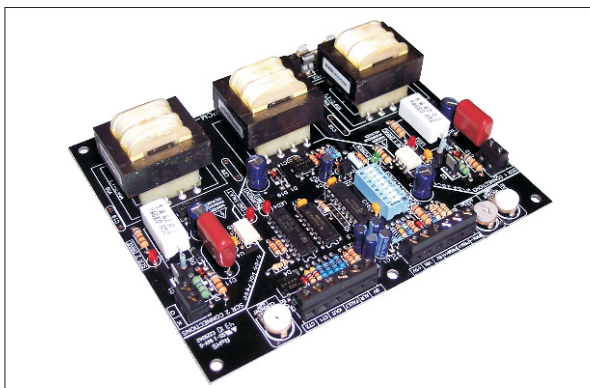


PHASE ANGLE SCR POWER CONTROL DRIVER BOARD for INDUCTIVE LOADS - NWIPCM-1P



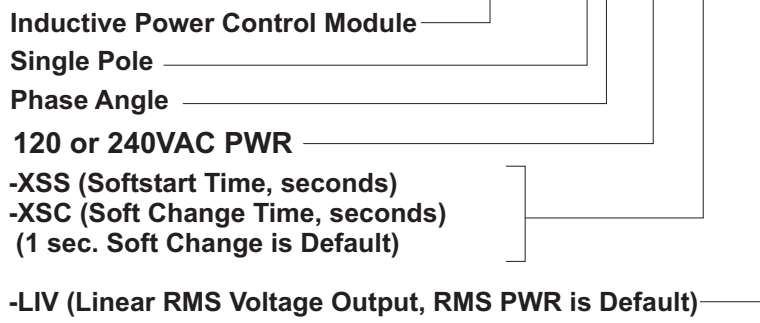
- **Dual Phase Angle SCR Driver provides DC gate drive**
- **True linear output phase angle control w/current feed back**
- **Suitable for resistive and Inductive Loads**
- **PWM input – inexpensive PLC interface**
- **Inputs of 4-20mA, 0-10V, 0-5V, Pot, PWM**
- **Line voltage compensation increases process stability**
- **Configurable soft start for sensitive loads**
- **Automatic 50/60Hz operation**
- **Adjustable voltage and current limit**
- **LED power and output indicators**

Product Description

The microprocessor based NWIPCM-1P provides true linear phase angle of SCRs for 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 high current gate drive is suitable for large SCRs.

Ordering Codes

NWIPCM-1P- - -



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

Output Specifications

SCR Drive Output	Initial pulse peak current of 1.2A rise time of ~200nS, maintain current of 160mA; See the SCR gate drive profile
Response Time	<50mS
Linearity	2%

Output Specifications(cont.)

Default Softchange Period	15 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%

Thermal Specifications

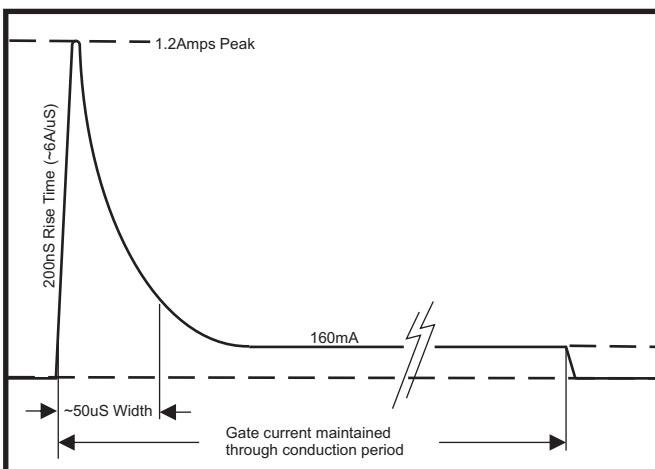
Operating Temperature Range	0 to 50 degC
Storage Temperature Range	-40 to 100 degC

Dip Switch Selections

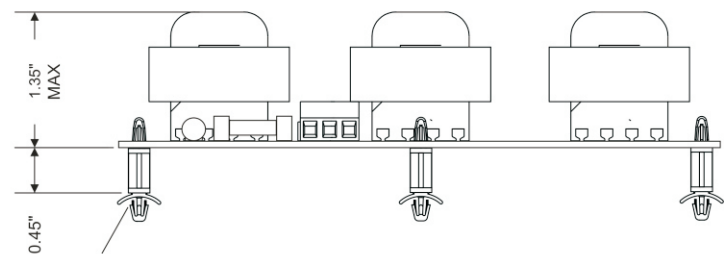
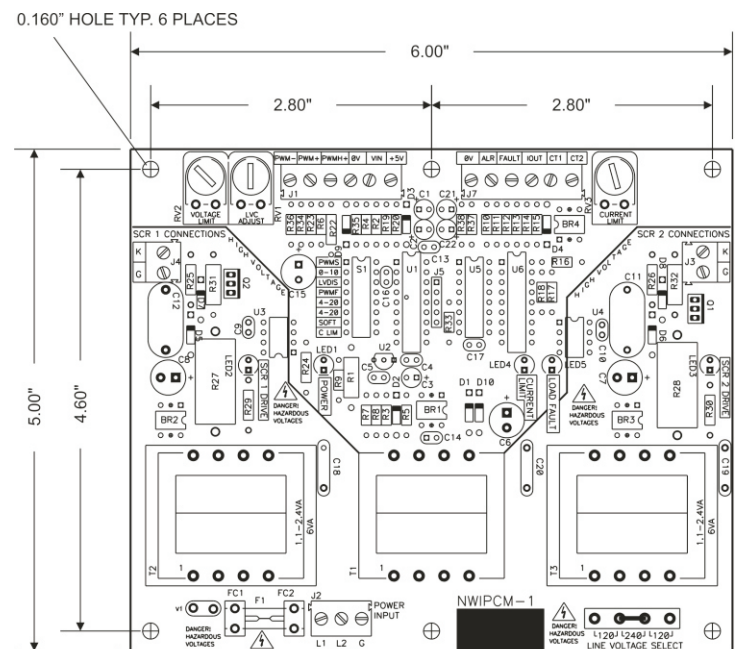
Command Input	1	2	4	5	6
0-5V (Default)	OFF	OFF	OFF	OFF	OFF
Potentiometer	OFF	OFF	OFF	OFF	OFF
0-10V	OFF	ON	OFF	OFF	OFF
4-20mA	OFF	OFF	OFF	ON	ON
1-5V	OFF	OFF	OFF	OFF	ON
2-10V	OFF	ON	OFF	OFF	ON
PWMF (Fast)	OFF	OFF	ON	OFF	OFF
PWMS (Slow)	ON	OFF	ON	OFF	OFF

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

Gate Drive Profile



Dimensions



TO SNAP-LOCK IN A .187±.003
[4.75±0.08] DIA. HOLE, IN A
.031-.078 [0.79-1.98] PANEL THICKNESS