PI-250

Portable Current Power Supply



- Portable Light Weight Current Voltage Supply
- Motor Overload Testing
- Ground Fault Testing
- Motor Overload Testing
- Circuit Breaker Testing

INTRODUCTION

A high current test set is designed with high current, low voltage outputs used for many purposes, including primary injection testing of direct acting low voltage circuit breakers, motor overload relays, current transformers and heat runs. It also can be used as a general purpose adjustable voltage or current source. The front panel displays provide simple indication of output current, time, and system status. The keyboard provides easy control of output.

DESCRIPTION

The **PI-250** Portable Current Power Supply incorporates the flexibility to provide unequaled capability in a portable package. The **PI-250** used alone, on 120 VAC supplies, generates continuous current of 250 amps with peak maximum output 750 amps through a breaker and 1000 amps into a short. The unit is housed in rugged metal case enclosure which weighs no more than 35 pounds, allowing one person easy mobility. Basic operation is very simple, and the proven instrumentation provides optimal output control and measurement.

The **PI-250** is a versatile and technologically advanced primary injection test set capable of testing circuit breakers, motor overlaod relays, and ground fault trip devices, magnetic, thermal or solid state. The test set can also be used on high current applications like ratio transformers, and heat runs.

The PI-250 features digital readout of current and time enhanced by digital signal processing. Automatic pulse (memory) mode provides fast and accurate evaluation of output current pulses as short as one half cycle.

The PI-250 incorporates a PIC microcontroller with a precision A/D converter and special firmware for true-RMS continuous and pulse current reading with high accuracy. It also utilizes a sophisticated current sensing system for more reliable current latch mode operation and better timing accuracy. An LED 4 digit readout for current in eight ranges from 5.000 A to 1000 A full scale with automatic overrange detection reduces the chance of operator error. An integral autoranging timer with LED readout provides four digits in seconds or cycles mode, with a resolution of 0.001 second or 0.1 cycle. The entire metering and control package is combined on a single PCB which can be removed and replaced very easily, for efficient maintenance and repair.

The PI-250 provides four output taps which range from 0-3.5 volts at 200 amps to 0-130 volts at 5 amps, continuous, and pulse output up to 5x. The convenient quick welding connectors of heavy cables for high current, and the lower current outputs use heavy duty binding posts which accommodate banana plugs and smaller wires.

The unit is housed in a rugged, lightweight aluminum case with a water-resistant seal, and a removable lid which has room for storage of power cord and output leads. The front panel is a durable plastic overlay which can be wiped clean easily and safely, and the tactile keypad provides long-lasting and reliable operation with positive operator feedback.

Portable Current Power Supply



SPECIFICATIONS

Input:	120 VAC +/- 10%, 50/60 Hz
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600 VA Continuous, 3 kVA Peak

CURRENT RANGES:

0-5.000 / 10.00 / 25.00 / 50.00 / 100.0 / 250.0 /

500.0 / 1000 Amperes

Output:

3 VAC 200 A Continuous 400 A 10 min on

400 A 10 min on 10 min off 600 A 90 sec on 3 min off 1000 A 0.2 sec on 2 min off

6 VAC 100 A Continuous

200 A 10 min on 10 min off 300 A 90 sec on 3 min off

500 A 0.2 sec on 2 min off

24 VAC 25 A Continuous

50 A 10 min on 10 min off 75 A 90 sec on 3 min off 125 A 0.2 sec on 2 min off

120 VAC 5 A Continuous

10 A 10 min on 10 min off 15 A 90 sec on 3 min off 25 A 0.2 sec on 2 min off

CURRENT ACCURACY:

+/- 0.5% Reading + 0.5% Range + 1 Digit

(Continuous)

+/- 1.0% Reading + 1.0% Range + 1 Digit

(Pulse > 0.01 sec)

TIMER RANGES:

0-9.999 / 99.99 / 999.9 / 9999 Seconds

0-999.9 / 9999 Cycles

TIMER ACCURACY:

+/-0.005 sec +/-0.005% of reading +/-1 count

DIMENSIONS AND NET WEIGHT

Height: 12.0 in. (178 mm) Width: 13.0 in. (483 mm)

Depth: 9.0 in. (152 mm) Weight: 35 lb. (4.55 kg)

STANDARD ACCESSORIES

Remote Initiate cable 1 S-B143 Contact Leads 1 pair S-A108

High current leads 1 pair Cable Lug Adapter 2 pcs

Electrical Test Instruments. Inc.

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