

# Portable High Current Circuit Breaker Test Sets

## 1,000-5,000 Amp Output



### 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

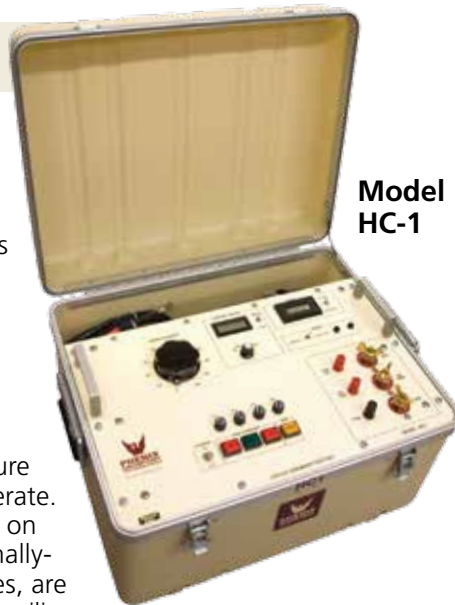
### Models Available

- HC-1
  - HC-2
  - HC-3
  - HC-5
- **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

### 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 normally-open 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  
HC-1



Model HC-5



	MODEL	HC-1	HC-2	HC-3	HC-5
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
OVERLOAD		1000 A	2000 A	3000 A	5000 A
		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.	
DUTY CYCLES		Continuous @ 100%		Continuous @ 100%	
		5 min ON/15 min OFF @ 200%		5 min ON/15 min OFF @ 200%	
		1 min ON/5 min OFF @ 300%		1 min ON/10 min OFF @ 300%	
		30 sec ON/5 min OFF @400%		10 sec ON/5 min OFF @400%	
		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	
		+/-0.5% Full Scale 2-2000 A		+/-0.5% Full Scale 2-2000 A	
	Timer	6 digit LCD, in cycles or seconds		6 digit LCD, in cycles or seconds	
	Range	0-999999 cycles or 0-9999.99 seconds		0-999999 cycles or 0-9999.99 seconds	
	Accuracy	+/-0.1% of reading +/- least significant digit		+/-0.1% of reading +/- least significant digit	
DIMENSIONS & WEIGHT	Length	20" (508 mm)	20" (508 mm)	21" (533 mm)	21" (533 mm)
	Width	16" (406 mm)	16" (406 mm)	22" (559 mm)	22" (559 mm)
	Height	14" (536 mm)	14" (536 mm)	46" (1168 mm)	46" (1168 mm)
	Weight	64 lbs (29 kgs)	97 lbs (44 kgs)	219 lbs (99 kgs)	270 lbs (122 kgs)
SHIPPING SIZE	Length	24" (610 mm)	24" (610 mm)	34" (864 mm)	34" (864 mm)
	Width	21" (533 mm)	21" (533 mm)	27" (686 mm)	27" (686 mm)
	Height	18" (457 mm)	18" (457 mm)	56" (1422 mm)	56" (1422 mm)
	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)
			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)



# PHENIX TECHNOLOGIES

## 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 62A, 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

