

Product Description

The microprocessor based 1B SCR Power Controller is a compact panel mount package that provides 0-100% burst (time proportioning) 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 with four different cycle time settings. Specially designed external snubber networks allow reliable control of inductive loads.

Ordering Codes

- Single Pole
- Burst (time proportioning)
- (6) 660 VAC Line (Omit for 240/480)
- (50) 45A @ 40C
- (90) 70A @ 40C
- (125) 80A @ 40C
- (H) 480VAC Line (Omit for 240)
- (DN) Internal#s (specifies heatsink / input)
- (M) External MOV
- (S) External Snubber, (M) MOV Required
- Special Options:
 - PL (Power Limit)
 - 135 (135 Ohm Input)

1B-X XXX X DN-M-S-XXX

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
0-135Ω*	ON	OFF	OFF	OFF

Cycle Time	4	6
200mS	OFF	OFF
1 Second	OFF	ON
10 Seconds	ON	OFF
100 Seconds	ON	ON

Input Specifications

Control Card Power Supply	24VAC +/-15%, 24VDC +30%/-10%, 65mA max
Frequency Range	47-63Hz
Resolution	0.5% (mA, pot, volts), 1% (0-135 Ohm)
Linearity	1.5% (mA, pot, volts), 5% (0-135 Ohm)
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
External Potentiometer Resistance	1-25KOhm

Output Specifications

MODEL	1B-50DN	1B-50HDN	1B-90HDN	1B-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 (w/o snubber)
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5
Response Time	100mS			
Power Limit Adjustment Range	5-100% of max. output power			

Thermal Specifications

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



www.nuwaveproducts.com

866-379-3597

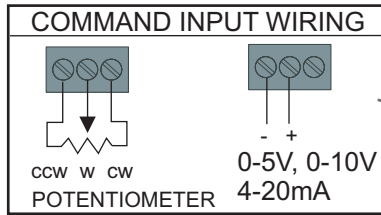
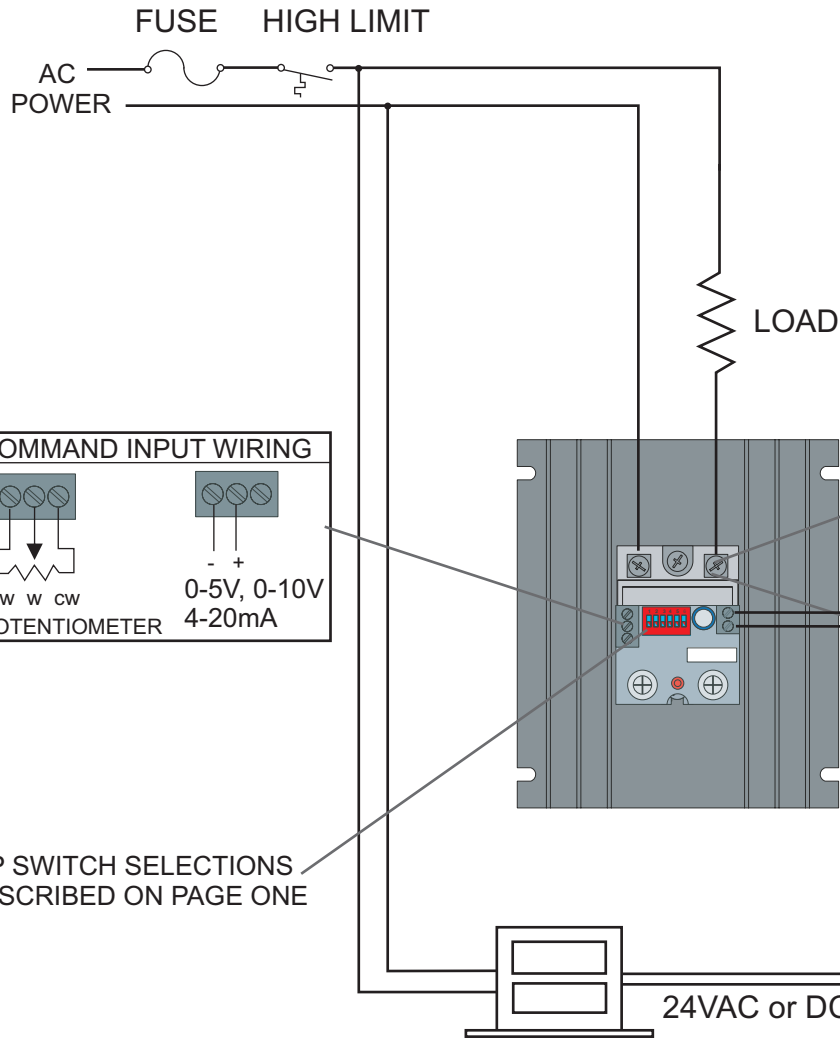
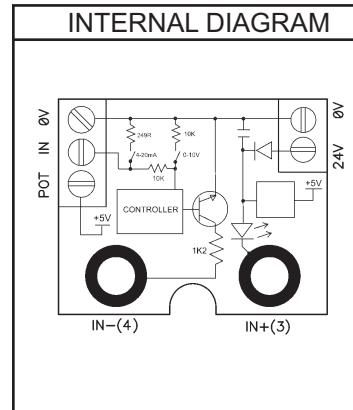
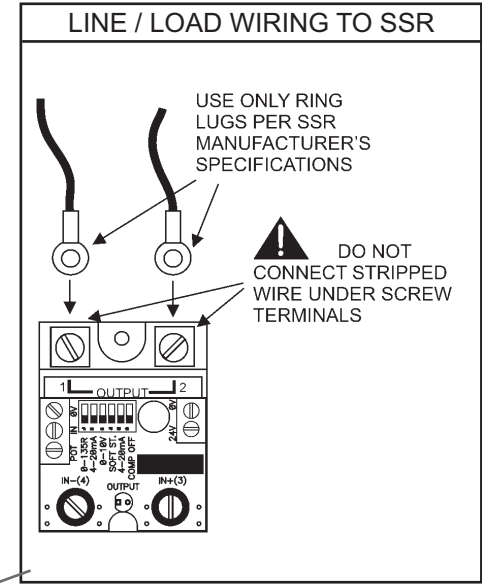
REV 0.1



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.



WARNING: HIGH VOLTAGE!! This control must be installed in a GROUNDED 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.



DIP SWITCH SELECTIONS DESCRIBED ON PAGE ONE

