

TABLE 1-1 SPECIFICATIONS

DCR-B2 SPECIFICATIONS

500 WATT SERIES

| DCR Model | OUTPUT POWER | | | Constant Voltage Ripple (PARV) (mVrms) | Constant Current Ripple (PARI) (mA rms) | TEMPCO | | REMOTE PROGRAMMING | | SIGNAL (Volt In/ Volt Out) | Eff. (% Typ.) | INPUT POWER | | | OUTPUT IMPEDANCE (Typical) | | | |
|-----------|---------------|----------------|------|--|---|--------|---------|--------------------|----------|----------------------------|---------------|-------------|---------------------|---------------------|----------------------------|-------|------|-------|
| | Voltage (Vdc) | Current (A dc) | 40°C | | | 70°C | (mV/°C) | (mA/°C) | (Ohms/V) | | | (Ohms/A) | Voltage Range (Vac) | Current Max. (A ac) | Power Factor (Typ.) | 120Hz | 1kHz | 10kHz |
| | | | | | | | | | | | | | | | | | | |
| 10-40B2 | 0-10 | 40 | 20 | 65 | 260 | 1.5 | 12 | 1200 | 10 | 1/1 | 61 | 103-127 | 8.7 | .65 | .025 | .020 | .060 | |
| 20-25B2 | 0-20 | 25 | 13 | 65 | 82 | 3.0 | 7.5 | 600 | 18 | 1/2 | 71 | 103-127 | 8.4 | .65 | .030 | .025 | .075 | |
| 40-13B2 | 0-40 | 13 | 6.6 | 90 | 30 | 6.0 | 3.9 | 300 | 30 | 1/4 | 71 | 103-127 | 9.8 | .65 | .050 | .040 | .125 | |
| 60-9B2 | 0-60 | 9 | 5 | 125 | 19 | 9.0 | 2.7 | 200 | 46 | 1/6 | 75 | 103-127 | 9.7 | .65 | .075 | .060 | .180 | |
| 80-6B2 | 0-80 | 6 | 3.3 | 150 | 12 | 12.0 | 1.8 | 150 | 68 | 1/8 | 77 | 103-127 | 8.3 | .65 | .125 | .110 | .300 | |
| 150-3B2 | 0-150 | 3 | 1.7 | 300 | 6 | 22.5 | 0.9 | 80 | 134 | 1/15 | 74 | 103-127 | 8.2 | .65 | .560 | .530 | .620 | |
| 300-1.5B2 | 0-300 | 1.5 | 0.8 | 700 | 4 | 45.0 | 0.46 | 40 | 270 | 1/30 | 74 | 103-127 | 8.9 | .60 | 1.90 | 1.80 | 2.0 | |
| 600-75B2 | 0-600 | 0.75 | 0.4 | 1200 | 2 | 90.0 | 0.225 | 20 | 530 | 1/60 | | 103-127 | 8.9 | .60 | 8.4 | 8.0 | 8.5 | |

Notes:

1. Optional inputs: 206V, 220V, 230V (Options M1, M2, M3 respectively)
2. At 115V input

COMMON SPECIFICATIONS

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| <p>Voltage Mode:</p> <p>Regulation: 0.03% with load change (NL to FL or FL to NL) or a ± 10% line voltage change.</p> <p>Drift (%Eo max): 0.1% typical, for 8 hours after 30-minute warmup with constant line, load, and ambient temperature.</p> <p>Transient Res: 50ms (typical) to return to ±1% band for a step load change 50%-100% or 100%-50% of full load (10V models ±3% band, 20V models ± 2%). Below ripple and transient response deteriorate by a factor of (60f)² where f is the input frequency.</p> <p>Current Mode:</p> <p>Regulation: 0.25% with 0-95% compliance-voltage change or ± 10% line voltage change.</p> <p>Resolution: 0.05% of Io max (typical)</p> <p>Drift (% Io max): 0.15% (typical)</p> | <p>General:</p> <p>Series Operation: To 200 Vdc Maximum. (150 and 300 volt models, only two in series).</p> <p>Parallel Operation: By master-slave (four units maximum) or straight parallel.</p> <p>Remote Sensing: See paragraph 3.2.2</p> <p>Op Temp Range: 0°C to 70°C</p> <p>Storage Temp: -40°C to +85 °C</p> <p>Isolation Voltage: 1000Vdc input to output.</p> <p>Finish: Bonderize-Black semi-gloss with white lettering.</p> <p>Overload/Short-circuit Protection: Adjustable current limiting with automatic recovery.</p> <p>Overvoltage Protector: Fully adjustable OVP on all models, internal.</p> <p>Average weight: 105 lbs.</p> |
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TABLE 1-2 SPECIFICATIONS

