Table 1-1 Specifications: Models 6259B, 6260B, 6261B, 6268B, 6269B

INPUT:

230Vac ±10%, single phase, 57-63Hz for the standard models. (For other input voltages or 50Hz operation, see the option listings in paragraph 1-10. Input power requirements are listed in paragraph 2-15.

OUTPUT:

Model	6259B	0-10 volts at 0-50 amps
	6260B	0-10 volts at 0-100 amps
	6261B	0-20 volts at 0-50 amps
	6268B	0-40 volts at 0-30 amps
	6269B	0-40 volts at 0-50 amps

LOAD EFFECT (LOAD REGULATION):

Constant Voltage — Less than 0.01% of output plus $200\mu V$ for a load change equal to the current rating of the supply.

Constant Current -

Models 6259B and 6261B — Less than 0.02% of output plus 1mA for a load change equal to the voltage rating of the supply.

Models 6260B, 6268B, and 6269B — Less than 0.02% of output plus 2mA for a load change equal to the voltage rating of the supply.

SOURCE EFFECT (LINE REGULATION):

Constant Voltage — Less than 0.01% of output plus $200\mu V$ for a change in line voltage between 208 and 254Vac (or 104 and 127Vac) at any output voltage and current within rating.

Constant Current -

Models 6259B and 6261B — Less than 0.02% of output plus 1mA for a change in line voltage between 208 and 254Vac (or 104 and 127Vac) at any output voltage and current within rating.

Models 6260B, 6268B, and 6269B — Less than 0.02% of output plus 2mA for a change in line voltage between 208 and 254Vac (or 104 and 127Vac) at any output voltage and current within rating.

PARD (RIPPLE AND NOISE):

(Measured within 20Hz to 20MHz bandwidth)

Model	Constant Voltage	Constant Current
6259B	500μVrms/5mV p-p	25mA rms
6260B	500µVrms/5mV p-p	50mA rms
6261B	500µVrms/5mV p-p	25mA rms
6268B	1mVrms/5mV p-p	20mA rms
6269B	1mVrms/5mV p-p	25m A rms

TEMPERATURE COEFFICIENT:

Constant Voltage — Less than 0.01% plus $200\mu V$ change in output per degree Celsius change in ambient following a 30-minute warmup.

Constant Current -

Models 6259B, 6261B, and 6269B — Less than 0.01% plus 4mA change in output per degree Celsius change in ambient following a 30-minute warmup.

Model 6260B — Less than 0.01% plus 8mA change in output per degree Celsius change in ambient following a 30-minute warmup.

Model 6268B — Less than 0.01% plus 2mA change in output per degree Celsius change in ambient following a 30-minute warmup.

DRIFT (STABILITY):

(Change in output (dc to 20Hz) over an 8-hour interval under constant line, load, and ambient temperature following a 30-minute warmup.)

Constant Voltage — Less than 0.03% of output plus 2mV.

Constant Current -

Models 6259B, 6261B, and 6269B — Less than 0.03% of output plus 10mA.

Model 6260B — Less than 0.03% of output plus 20mA. Model 6268B — Less than 0.03% of output plus 5mA.

LOAD TRANSIENT RECOVERY TIME:

Less than 50µsec is required for output voltage recovery (in constant voltage operation) to within 10mV of the nominal output following a change in output current equal to the current rating of the supply or 5 amps, whichever is smaller.

REMOTE PROGRAMMING COEFFICIENTS:

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Output	Voltage	Programming	_

	Resistance	Voltage
Model	Control (±1%)	Control (±1%)
All Models	200Ω/V	1V/V
Output Cur	rent Programming —	
	Resistance	Voltage
Model	Control (±10%)	Control (±10%)
6259B	4Ω/A	10mV/A
6260B	2 Ω/A	5mV/A
6261B	4Ω/A	10mV/A
6268B	6Ω/A	16.7mV/A
6269B	4Ω/A	10mV/A

REMOTE PROGRAMMING SPEED:

(Typical time required to nonrepetitively change from zero to within 99.9% of the maximum rated output voltage, or from the maximum rated output voltage to within 0.1% of that voltage above zero.)

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Model	Up, Full Load	Down, Full Load
6259B	70ms	10ms
6260B	70ms	5ms
6261B	1 50 ms	25ms
6268B	300ms	30ms
6269B	350ms	20ms
Model	Up, No Load	Down, No Load
Model 6259B	Up, No Load 70ms	Down, No Load 200ms
	- · · ·	
6259B	70ms	200ms
6259B 6260B	70ms 70ms	200ms 200ms
6259B 6260B 6261B	70ms 70ms 150ms	200ms 200ms 250ms

PANEL METERS:

The accuracy of the front panel voltmeter and ammeter is $\pm 2\%$ of full scale. The ranges of these meters are:

Model	<u>Model</u>
6259B 12V, 60A	6268B 50V, 35A
6260B 12V, 120A	6269B 50V, 60A
6261B 24V, 60A	

TEMPERATURE RATINGS:

Operating	0 to 55°C	Storage	-40 to +75°C
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COOLING:

These power supplies are forced air cooled. The Model 6259B is cooled by a single fan; the other models are cooled by two fans.

RESOLUTION:

(Minimum output voltage or current change that can be obtained using the front panel controls.)

<u>Model</u>	Constant Voltage	Constant Current
6259B	1mV	50mA
6260B	1mV	100mA
6261B	2mV	50m A
6268B	5mV	30mA
6269B	5mV	50m A

OUTPUT IMPEDANCE (TYPICAL):

Approximated by a resistance in series with an inductance as follows:

Model	Model
$\frac{1}{6259}$ 0.05mΩ, 1μH	$\overline{6268B}$ 0.2m Ω , 1 μ H
6260B $0.02m\Omega$, $1\mu H$	6269B $0.1m\Omega$, $1\mu H$
6261B $0.01m\Omega$, $1\mu H$	

OVERVOLTAGE PROTECTION CROWBAR:

To avoid false tripping, the recommended trip margin above the output voltage is 5% of the output voltage plus 2 volts for Models 6259B, 6260B, and 6261B, and 5% of the output voltage plus 1 volt for Models 6268B and 6269B. The approximate crowbar trip voltage ranges are:

Model	<u>Model</u>	
6259B 2V-12V		4V-45V
6260B 2V-12V 6261B 2V-23V	6269B	4V-45V

OPTIONS AVAILABLE: --

(See paragraph 1-10 for descriptions)

All Models — Options 005, 007, 008, 009, 010, 013, 014, 020, 021, 022, 027, 040.

Model 6260B only - Option 016.

Model 6259B, 6261B, and 6268B only - Option 026.

INPUT POWER CONNECTIONS:

Input power is connected by way of a 3-terminal barrier strip on the rear panel.

DIMENSIONS:

(See Figure 2-1 outline diagrams.)

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Model	Net	Shipping
6259B	69 lbs. (31.3 kg)	78 lbs. (35.3 kg)
6260B	97 lbs. (43.9 kg)	106 lbs. (48.0 kg)
6261B	78 lbs. (35.3 kg)	87 lbs. (39.4 kg)
6268B	76 lbs. (34.4 kg)	84 lbs. (38.1 kg)
6269B	89 lbs. (40.3 kg)	98 lbs. (44.0 kg)