PHASE ANGLE SCR DRIVER BOARD for INDUCTIVE LOADS - PCM-1P





Product Description

The microprocessor based PCM-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 several industry standard inputs. The high current gate drive is suitable for large SCRs.

- Back to Back SCR Driver provides DC gate drive
- Linear output phase angle control w/current feed back
- Suitable for resistive or Inductive Loads
- Inputs Accepts 4-20mA, 0-10V, 0-5V, Pot, PWM
- Configurable soft start / change for high inrush loads
- Automatic 50/60Hz and 120/208/240VAC operation
- Adjustable voltage and current limit
- LED power and output indicators

| Ordering Codes | PCM-1P |
|---|--------|
| Power Control Module Single Phase Phase Angle | |
| -SS (Softstart Default) | |

Input Specifications

| 100-265 VAC, 50mA max |
|--|
| 47-63Hz |
| 4-20mA, 0-20mA, 0-5V, 1-5V, 0-10V, 2-10V, Pot, PWM (TTL Level) |
| 1K - 25KOhm |
| 10K (0-10V), 250 Ohms (4-20mA), 100K (0-5V) |
| 0-200mAAC Full Scale |
| 2500Vrms |
| |

Output Specifications

| SCR Drive Output | Initial pulse peak current of ~1.6A w/rise time of ~200nS, maintain current of ~160mA; See the SCR gate drive profile. |
|------------------|--|
| Response Time | <50mS |
| Linearity | 2% |



Output Specifications(cont.)

| Soft Start / Change Period | 0.5, 1, 4 seconds (select via dip switch) |
|--------------------------------|---|
| Voltage Limit Adjustment Range | 0-100% of max.Line voltage |

Thermal Specifcations

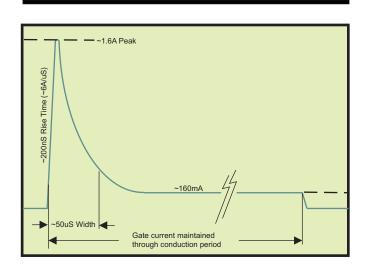
| Operating Temperature Range | 0 to 50 degC |
|-----------------------------|-----------------|
| Storage Temperature Range | -40 to 100 degC |

Dip Switch Selections

| Command Input | 2 | 3 | 4 |
|----------------|-----|-----|-----|
| 0-5V (Default) | OFF | OFF | OFF |
| Potentiometer | OFF | OFF | OFF |
| 0-10V | ON | OFF | OFF |
| 4-20mA | OFF | ON | ON |
| 1-5V | OFF | OFF | ON |
| 2-10V | ON | OFF | ON |

| Feature | 1 | 5 | 6 |
|----------------------------------|-----|-----|-----|
| Soft Start / Soft Change OFF | OFF | OFF | |
| Soft Start / Soft Change 0.5 sec | ON | OFF | |
| Soft Start / Soft Change 1 sec | OFF | ON | |
| Soft Start / Soft Change 4 sec | ON | ON | |
| Voltage Limit | | | OFF |
| Current Limit | | | ON |

Gate Drive Profile



Dimensions

