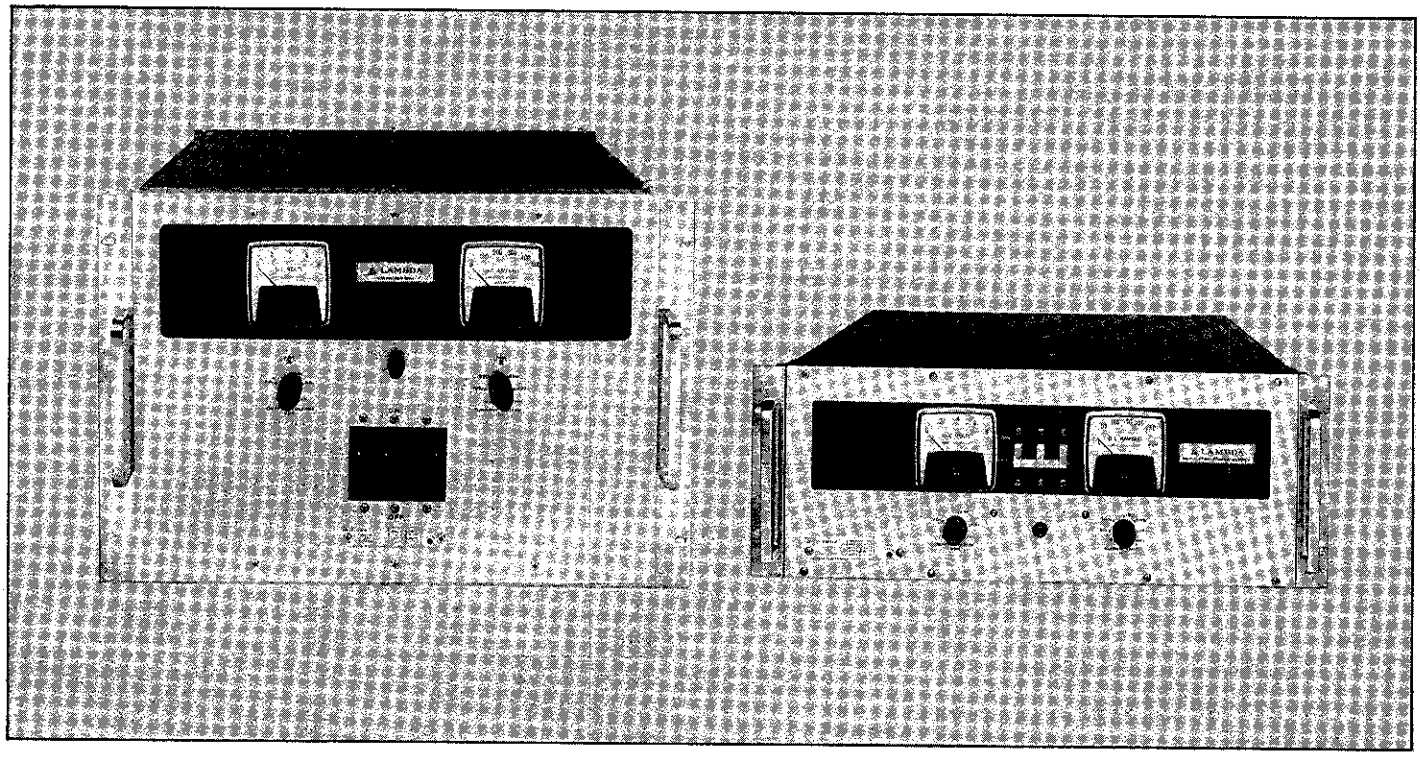
PART III—LAB, TEST EQUIPMENT AND SYSTEM POWER SUPPLIES

Lambda LB series



Features—LB series

Up to 87% efficiency

Regulation line 0.05%+6 mV; load 0.1%+10 mV

Ripple 10 mV RMS max. by use of electronic ripple reducer

Convection cooled, no blowers or internal fans, no external heat sinking

Overvoltage protection standard on all models up to 60 VDC rating

No overshoot on turn-on, turn-off or power failure

Remotely programmable

Remotely sensing

Magnetics designed to MIL-T-27C, grade 6

Completely protected, short circuit proof – continuously adjustable automatic current limiting

