



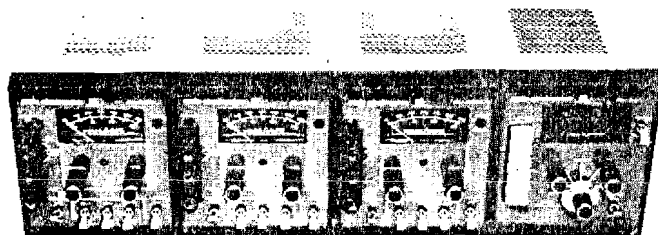
## EL Series POWER SUPPLY TEST EQUIPMENT

ACDC Electronics introduced the EL 750 precision programmable electronic load in 1973. It rapidly gained wide acceptance and has become a standard item in the test labs of our customers and many of our competitors.

Instruments handling up to 1500W or 300A require extreme reliability. All electronic loads are burned in for 120 hours prior to shipment. Thousands of hours of continuous use at ACDC have proven the EI 750B and EI 300 to be the most reliable and cost effective power supply test instruments on the market today.

Extremely flexible and highly versatile, they cover a broad spectrum of applications, burn-in or life testing, on-site diagnostics, or OEM installation in large systems. Ideal for testing power sources in laboratories, quality assurance, receiving inspection, and production test departments, these test instruments are the optimum solution for the testing of multi-output power supplies. The basic modules are highlighted below.

Let us lend our considerate expertise to your power supply test problems. For more detailed information on the versatility of these systems, contact the Product Marketing Department at ACDC Electronics.



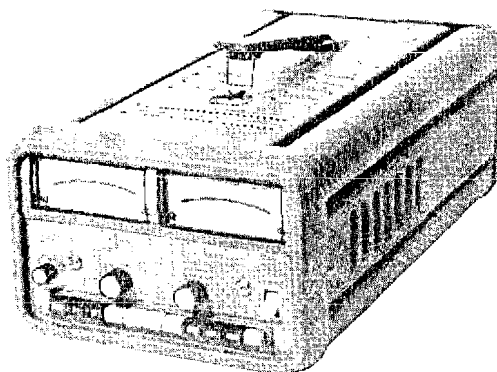
### Special Features —

#### EL 750B Dynamic Load



- Dissipates up to 750W
- 1.8VDC to 55VDC — up to 150A
- Static or Dynamic Testing

- Constant current or constant resistance modes
- Built-in square wave generator 120Hz or 1KHz operation
- Programmable with an externally applied, variable DC voltage
- Parallel operation for greater flexibility
- Meter shunt for calibration or digital read-out
- Front panel fault detectors
- Size: 9" x 6" x 17.3", 24 pounds



The EL750B is ideal for verification of single output power supply operation. Static or dynamic resistance loading tests performance such as output regulation or transient response. External variable load modulation can determine output impedance at specific frequencies. In the constant current mode it functions to test discharge rates of batteries or capacitor banks. Used with a DC power source it becomes a variable, constant current supply useful for measurement of resistance values of components or motor coils under operating conditions. The forward voltage drop of rectifier diodes or high current terminal connections can also be tested in this fashion.

