CB-360-DC
DC Circuit Breaker Test Set



- **Capable of testing electromechanical or thermal-magnetic trip devices with dc current**
- **Digital timer**
- **High-current output up to 30,000 amperes**

DESCRIPTION

The Model CB-360-DC DC Circuit Breaker Test Set is a mobile, high-current test set designed specifically for testing dc circuit breakers. It incorporates a variable high-current dc output, control circuitry, instrumentation, and overload and short-circuit protection.

APPLICATIONS

The Model CB-360-DC DC Circuit Breaker Test Set is designed to test low-voltage dc circuit breakers with dc current. The unit provides the capability of calibrating and functionally testing the time-delay characteristics of the electromechanical or thermal-magnetic trip devices on dc circuit breakers. This is accomplished by simulating an overload or fault condition on the circuit breaker.

FEATURES AND BENEFITS

- **Digital timer:** A specially designed, solid-state digital timer is incorporated to measure the elapsed time of the test in either seconds or cycles. It features extensive shielding and noise-suppression circuitry to ensure accurate and reliable operation under the most demanding field conditions. Accuracy of the timer, which incorporates a crystal-controlled oscillator, is independent of the power-line frequency.
- **Timer control circuit:** This circuit automatically starts the timer when the output is energized and automatically stops the timer and de-energizes the output when the device under test is operating. This circuit accommodates the following test conditions by simple switch selection of the appropriate mode.

  Current actuated: This mode is used to test a device that has no auxiliary contacts to monitor, such as a single-pole circuit breaker. The timer stops when the output current is interrupted.

  Normally closed: This mode is used to test a device with normally closed contacts. The timer stops and the output is de-energized when thecontacts open.

  Normally open: This mode is used to test a device with normally opencontacts. The timer stops and the output is de-energized when the contacts close.
- **Output connections:** To permit direct connection of many types of drawout-style circuit breakers to the test set, Model CB-360-DC is equipped with a stab adapter board and Model CBS-1 and Model CBS-2 stab sets.

  Please refer to the catalog entry for the Megger Circuit Breaker Stab Sets to determine the uses of the included stab sets. If the included stab sets will not test all breakers, refer to the Model CBS-3 optional stab set list.
- **Overload protection:** The test set is provided with circuit breakers, overload relays and fuses to protect it from extreme or prolonged overloads. Additionally, the output section is forced-air cooled and is equipped with a temperature-sensitive interlock switch that de-energizes the unit in the event of abnormal heating of the rectifiers.
- **Enclosures:** For safety and mobility, the test set is in a rugged, two-piece enclosure, each section having a low center of gravity, large locking casters and eye hooks for lifting.

SPECIFICATIONS

Input

Voltage: 460 V ± 5%
For other voltages and frequencies, contact Technical Sales.
Current: 100 A
Frequency: 60 Hz

Output

The output current is adjustable from zero up to the maximum available from the test set. The following output currents are available through typical modern circuit breakers that are directly connected to the test set using Multi-Amp stabs:

Output Current	Maximum Time On	Minimum Time Off
3750 A	15 min	15 min
10,000 A	21 s	5 min
20,000 A	5 s	3 min
30,000 A	1 s	2.5 min

Ammeter Circuit

The ammeter system is calibrated in dc amperes with an overall system accuracy of ±5% full scale, with balanced three-phase input to test set. The ammeter is equipped with non-reflective glass, mirrored scale, knife-edge pointer and preset mechanism to aid in measuring currents of short duration.
Scales: 5/10/25

Ranges (switch-selected)
0 to 500/1000/2500/5000/
10,000/25,000/50,000 A dc

Digital Timer

Display: 6-digit display with 0.38-in. (9.5-mm) numerals
Ranges (switch-selected)
- 0 to 99.9999 s
- 0 to 9999.99 s
- 0 to 99999.9 cycles

Accuracy

Seconds Mode: ± least significant digit (0.0001 or 0.01 depending on range in use) or ±0.0025% of reading, whichever is greater
Cycles Mode: ±0.5 cycle

Dimensions

Control Section
45 H x 53 W x 30 D in.
(114 H x 135 W x 76 D cm)

Output Section
45 H x 54 W x 30 D in.
(114 H x 137 W x 76 D cm)

Weight

Control Section: 1460 lb (663 kg)
Output Section: 1585 lb (720 kg)

ORDERING INFORMATION

Item (Qty)	Cat. No.
Model CB-360-DC DC Circuit Breaker Test Set	CB-360-DC
Included Accessories	
Standard stab sets	CBS-1 and CBS-2
Continuity test leads, 12 ft [3.7 m] (1 set)	2998
Timer leads, 12 ft [3.7 m] (1 set)	2997
Input leads, 15 ft, 4/0 cable (3)	17163
Ground interconnect, #6 cable	2979
Interconnect cables (3)	17170
Lifting eyebolts, 0.625 in. (8)	1161
Fuses	
600 V, 1.5 A KTK (2)	2822
600 V, 10 A KTK (1)	977
250 V, 1.5 A MDA (5)	950
250 V, 30 A FRN (3)	912
Instruction manual (1)	10724