



# PI-4000B

## Portable Circuit Breaker Test Set

### Our Mission is Reliability

ETI Precision manufactures industry-leading high-current circuit breaker testers and AC/DC variable power supplies. Our products are manufactured in the USA and deployed at testing companies and within critical environments nationwide, ensuring technical functionality, accuracy, and increased equipment availability.



## DESCRIPTION

The PI-4000B is a rugged, durable, and easy to use high-current primary injection test set. The unit is constructed in a steel enclosure with removable sides and top for easy access to internal components. The sides are clear of protruding components and full-width handles with provisions for lifting hooks are on both ends. Locking swivel castors on all four corners provide ease of mobility.

- **Peak Output of 40,000A:** This test set achieves peak output of approximately 40,000A making the unit ideal for testing draw-out breakers and molded-case breakers up to 4000A continuous.
- **Maximum Versatility:** With an output transformer with dual primaries and secondaries, the PI-4000B provides optimal impedance matching to a wide range of breaker sizes.
- **Convenient Preset Outputs:** The PI-4000B is built with various pulse preset modes providing additional testing capabilities for electromechanical and solid state trip devices. A short preset pulse duration and a long preset time can be used to test between instantaneous tripping and heat runs on cables or other devices.
- **Serial Port:** The PI-4000B has a standard serial port that may be connected to a printer, computer, or other device to print or store time and current values of test results in ASCII format.
- **Prioritizing Safety:** An internal voltage sensor automatically configures the AC control power section to be energized only when properly configured for the applied voltage. The PI-4000B also provides temperature protection for the output bus and the vernier Powerstat™ to ensure that neither temperature exceeds a safe operating level.

## APPLICATIONS

This test set will test low-voltage, molded-case and metal-clad, direct acting AC circuit breakers from various manufacturers. The test set can also be used for high current applications like ratio transformers and heat runs. Using SCR's, the PI-4000B eliminates closing time errors. Initiation at the zero crossover point eliminates DC offset in the current waveform and results in accurate, repeatable test results even with short-duration currents for high speed solid state or electromechanical trip devices.

## REQUEST A QUOTE TODAY

Contact our experts at [info@etiprecision.com](mailto:info@etiprecision.com) or 410-857-1880. Not sure if the PI-4000B is right for you? We are available to offer advice and consultations to help you select the right products for your business.

# SPECIFICATIONS<sup>1</sup>

## PI-4000B Output Current & Overload Capabilities

9V (Parallel)	18 V (Series)	Overload	Duty	Max ON Time	Min OFF Time	Max Input Current 480 / 240 V
4000 A	2000 A	1X	100%	Continuous	N/A	94 / 187 Amps
5600 A	2800 A	1.4 X	50%	15 Min	15 Min	140 / 280 Amps
8000 A	4000 A	2 X	25%	5 Min	15 Min	187 / 375 Amps
12000 A	6000 A	3 X	10%	1.5 Min	15 Min	281 / 562 Amps
16000 A	8000 A	4 X	6%	45 Sec	15 Min	375 / 750 Amps
20000 A	10000 A	5 X	4%	4 Sec	2 Min	468 / 937 Amps
28000 A <sup>2</sup>	14000 A <sup>2</sup>	7 X	2%	2 Sec	2 Min	656 / <sup>3</sup> Amps
40000 A <sup>2</sup>	20000 A <sup>2</sup>	10 X	1%	1 Sec	2 Min	937 / <sup>3</sup> Amps

<sup>1</sup>Specifications subject to change without notice

<sup>2</sup>Available with 480 VAC input only

<sup>3</sup>Not available 240 Volt Input

**Current Ranges:**

- 0-1000 Amps
- 5 Kilo-Amps
- 25 Kilo-Amps
- 100 Kilo-Amps

**Current Accuracy:**

- +/- 0.5% of reading + 0.5% of range continuous
- +/- 1% of reading + 1% of range pulse

**Timer Ranges:**

- 0-9999.999 Seconds
- 0-9999.9 Cycles

**Timer Accuracy:**

- +/- 0.5% of Reading +/- 1 Count

**Digital Voltmeter Input:**

- Range: 0-600 VAC
- Accuracy 1% of Full Scale

**Dimensions and Weight:**

- Height: 45.0 in. (114.3 cm)
- Width: 48.0 in. (121.92 cm)
- Depth: 27.25 in. (69.22 cm)
- Weight: 1125 lb. (429.23 kg)

**Serial Port:**

- Standard serial port for connection to printer, computer, or other device to print or store time and current values in ASCII format.

**Input Supply:**

- 208/240 or 480 VAC + 10%, -15% (Switch Selectable), Single Phase
- 60 Hz (50 Hz at 10% Lower Maximum Line Voltages)
- 45 KVA (Continuous) at 36 KVA Output (80% Efficiency)

**Standard Accessories:**

Accessory	Part #	Quantity
1/2 inch Stabs (horizontal or vertical)	M-I211	2 EA
3/4 inch Stabs (horizontal or vertical)	M-I212	2 EA
Contact Leads	S-B194	1 EA
Remote Initiate Cable	S-B143	1 EA
Power Input Lead Set (20 feet)	OP-120-2	1 EA
Rugged Accessory Case	M-E226	1 EA
Technical Manual	S-A119	1 EA



**Optional Accessories:**

Accessory	Part #
MAC Report Generator Software	OP-112
Universal Adjustable Stab System	OP-124
Series Output Bar	M-I213

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