

Portable High Current Circuit Breaker Test Systems

1000-5000 Amp Output

- Easy to operate
- Ruggedly constructed for years of field and shop use
- Designed using proven technology, these units combine a variable high current output with user-friendly controls and precision instrumentation

TESTING APPLICATIONS

- Ideal for testing thermal, magnetic, and solid-state motor overload relays, as well as molded-case circuit breakers and ground fault trip devices
- They can also be used in many other applications requiring a high current source

DESCRIPTION

Phenix Technologies' High Current Test Sets provide a short duration output through a typical molded-case circuit breaker when an instantaneous trip element must be tested. Sufficient current is available for testing time delay characteristics of motor overload relays and molded-case circuit breakers.

The unique auto-sensing feature makes the test set easy to operate. Sensing leads, which operate on either normallyopen or normally-closed (non-energized) devices, are connected to the test object auxiliary contacts or open breaker pole. The output current level can be easily preset. When the output is initiated, the preset output current locks on and the timer starts. When the test set senses a change in state of the test object auxiliary contacts (NO to NC or NC to NO), the current shuts off and the timer stops. For instantaneous trip tests, the memory feature of the currentmeter holds the peak current value until reset by the operator.

























	MODEL	HC1	HC2	HC3	HC5
INPUT	Voltage/Current	120 VAC, 20 Amp 230 VAC, 10 Amp	120 VAC, 20 Amp 230 VAC, 12 Amp	230 VAC, 25 Amp	230 VAC, 50 Amp
=	Frequency		50 Hz or 60 Hz (one	must be specified)	
OUTPUT	Voltage/Current	0-120 VAC, 5 A 0-24 VAC, 25 A 0-6 VAC, 120 A 0-3 VAC, 240 A	0-70 VAC, 25 A 0-14 VAC, 125 A 0-7 VAC, 250 A 0-3.5 VAC, 500 A	0-15 VAC, 0-200 A 0-7.5 VAC, 0-400 A 0-3.75 VAC, 0-800 A	0-15 VAC, 0-333 A 0-10 VAC, 0-500 A 0-5 VAC, 0-1000 A
ΑD		1000 A	2000 A	3000 A	5000 A
OVERLOAD		Short duration overloads are possible on each tap. The test set is capable of 1000 A (HC1), 2000 A (HC2), depending on the impedance of the test circuit.		Short duration overloads are possible on each tap. The test set is capable of 3000 A (HC3), 5000 A (HC5), depending on the impedance of the test circuit.	
ES.		Continuous @ 100%		Continuous @ 100%	
DUTY CYCLES		5 min ON/15 min OFF @ 200%		5 min ON/15 min OFF @ 200%	
∠ ∠		1 min ON/5 min OFF @ 300% 30 sec ON/5 min OFF @400%		1 min ON/10 min OFF @ 300% 10 sec ON/5 min OFF @400%	
DOT		3 sec ON/5 min OFF @ 500%		3 sec ON/5 min OFF @ 500%	
DIGITAL METERING	Currentmeter	3 1/2 digit LCD		4 1/2 digit LCD	
	Ranges	0-1.999/19.99/199.9/1999 A		0-1.9999/19.999/199.99/5000 A	
	Accuracy	+/-1% Full Scale up to 2 A		+/-1% Full Scale 0-2 A; 2000-5000 A	
L		+/-0.5% Full Scale 2-2000 A		+/-0.5% Full Scale 2-2000 A	
Ψ	Timer -	6 digit LCD, in cycles or seconds		6 digit LCD, in cycles or seconds	
DIG	Range Accuracy	0-999999 cycles or 0-9999.99 seconds +/-0.1% of reading +/- least significant digit		0-999999 cycles or 0-9999.99 seconds +/-0.1% of reading +/- least significant digit	
10					
SNS =	Length	20" (508 mm)	20" (508 mm)	21" (533 mm)	21" (533 mm)
IMENSION & WEIGHT	Width	16" (406 mm)	16" (406 mm)	22" (559 mm)	22" (559 mm)
DIMENSIONS & WEIGHT	Height Weight	14" (536 mm) 64 lbs (29 kgs)	14" (536 mm) 97 lbs (44 kgs)	46" (1168 mm) 219 lbs (99 kgs)	46" (1168 mm) 270 lbs (122 kgs)
SHIPPING SIZE	Length	24" (610 mm)	24" (610 mm)	34" (864 mm)	34" (864 mm)
	Width Height	21" (533 mm) 18" (457 mm)	21" (533 mm) 18" (457 mm)	27" (686 mm) 56" (1422 mm)	27" (686 mm) 56" (1422 mm)
SHI	Weight	74 lbs. (34 kgs)	112 lbs (51 kgs)	280 lbs (127 kgs)	320 lbs (145 kgs)
CABLES INCLUDED		Sense Leads (2) 5' (1.5 m)	Sense Leads (2) 5' (1.5 m)	Sense Leads (2) 8' (2.4 m)	Sense Leads (2) 8' (2.4 m)
		Low Current, 10 ga. (2) 5' (1.5 m)	Low Current, 10 ga. (2) 5' (1.5 m)	Low Current, 10 ga. (2) 6' (1.8 m)	Low Current, 10 ga. (2) 6' (1.8 m)
		High Current, 2 ga. (2) 5' (1.5 m)	High Current, 4 ga. (2) 5' (1.5 m)	Medium Current, 4 ga. (2) 4' (1.2 m)	Medium Current, 4 ga. (2) 4' (1.2 m)
CAB			High Current, 4/0 (2) 5' (1.5 m)	High Current, 4/0 (4) 2' (.6 m)	High Current, 4/0 (4) 2' (.6 m)

High Voltage • High Current • High Power Test Systems and Components





World Headquarters

Phenix Technologies, Inc.

75 Speicher Drive Accident, MD 21520 USA

Ph: +1.301.746.8118 Fx: +1.301.895.5570 Info@phenixtech.com

Branch Offices

Phenix Systems AG

Riehenstrasse 64, 4058 Basel, Switzerland Ph: +41.61.383.2770 • Fx: +41.61.383.2771 Info@phenixsystems.com

Phenix Asia

Zhong Cheng Rd, Sec 1, No 177, 2F, Taipei 11148 Taiwan Ph: +886.2.2835.9738 • Fx: +886.2.2835.9879

Info@phenixasia.com

