ANACON POWER & CONTROLS
Relay Assembly Specialists
An Anacon Electronic Sales, Inc. Company

150A - 300A Rated

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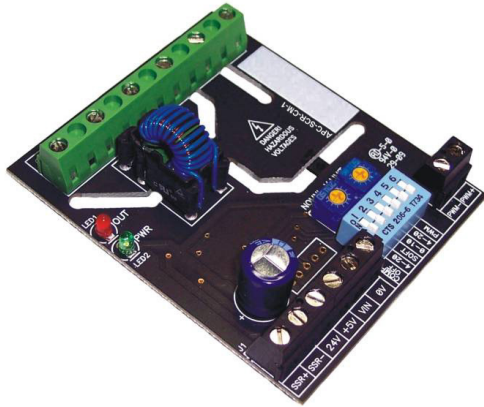www.anaconpower.com   email: sales@anaconpower.com

Phase Angle Controller Card - High Current Back-to-Back SCR Modules

The microprocessor based APC-SCR-CM-1 provides true linear phase angle control of resistive and inductive loads. The output power is proportional to the command input which can be dip switch selected from six different industry standard inputs. The output can drive SSRs or SCR gates directly.

Standard Features:

- Provides true linear power output phase angle control and burst fire control.
- Small 3.0" x 2.5" module mounts in a snap track or a dinrail.
- Command input accepts 4-20mA, 0-10V, 0-5V, Pot, PWM.
- Configurable line voltage compensation increases stability of your process.
- Configurable soft start for high inrush loads.
- Wide frequency operation (30 to 90Hz).
- Adjustable Voltage Limit.
- Drives SCR gates directly.
- Single phase and three phase control.

ORDERING CODES

Ordering Codes   APC-SCR-CM-1P-___-___

Power Control Module
Single Pole
Phase Angle
SCR or SSR
-XSS (Softstart Time, seconds)
-XSC (Soft Change Time, seconds)
-REV (Reverse Acting Output)
-PWM (PWM Input)

APC-SCR-CM-1P -SSR	Phase Angle Control Module SSR DRIVE
APC-SCR-CM-1P- SCR	Phase Angle Control Module SCR GATE DRIVE

INPUT SPECIFICATIONS

Power Supply	24 VAC +/-10%, 100 mA max
Frequency Range	47-63Hz 24V power supply, 30-90Hz synch input
Command Inputs	4-20mA, 0-20mA, 0-5V, 1-5V, 0-10V, 2-10V, Pot, PWM
Command Input Impedance	10K (0-10V), 250 Ohms (4-20mA), 100K (0-5V)
PWM Input Frequency Range	500Hz – 15KHz
External Potentiometer Resistance	10-25KOhm

OUTPUT SPECIFICATIONS

SSR Control Output	SSR Drive, DC Pulse, nominally 10V @ 20mA
SCR Drive Output	16KHz Burst for 1.35mS every half cycle. Initial pulse peak current of 600 mA, maintain pulses, 300mA, 10uS pulse width per pulse, rise time of 100nS
Response Time	30mS
Linearity	2%
Default Softstart Period	5 seconds to reach 100%
Voltage Limit Adjustment Range	5-100% of max. Output voltage
Line Voltage Compensation Range	+/-15% up to 100% output power
Regulation	+/-2%

THERMAL SPECIFICATIONS

Operating Temperature Range	0 to 50 degrees C
Storage Temperature Range	-40 to 100 degrees C

DIMENSIONS

APC-SCR-CM-1 MODULE (ALONE)

APC-SCR-CM-1 MODULE (MOUNTED IN SNAP TRACK)

DIP SWITCH SELECTIONS

Feature to Enable	1	3
Line Voltage Comp Enabled (default)	OFF	OFF
None	ON	OFF
Soft Start Only Enabled	ON	ON
Soft Start & Line Voltage Comp Enabled	OFF	ON

Command Input	2	4	5	6
0-5V (Default)	OFF	OFF	OFF	OFF
Potentiometer	OFF	OFF	OFF	OFF
0-10V	OFF	ON	OFF	OFF
4-20 mA	ON	OFF	ON	OFF
1-5V	ON	OFF	OFF	OFF
2-10V	ON	ON	OFF	OFF
PWM (isolated input)	OFF	OFF	OFF	ON