

POWER SUPPLY - (digital), variable, ac/dc

Cat: LB2641-002 (digital) high power with circuit breaker

<u>DESCRIPTION</u>: This useful <u>IEC Power Supply</u> (digital) is a robust and compact unit designed for general laboratory use. It is suitable for most laboratory experiments where large current and smooth adjustment from 0 to 25 volts of both AC and DC is required. The dual digital voltmeters with large bold illuminated digits monitor both DC and AC output voltages simultaneously. Separate 4mm, socket head, spin free terminals are provided for both AC and DC outputs.

LB2641-002 general purpose filtered power supply



Physical size: 330x178x107mm LxWxH Weight: 6.3 kg

SPECIFICATIONS: IMPORTANT NOTE: At no load, when both AC and DC voltages are set to maximum, they exceed the nominal 25 volts. Conversely, the maximum output voltage decreases to be slightly below 25V at full load. This is normal.

Input: 220/240V.AC. 50/60Hz 0.8Amp Standard removable mains cable.

Mains On/Off: Illuminated mains ON/OFF rocker switch.

Outputs:

AC output: Adjustable 0-25V.AC. Approx. 21V at max. 10 amps.

8 amps continuous or 10 amps at 50% duty cycle (10 min ON / 10 min OFF)

DC output: Adjustable, 0-25V.DC Approx. 22V at max. 8 amps.

6 amps continuous or 8 amps at 50% duty cycle (10 min ON / 10 min OFF)



DC Output cont'd:

Full wave rectified and filtered: The DC output is filtered by a choke & capacitor filter in Π (pi) configuration. Output is smoothed and the peak/peak ripple measures about 0.2% at 2 amps, 1% at 5 amps, 2% at 6 amps and 4% at 8 amps (full load).

Protection: Overload and short circuit protection is by a high quality magnetic circuit breaker. Can be used also as the output switch and, when tripped, can be easily and quickly reset. The breaker protects against overload on the combination of both AC and DC outputs.

High voltage spikes from inductive loads are suppressed internally to avoid damage to the power supply components.

Metering: The output voltage for both DC and AC outputs are continuously displayed in bright red LED digits for easy viewing in the classroom. Resolution is to 0.1 volts.

NOTE: <u>on open circuit</u>, the DC output voltage and the corresponding digital reading will be seen to reduce slowly as the filter capacitors gradually discharge. If the power supply has a load connected, the DC output voltage falls more quickly.

Controls: Illuminated mains ON/OFF switch, voltage adjustment knob, circuit breaker knob (down direction is tripped).

Physical: 330 x 178 x 107mm length x depth x height

Weight: 6.3kg

Designed and manufactured in Australia