# Electronic Loads

## Electrical Specifications—EL 750B

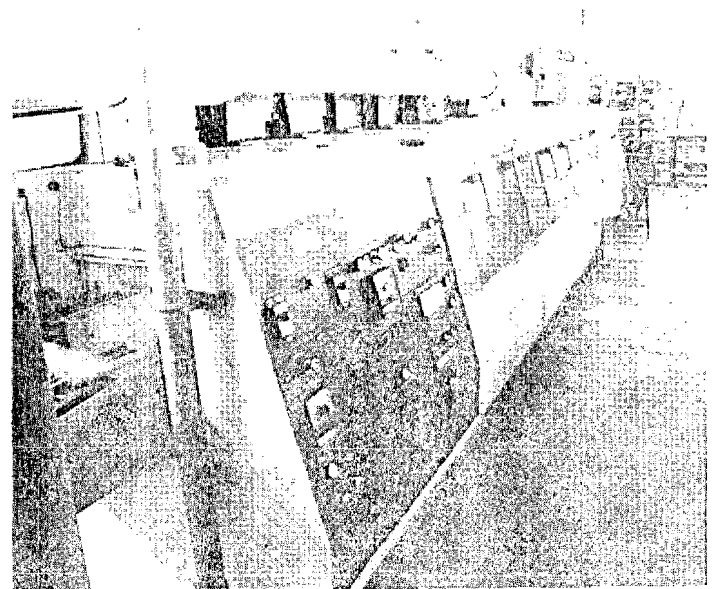
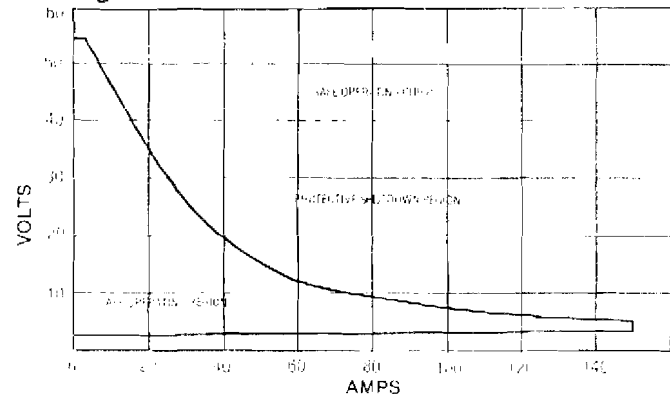
<b>Power Requirements</b>	EL 750B 105 to 125V EL 750B-A 210 to 250V EL 750B-E 198 to 242V EL 750B-K 215 to 264V 47 to 63Hz, 10 20W
<b>Maximum Loading Power</b>	750W (See Safe Operating Curve)
<b>Minimum Load Voltage</b>	1.8VDC
<b>Maximum Load Current</b>	150A
<b>Maximum Load Voltage</b>	55VDC
<b>Operating Mode</b>	Constant Current or Constant Resistance
<b>Current Ripple</b>	Less than 0.1A P-P
<b>Dynamic Loading</b>	Allows switching between two current levels at a switch selected rate of 1 KHZ or two times input line frequency. The two current levels are set by front panel controls
<b>Dynamic Load Response Time</b>	1 microsecond per amp or 60 microseconds, whichever is greater
<b>Remote Programming (Constant Current)</b>	0-10V is equal to 0-150A. Accuracy is $\pm 1\%$ . Program voltage input impedance approximately 100K.
<b>Meter Ranges</b>	Voltmeter 0-60 VDC Ammeter 0-10-50-100-200A
<b>Meter Accuracy</b>	2% full scale
<b>Protection Circuits</b>	Electronic circuit limits power dissipation to 750W. Load shuts down in the event of an overvoltage. Thermal sensors shut off load in the event of an overtemperature condition. Unit is protected against application of reversed polarity voltages.
<b>Current Signal Output</b>	Voltage proportional to current is provided. 1 millivolt per amp. $\pm 1\%$ .
<b>Operating Temperature Range</b>	0-40°C.
<b>Cooling</b>	Forced air cooling integral in design

**Front Panel Controls** Push button switches turn power on/off, select mode of operation, dynamic load on/off, dynamic load frequency, and ammeter current range. Controls to adjust for input voltage, dynamic load, and load current. Toggle switch for load on/off

**Front Panel Indicators** Voltmeter, ammeter, power-on indicator, overvoltage-overcurrent indicator (E1), saturation indicator, and overtemperature indicator

**Rear Panel** AC power connector, fuse, remote program, input/output connector (MOLEX), and positive and negative bus bars