Constant I/Constant V by automatic crossover

Series operation

Multi-current-rated for 40° C, 50° C, 60° C, 71° C

MODEL	MAX AMPS AT AMBIENT OF:[1] 40°C	50°C	60°C	71°C	DIMENSIONS	PRICE[2]
0-7.5 VOLTS						
LB-701-FM-OV	300	270	235	200	7"x19"x20-1/16"	$4743
LB-721-FM-OV	500	450	400	350	12-3/16"x19"x22-1/16"	7537
0-15 VOLTS						
LB-702-FM-OV	180	170	160	150	7"x19"x20-1/16"	4743
LB-722-FM-OV	300	265	225	180	12-3/16"x19"x22-1/16"	7537
0-36 VOLTS						
LB-703-FM-OV	80	75	70	65	7"x19"x20-1/16"	4743
LB-723-FM-OV	135	130	125	120	12-3/16"x19"x22-1/16"	7537
0-60 VOLTS						
LB-704-FM-OV	50	47	44	40	7"x19"x20-1/16"	4743
LB-724-FM-OV	80	75	70	65	12-3/16"x19"x22-1/16"	7537
0-120 VOLTS						
LB-705-FM	25	22	19	16	7"x19"x20-1/16"	4467
LB-725-FM	40	36	32	28	12-3/16"x19"x22-1/16"	7260
0-300 VOLTS						
LB-706-FM	10	9.5	9.0	8.0	7"x19"x20-1/16"	4467
LB-726-FM	16	15	14	13	12-3/16"x19"x22-1/16"	7260

NOTES:
[1] Current rating applies over entire voltage range.
[2] Prices include meters. LB Series models are not available without meters. Prices for all models up to and including 60 VDC include built-in over-voltage protection.
[3] Chassis slides are available with LB-701 thru LB-706-FM models only. See page 105.

Specifications—LB Series

DC Output
Voltage ranges as shown in tables.

Constant Voltage
regulation, line .....0.05% + 6 mV for line variations from 187-229 VAC or from 229-187 VAC
regulation, load .....0.1% + 10 mV for load variations from 0 to full load
remote programming
resistance .....200 ohms/volt nominal
remote programming
voltage .....volt per volt
ripple and noise .....10 mV RMS max.; 100 mV RMS max. for LB-706-FM; 150 mV RMS max. for LB-726-FM.
With "V" option: 15 mV RMS for LB-701 thru LB-705; 150 mV RMS for LB-706
temperature
coefficient .....(0.03% + 0.5 mV/°C)

Constant Current
(Current regulated line and load)
automatic crossover
current range .....zero to max. current as shown in tables
regulation (line and
load combined) ....less than 1% + 10 mA for 721-725; less than 1% for 701-706 (1% + 50 mA for LB-726-FM) for input variations from 187-229 VAC or from 229-187 VAC and from 0 to 95% output voltage change
ripple and noise .....for LB-701-LB-705-FM and LB-721-FM-OV-LB-725-FM less than (1/Vout*)% RMS of load current either positive or negative terminal grounded. For LB-706-FM, less than (10/Vout*)% of load current. For LB-726-FM, less than (15/Vout*)% of load current. With "V" option (1.5/Vout*)% of I DC for LB-701-705; (15/Vout)% of I DC for LB-706

*Vout equals I out R_L measured at output terminals of power supplies.

AC Input
208 ±10% VAC; 57-63 Hz, 3 phase ±10% max. phase unbalance, 4 wire. For operation at other than 57-63 Hz, see AC input option.

Efficiency
Up to 87% efficiency.

Response Time
For a 20% load change between 20% and 100% load, the voltage will recover to within 0.5 volt in 150 milliseconds.

Ambient Operating Temperature Range
Continuous duty from 0° to 71°C with load current rating shown in tables.

Storage Temperature
—55° to +85°C.

Overload Protection
THERMAL
Thermostat requires resetting of circuit breaker to re-energize.
ELECTRICAL
External overload protection: adjustable, automatic electronic current limiting circuit limits the output current to the preset value, thereby providing protection for load as well as power supply. Current limiting settability to 110% of rated current.
Internal failure protection: provided by primary circuit breaker.

