

ACDC-20

Portable AC DC power supply

- Input: 120 50/60 Hz VAC +/- 10%
- Output Voltages (2.4 KVA) Unregulated
- 0-560 VAC Selectable Output Ranges
- 0-480 VDC Selectable Output Ranges
- AC and DC ammeters
- 120VDC Range is filtered
- 115 pounds



DESCRIPTION

This instrument is housed in a rugged case with a Removable lids. The input connection is by way of a recessed three prong male inlet compatible with standard IEC cords. The input is protected and controlled by a 20 amp single pole circuit breaker. When it is turned ON, a single or dual deck variable autotransformer (Vernier) is energized, and an amber POWER ON light is illuminated, as well as a 0-600 volt digital meter. The output arm(s) are protected by a one or two pole breaker. The variable output of the Vernier is connected to the primaries of four 750 VA toroidal transformers. The secondaries are connected in series and parallel configuration by means of a multi-deck six position selector switch. The AC output is monitored by the 0-600 VAC digital meter. An additional resistor is added in DC mode to read the expected DC output voltage under normal load conditions.

The output is controlled by means of a three position rotary switch. It has a maintained and momentary position, and a center OFF. When turned ON, a relay is energized and the internal lamp is illuminated. The contacts of the relay drive AC voltage directly to one pair of yellow binding posts, and through a full wave bridge rectifier to a pair of red and black binding posts. A 10 kOhm load resistor is connected to the DC output along with a 12 volt Zener diode . This provides a 5-20 watt load for the DC output,

APPLICATION

This is a portable AC and DC power supply intended for circuit breaker charging motors and other general purpose applications. It will provide variable AC voltages up to 560 VAC and DC voltages up to 480 VDC, at 2 kVA. It will be in an enclosure approximately 21" x 18" x 12", and weighs 115 lb.

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SPECIFICATIONS



Width: 21.5 inches (546 mm)
Length: 18.5 inches (470 mm)
Height: 11.5 inches (292 mm)
Weight: 115 pounds (52.2 kg)

Input: 105-130 VAC, 50/60 Hz, 2.4 kVA nominal (20 amperes)

Outputs: 0-140 VAC at 16 A continuous (2.8 kVA)
0-280 VAC at 10 A continuous
0-560 VAC at 5 A continuous
0-480 VDC at 4 A continuous (1.92 kVA) (Unfiltered)
0-240 VDC at 8 A continuous (Unfiltered)
0-120 VDC at 16 A continuous (filtered)

Ripple (DC): <2% 120VDC Range Only

Overloads: 200% 30 seconds ON, 90 seconds OFF (25% Duty Cycle)
300% 10 seconds ON, 90 seconds OFF (10% Duty Cycle)

Voltmeter Accuracy:

AC: +/- 0.5% of reading +/- 0.5% FS

DC: +/- 2% of reading +/- 1% FS (at rated output current and resistive load)

Ammeter Accuracy:

AC: +/- 0.15% FS, +/- 6 Counts

DC: +/- 0.15% FS

Included Accessories

- Input power cord 1
- Contacts leads 1 pair
- Technical manual 1 copy