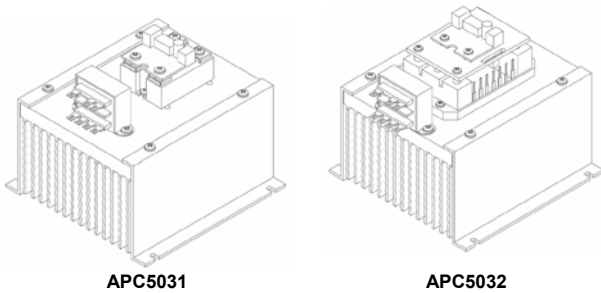




**"COOL ONE" PANEL MOUNT Phase Angle SCR Power Controller w/ Multi-Input Options**

Anacon's "Cool One" heat sink design is by far one of the most unique ideas to come along in quite some time. Read about its amazing features and how Anacon can help with your design regardless of whose Solid State Relays you're using. "Cool One" works better!



APC5031

APC5032

**Standard "COOL ONE" Features:**

- Current Ratings 70A and 150A @ 40°C Convection
- Output voltage: 24-240Vac Line
- Dual Input, 120Vac/220Vac, Step Down Transformer provides 24Vac to power Phase Controller Card
- Standard LED Status Indicator
- UL/cUL Recognized TUV Approved & CE Compliant Version
- Operates from 47-63Hz
- Multi-Input Control: 4-20mA, 0-10V, 0-5V, 0-135 ohms, Potentiometer
- Built in Transient Protection
- Phase Angle Linearity Proportional to Input
- Includes Control Module, Solid State Relay & Anacon's clear anodized, "Cool One" MHS5050 panel mount heat sink.

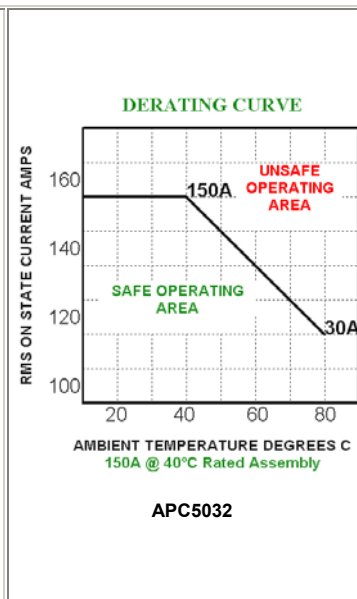
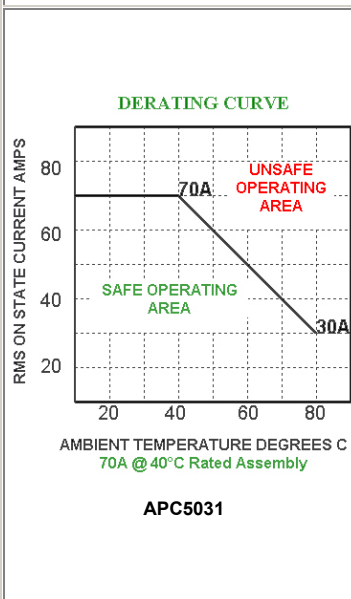
**SPECIFICATIONS**

| PART NUMBER | INPUT RANGE                                    | ASSEMBLY LOAD CURRENT (AMPS AC) | LINE VOLTAGE | PEAK VOLTAGE | RELAY RATING |
|-------------|--|---------------------------------|--------------|--------------|--------------|
| APC5031     | 4-20mA, 0-10V, 0-5V, 0-135 ohms, Potentiometer | 70A @ 40 Degrees C Convection   | 24-240Vac    | 600V Peak    | 70A          |
| APC5032     | 4-20mA, 0-10V, 0-5V, 0-135 ohms, Potentiometer | 150A @ 40 Degrees C Convection  | 24-240Vac    | 600V Peak    | 150A         |

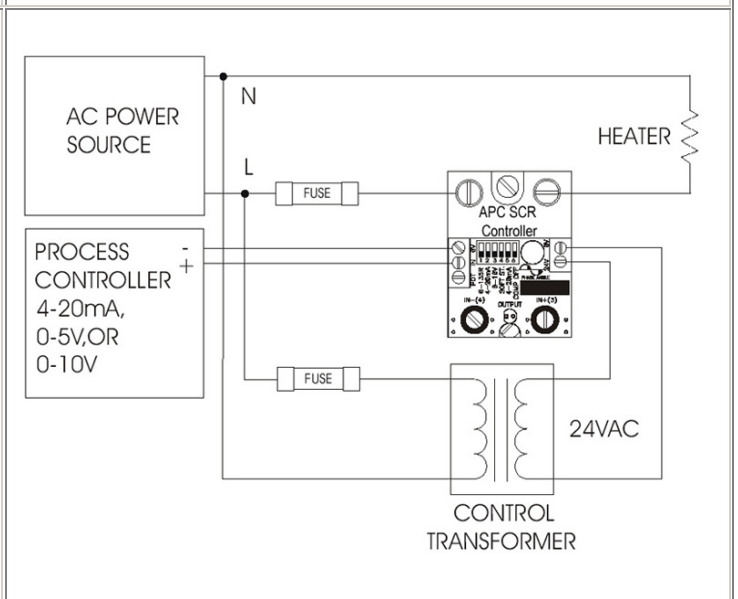
**Notes:**

- Ratings based upon 100% duty cycle for 20 minutes or 80% duty cycle continuous.
- Ratings based upon relays being mounted either individually or side by side with zero spacing.
- Cool One's unique construction allows better performance than conventional heat sink designs even when mounted side by side.

**THERMAL CURVES**



**MULTI-INPUT WIRING DIAGRAM**





## Application Information

The APC5031 and APC5032 are phase angle SCR Power Controllers. The switch selectable control ranges for the Multi-Input version are: 0-10V, 0-5V, 2-10V, 1-5 V, 4-20Ma, and manually using a potentiometer. The power delivered to the load is proportional to the command signal input. Input selection options are achieved by dip switch selection as noted on front of this datasheet.

A line to 24Vac transformer supplies power and phase information to the controller card. The transformer is connected across the AC power source as noted below. There is a feature to compensate for line voltage variation. By adjusting the phase angle automatically with line voltage changes, constant power is maintained at the load. To use the line voltage compensation feature properly, the 24Vac transformer should be fed from the same mains as the load circuit to be controlled per the wiring diagram below. Line voltage compensation can be enabled or disabled via dip switch selections noted on front of this specification.

A separate control transformer is provided for both the APC5031 and APC5032 SCR Power Controllers.

See [User manual](#) for complete list of commands & wiring options.

## Command Input

| Command Input  | 1   | 2   | 3   | 5   |
|----------------|-----|-----|-----|-----|
| 0-5V (Default) | Off | Off | Off | Off |
| Potentiometer  | Off | Off | Off | Off |
| 0-10V          | Off | Off | On  | Off |
| 4-20Ma         | Off | On  | Off | On  |
| 1-5V           | Off | Off | Off | On  |
| 2-10V          | Off | Off | On  | On  |

| Feature Enable                         | 4   | 6   |
|--|-----|-----|
| Line Voltage Comp Enable (Default)     | Off | Off |
| None                                   | Off | On  |
| Soft Start                             | On  | On  |
| Soft Start & Line Voltage Comp Enabled | On  | Off |

Contact Anacon Power & Controls for applications assistance - 800-466-9080.

### MECHANICAL DRAWINGS