Overvoltage Protection
Built-in overvoltage protection on all models up to 60 VDC ratings.

Input Connections
Terminal block on rear of chassis.

Output Connections
LB-700 series: 2 heavy duty studs 1/2"-20 on LB-701-FM-OV and LB-702-FM-OV models; all other models: 5/16"-24 studs on rear of chassis. LB-720 series: 4 heavy duty studs 5/16"-24 on LB-721-FM-OV and LB-722-FM-OV models; all other models: 2 studs, 5/16"-24.

Meters
Independent voltmeter and ammeter with ±2% accuracy.

Controls
DC OUTPUT AND CONTROL
Coarse and fine voltage adjust and coarse and fine current adjust on front panel.

POWER
Circuit breaker to protect against internal failure and to provide an on-off control on front panel. Pilot lamp on front panel energizes when circuit breaker is "on".

Remote Sensing
Provision is made for remote sensing to eliminate effect of power output lead resistance on DC regulation up to 5 Volts in each leg.

Physical Data

Series	Weight Lbs. Net	Weight Lbs. Ship	Size Inches
LB 700	230	240	7 x 19 x 20-1/16
LB 720	360	410	12-3/16 x 19 x 22-1/16

Panel Finish
Brushed aluminum clear anodized panels with grey inlay.

Chassis Finish
Grey, FED. STD. 595 No. 26081.

Options
AC Input

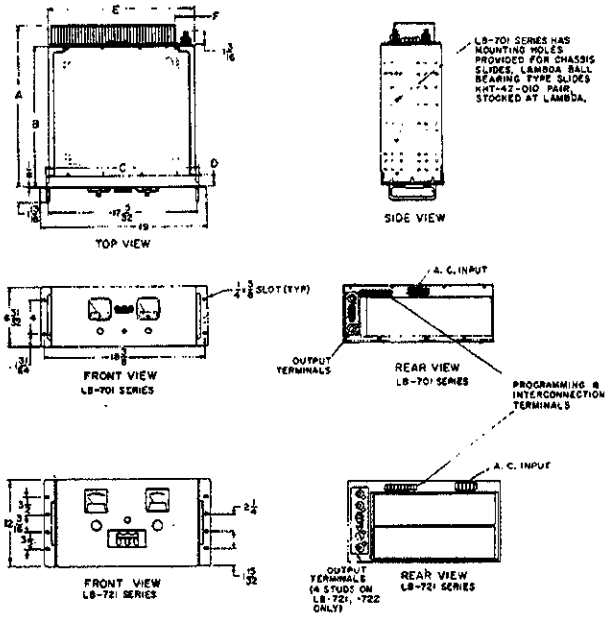
Add Suffix	For Operation at:	Price Qty. 1-14	Price Mixed Models Qty. 15 & up	Price Single Model Qty. 15 & up
For LB 700 Series Only				
—V	208 ±10% VAC 47-53 Hz 3 phase	12%	12%	10%
For 50 Hz operation derate current 10%.				
—V1	230 ±10% VAC 57-63 Hz 3 phase	12%	12%	10%
For LB-720 Series Only				
—V1	230 ±10% VAC 57-63 Hz 3 Phase	12%	12%	10%

Accessories
Chassis slides (LB-701-FM-OV thru LB-706-FM models only) and pot covers. See page 105.

Guaranteed for 5 Years
5-year guarantee includes labor as well as parts. Guarantee applies to operation at full published specifications at end of 5 years.

PART IV—DIMENSIONAL DRAWINGS
FULL-RACK MODELS, LB SERIES

LB Series



MODEL	A	B	C	D	E	F
LB 700SERIES	20 1/16	17 33/64	17 9/16	1 1/4	17	2 3/16
LB 720SERIES	22 1/16	19 1/2	17 5/8	1 1/2	17 5/8	2 1/2

TERMINAL STRIP SCREW SIZE
LB 701 SERIES TB-1 & TB-3 6-32 X 5/16
TB-2 5-40 X 1/4 STUDS — 5/16-24 (1/2-20 ON 701 & 2)
LB 720 SERIES TB-1 6-32 X 5/16,
TB-3 & 32 X 5/16
TB-2 5-40 X 5/16 STUDS 5/16-24