DCR-B2 SPECIFICATIONS

1000 WATT SERIES

| DCR Model | OUTPUT POWER | | | Constant Voltage Ripple (PARV) (mV/rms) | Constant Current Ripple (PARC) (mA/rms) | TEMPCO | | REMOTE PROGRAMMING | | SIGNAL (Volt In/ Volt Out) | Eff (% Typ.) | INPUT POWER | | |
|-----------|---------------|--------------|------------|---|---|---------|---------|--------------------|-----------|----------------------------|--------------|----------------------------|---------------------------|---------------------|
| | Voltage (Vdc) | Current 40°C | (Aac) 70°C | | | (mV/°C) | (mA/°C) | (Ohms/ V) | (Ohms/ A) | | | Voltage Range (Vac) Note 1 | Current Max. (Aac) Note 2 | Power Factor (Typ.) |
| | | | | | | | | | | | | | | |
| 10-80B2 | 0-10 | 80 | 40 | 65 | 260 | 1.5 | 24 | 1200 | 5 | 1/1 | 82 | 103-127 | 16 | .68 |
| 20-50B2 | 0-20 | 50 | 26 | 65 | 125 | 3.0 | 15 | 600 | 6 | 1/2 | 87 | 103-127 | 20 | .62 |
| 40-25B2 | 0-40 | 25 | 13 | 90 | 50 | 6.0 | 7.5 | 300 | 16 | 1/4 | 79 | 103-127 | 16 | .68 |
| 50-18B2 | 0-60 | 18 | 8.5 | 125 | 38 | 9.0 | 5.4 | 200 | 22 | 1/6 | 81 | 103-127 | 19 | .60 |
| 60-12B2 | 0-80 | 12 | 6.6 | 150 | 23 | 12.0 | 3.6 | 150 | 33 | 1/8 | 83 | 103-127 | 15 | .65 |
| 150-6B2 | 0-150 | 6 | 3.3 | 300 | 12 | 22.5 | 1.8 | 80 | 66 | 1/15 | 84 | 103-127 | 15.5 | .60 |
| 300-3B2 | 0-300 | 3 | 1.65 | 700 | 7 | 45.0 | 0.9 | 40 | 133 | 1/30 | 85 | 103-127 | 15.7 | .60 |
| 600-1.5B2 | 0-600 | 1.5 | .825 | 1200 | 6 | 90.0 | 0.9 | 20 | 133 | 1/60 | 85 | 103-127 | 27.4 | .66 |

Notes:

- Optional Inputs: 208V, 220V, 230V (Options M1, M2, M3 respectively)
- At 115V input

COMMON SPECIFICATIONS

| Voltage Mode: | |
|-------------------|---|
| Regulation: | 0.03% with load change (NL to FL or FL to NL) or a ± 10% line voltage change. |
| Drift (%Eo max): | 0.1% typical, for 8 hours after 30-minute warmup with constant line, load, and ambient temperature. |
| Transient Res: | 50ms (typical) to return to ±1% band for a step load change 50%-100% or 100%-50% of full load (10V models ±3% band, 20V models ± 2%). Below ripple and transient response characteristics will deteriorate by a factor of (60/f)² where f is the input frequency. |
| Current Mode: | |
| Regulation: | 0.25% with 0-95% compliance-voltage change or ± 10% line voltage change. |
| Resolution: | 0.05% of Io max (typical) |
| Drift (% to max): | 0.15% (typical) |

| General: | |
|------------------------------------|---|
| Series Operation: | Up to 200 Vdc Maximum. (150 and 300 volt models, only two in series). |
| Parallel Operation: | By master-slave (four units maximum) or straight parallel. |
| Remote Sensing: | See paragraph 3.2.2 |
| Op Temp Range: | 0°C to 70°C |
| Storage Temp: | -40°C to +85 °C |
| Isolation Voltage: | 1000Vdc input to output. |
| Finish: | Bonderize-Black semi-gloss with white lettering. |
| Overload/Short-circuit Protection: | Adjustable current limiting with automatic recovery. |
| Overvoltage Protector: | Fully adjustable OVP on all models. Internal. |
| Average weight: | 40 lbs. |