

Table 1-1 Specifications

**DCR-B SPECIFICATIONS  
2700-WATT FAN-COOLED  
SERIES**

| DCR Model | OUTPUT POWER  |                             |       | Constant Voltage Ripple (PARD) (mV rms) | Constant Current Ripple (PARD) (mA rms) | TEMPCO |         | REMOTE PROGRAMMING |             | SIGNAL (Volt In/Volt Out) | Efficiency (% Typ.) | INPUT POWER   |                     |       | OUTPUT IMPEDANCE (Typical) |       |       |
|-----------|---------------|-----------------------------|-------|---|---|--------|---------|--------------------|-------------|---------------------------|---------------------|---------------|---------------------|-------|----------------------------|-------|-------|
|           | Voltage (Vdc) | Current (A dc)<br>40°C 71°C |       |   |   | mV/°C  | (mA/°C) | (Ohms/V)(Ohms/A)   | Range (Vac) |                           |                     | Current (Aac) | Power Factor (Typ.) | 120Hz | 1kHz                       | 10kHz |       |
| 7-300B    | 0-7           | 300                         | 150.0 | 65                                      | 2,800                                   | 1.1    | 90.0    | 1714               | 0.33        | 0.7/1                     | 65                  | 187-229       | 27.5                | .62   | .0015                      | .0015 | .0015 |
| 20-115B   | 0-20          | 115                         | 58.0  | 65                                      | 375                                     | 3.0    | 35.0    | 600                | 3.5         | 1/2                       | 70                  | 187-229       | 26.5                | .60   | .007                       | .006  | .018  |
| 40-70B    | 0-40          | 70                          | 40.0  | 90                                      | 157                                     | 6.0    | 21.0    | 300                | 6.0         | 1/4                       | 77                  | 187-229       | 29.7                | .58   | .012                       | .010  | .030  |
| 60-45B    | 0-60          | 45                          | 26.5  | 125                                     | 93                                      | 9.0    | 13.5    | 200                | 9.0         | 1/6                       | 80                  | 187-229       | 29.0                | .56   | .016                       | .019  | .040  |
| 80-33B    | 0-80          | 33                          | 20.0  | 150                                     | 61                                      | 12.0   | 9.9     | 150                | 12.0        | 1/8                       | 81                  | 187-229       | 27.2                | .57   | .024                       | .022  | .055  |
| 150-18B   | 0-150         | 18                          | 10.0  | 300                                     | 36                                      | 22.5   | 5.4     | 80                 | 22.0        | 1/15                      | 83                  | 187-229       | 27.0                | .58   | .060                       | .057  | .066  |
| 300-9B    | 0-300         | 9                           | 5.5   | 700                                     | 21                                      | 45.0   | 2.7     | 40                 | 44.0        | 1/30                      | 83                  | 187-229       | 27.4                | .57   | .360                       | .340  | .400  |
| 600-4.5B  | 0-600         | 4.5                         | 2.5   | 1,200                                   | 9                                       | 90.0   | 1.35    | 20                 | 89.0        | 1/60                      | 85                  | 187-229       | 26.8                | .57   | 1.00                       | .980  | 1.10  |

## Notes:

- Overvoltage protector internal.
- Average Weight, 130 lbs.
- Optional Inputs: 220V (M2 OPTION), 230, (M3 OPTION)
- At 208V input.

## COMMON SPECIFICATIONS

## Voltage Mode:

Regulation: 0.03% with load change (NL-to-FL or FL-to-NL) and a full line-voltage change combined.

Resolution: 0.05% of Eo max. (typical)

Drift (% Eo max): 0.1% typical, for 8 hours after 30-minute warmup with constant line, load, and ambient temperature.

Transient Response: 50ms (typical) to return to  $\pm 1\%$  band for a step load change 50%-100% or 100%-50% of full load (10V models  $\pm 3\%$  band, 20V models  $\pm 2\%$ ). Below 60 Hz, 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 and  $\pm 10\%$  line voltage change combined.

Resolution: 0.05% of Io max (typical)

Drift (% Io max): 0.15% (typical)

## General:

\*Series Operation: To 200 Vdc Maximum. (150 and 300 volt models, two in series).

Parallel Operation: By master-slave or straight parallel, four units maximum.

Remote Sensing: See paragraph 3.2.2

Operating Temperature Range: 0°C to 71°C

Storage Temperature: -40°C to +85°C

Cooling: Fan Assist

Isolation Voltage: 1000 Vdc input to output.

Finish: Bonderize-Black semi-gloss with white lettering.

Overload/Short-circuit Protection: Adjustable current limiting with automatic recovery.

\*For master-slave series operation of the 7-300B, consult factory.