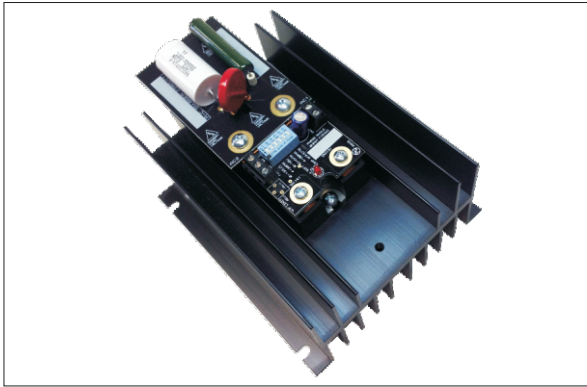


Phase Angle SCR Power Control to 80A @ 40C 1P-N Series

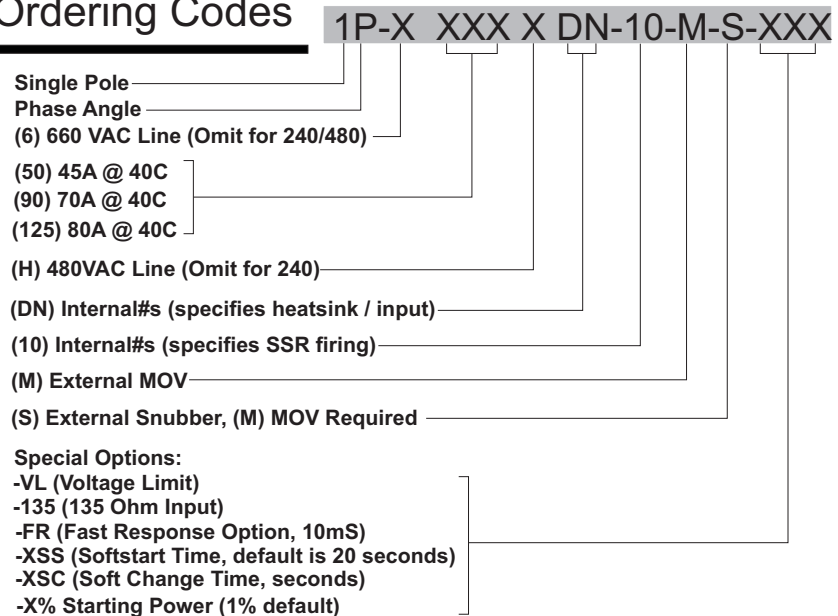


- **True linear output phase angle control**
- **Suitable for inductive loads**
- **Inputs of 4-20mA, 0-10V, 0-5V, 0-135 Ohm, Pot, PWM**
- **Line voltage compensation increases process stability**
- **Configurable soft start for sensitive loads**
- **Automatic 50/60Hz operation**
- **Adjustable voltage limit (-VL) option**
- **Single phase and three phase control**
- **LED output indicator**

Product Description

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

Ordering Codes



Input Specifications

Control Card Power Supply	24VAC +/-15%, 65mA max
Frequency Range	47-63Hz
Command Inputs	4-20mA, 0-20mA, 0-5V, 1-5V, 0-10V, 2-10V, 0-135Ohm, Pot, PWM
Command Input Impedance	10K (0-10V), 250 Ohms (4-20mA), 100K (0-5V)
0-135Ohm Excitation Current	13mA
PWM Input Freq Range	10Hz - 100Khz
External Potentiometer Resistance	1-25KOhm

Output Specifications

MODEL	1P-50DN	1P-50HDN	1P-90HDN	1P-125HDN
Operating Voltage (47-63 Hz) [Vrms]	24-280	48-530	48-530	48-530
Load Current Range [Arms]	.04-45	.04-45	.04-70	.04-80
Transient Overvoltage [Vpk]	600	1200	1200	1200
Max. Surge Current, (16.6ms) [Apk]	625	625	1200	1750
Max. On-State Voltage Drop [Vpk]	1.6	1.7	1.7	1.7
Max. I ² t for fusing (8.3mS) [A ² sec]	1620	1620	6000	12,700
Max. Off-State Leakage Current [mArms]	10	10	10	10 (without snubber)
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5
Response Time	100mS or 10mS (for FR)			
Linearity	2%			
Default Softstart Period	20 seconds to reach 100%, Other SS times available			
Voltage Limit Adjustment Range	5-100% of max. Output voltage			
Line Voltage Compensation Range	+/-15% up to 100% output power			
Regulation	+/-3%			

Thermal Specifications

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

Dip Switch Selections

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
0-135Ohm*	ON	OFF	OFF	OFF
PWM**	OFF	OFF	OFF	OFF

Feature to Enable	4	6
Line Voltage Comp Enabled (default)	OFF	OFF
None	OFF	ON
Soft Start Only Enabled	ON	ON
Soft Start & Line Voltage Comp Enabled	ON	OFF

Dimensions

