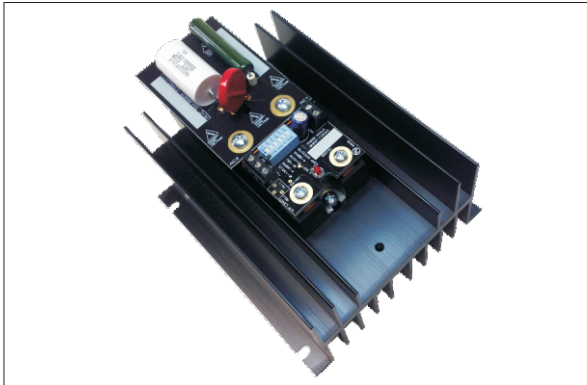


Time Proportioning SCR Power Control to 80A @ 40C 1B-N Series

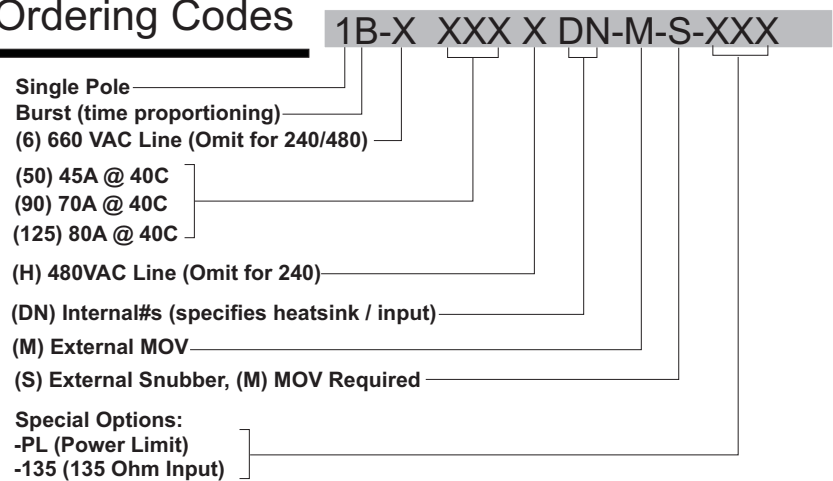


- **Configurable for 4 different cycle times**
- **Input accepts 4-20mA, 0-10V, 0-5V, 0-135 Ω, Pot**
- **Adjustable Power Limit (-PL) Option**
- **Single phase and three phase control**
- **LED output indicator**

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



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 (without 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

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 |

Dimensions

