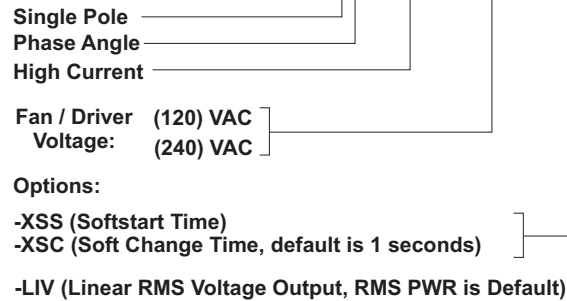


**Product Description**

The microprocessor based 1P-HC SCR Power Controller is a compact panel mount package that provides linear phase angle control of the load. The output power is based on the command input and the current transformer feedback. The input can be dip switch selected from seven different industry standard inputs. Specially designed external snubber networks allow reliable control of inductive loads.

**Ordering Codes**

**1P-HC-XXX-XXX-XXX**



**Dip Switch Selections**

Command Input	1	2	4	5	6
0-5V (Default)	OFF	OFF	OFF	OFF	OFF
Potentiometer	OFF	OFF	OFF	OFF	OFF
0-10V	OFF	ON	OFF	OFF	OFF
4-20mA	OFF	OFF	OFF	ON	ON
1-5V	OFF	OFF	OFF	OFF	ON
2-10V	OFF	ON	OFF	OFF	ON
PWMF (Fast)	OFF	OFF	ON	OFF	OFF
PWMS (Slow)	ON	OFF	ON	OFF	OFF

Feature to Enable	3	7	8
None	ON		
Line Voltage Comp Enabled (default)	OFF		
Soft Start / Soft Change Enabled		ON	
Current Limit			ON

**Input Specifications**

Power Supply	120 or 240VAC +/-10%,100mA max
Frequency Range	47-63Hz
Command Inputs	4-20mA, 0-20mA, 0-5V, 1-5V, 0-10V, 2-10V, Pot, PWM
External Potentiometer Resistance	10-25KOhm
Command Input Impedance	10K (0-10V), 250 Ohms (4-20mA), 100K (0-5V)
PWM Input Frequency Range	10Hz - 15KHz
PWM Input Level	5 - 24Vp-p (Logic level or PLC PWM outputs)
Current Transformer Input Range	0-200mAAC (0-5VAC) for use with 500 to 5000T CTs
Command to Mains / SCR Isolation	2500Vrms
Default Softchange Period	1 seconds to reach 100%
Voltage Limit Adjustment Range	0-100% of max. Output voltage
Line Voltage Compensation Range	+/-15% up to 100% output power
Regulation	+/-2%

**Output Specifications**

Operating Voltage (47-63 Hz) [Vrms]	12-600
Load Current Range [Arms]	1-200 @ 40C
Transient Overvoltage [Vpk]	1300
Max. Surge Current, (8.3ms) [Apk]	2500
Max. On-State Voltage Drop [Vpk]	1.6
Max.I <sup>2</sup> t for fusing (8.3mS) [A <sup>2</sup> sec]	62500
Max. Off-State Leakage Current [mArms]	50
Heatsink (90degC) Thermal Cut-Out	5A, 120/240VAC, NC Contacts

**Thermal Specifications**

Operating Temperature Range	0 to 50 degC, max current Ratings are for 40C
Storage Temperature Range	-40 to 100 degC



[www.nuwaveproducts.com](http://www.nuwaveproducts.com)

866-379-3597

REV 0.1



**WARNING: FIRE HAZARD!!** Even quality electronic components **CAN FAIL KEEPING FULL POWER ON!** Provide a **SEPARATE (redundant) OVER TEMPERATURE SHUTDOWN DEVICE (HIGH LIMIT)** to switch the power off if safe temperatures are exceeded on the process. Wire heat sink thermostat to shutdown power to the device if safe temperatures are exceeded on the heatsink.



**WARNING: HIGH VOLTAGE!!** This control must be installed in a **GROUNDING** enclosure by a qualified electrician in accordance with applicable local and national codes including NEC and other applicable codes. Provide a safety interlock on the door to remove power before gaining access to the device.