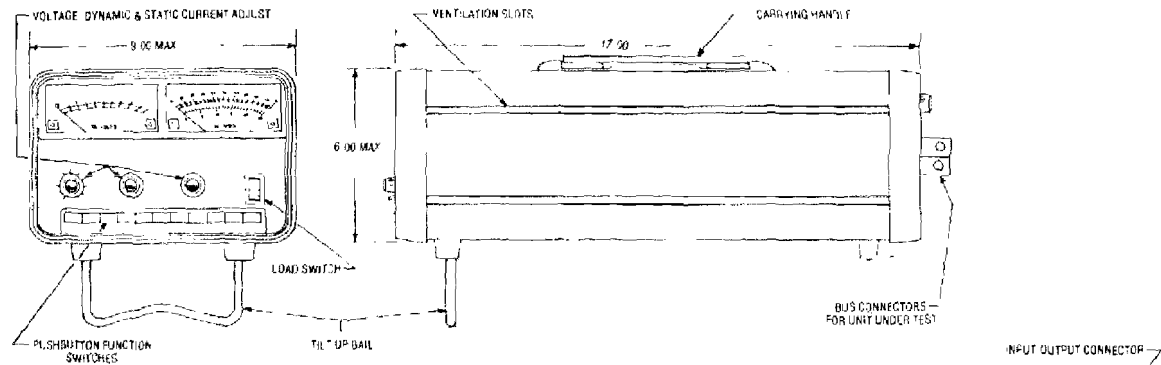
**Derating Chart**



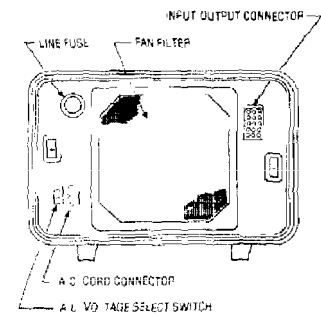
In final phase of drag solder PCB assemblies are conveyed to POLY-CLEAN wash.

# Electronic Loads

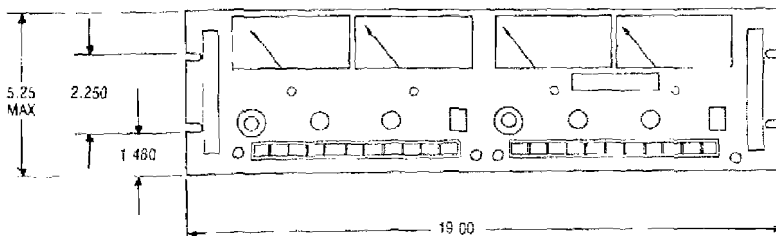
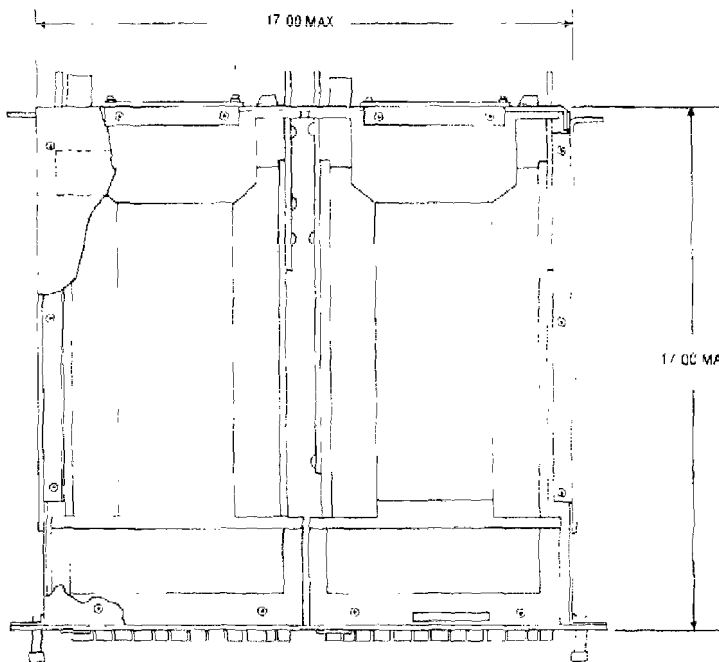
## Mechanical Specifications—



**EL 750B**



**REAR VIEW**



**EL 750BR-2**