

# AMMCB-500

HIGHEST ACCURACY & LOWEST COST



Molded Case Circuit Breaker and Relay Tester

## AMMCB-500

3-Current Source Output

Instantaneous output of 2600A – for testing higher fault currents

Testing Molded-Case Circuit Breakers

Testing Thermal, Magnetic, Or Solid-State Relays

LCD screen

amperis

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The AMCCB-500 is a microprocessor-based high current circuit breaker test set. This unit provides a variable high current source, control, metering, and timing circuitries for testing overload relays and thermal and magnetic circuit breakers.

### Current Source

The AMCCB-500's current source has 3 outputs: 500A @ 4 Vac, 125A @ 14Vac, and 25A @ 70Vac. The current sources can output short-duration overload conditions. This feature is convenient for performing instantaneous trip tests of molded case circuit breakers, or testing the time delay characteristics of magnetic overload relays.

Test current is measured and displayed on a 128 x 64 pixel back-lit LCD screen that is clearly visible in direct sun light or low light levels. Control switches are used to turn the current source on and off, select the timer stop input type (current mode, dry contact, or wet contact), and control the LCD contrast.

A "momentary" mode can turn on the current source, capturing the current reading and displaying the value on the LCD. This feature can be used to set the test current and minimizes the possibility of overheating the device under test.

Test current is turned on at the zero crossing point using a solid state device for reliability and precision timing.

### Current Source Thermal Protection

Built in thermal sensor allows the microprocessor to monitor the transformer current source operating temperature.



### Built-in Timer

The AMCCB-500's built-in timer displays the test results in milliseconds and cycles. The cycle time (50 or 60 Hz) is selectable by the user. Timer reading range is from 0.1 ms to 2 hours. Timer resolution is 0.1 ms and the timer accuracy is  $\pm 0.1\%$  of reading,  $\pm 0.1$  ms.

### Built-in Current Meter

The AMCCB-500 features a built-in current meter that displays the test current (100mA - 3000A). Current reading accuracy is:  $\pm 1\%$  of reading,  $\pm 2$  digits. Test results (current reading and time) are retained after performing a test so that the test results can be reviewed. This is a convenient feature when used with the momentary mode to preset the test current to avoid overheating the circuit breaker.

**Timer Start Mode:** Timer can be started when the current source is turned on or off.

**Timer Stop Mode:** Timer can be stopped with the removal of the test current or detection of a status change of dry contact or voltage input.

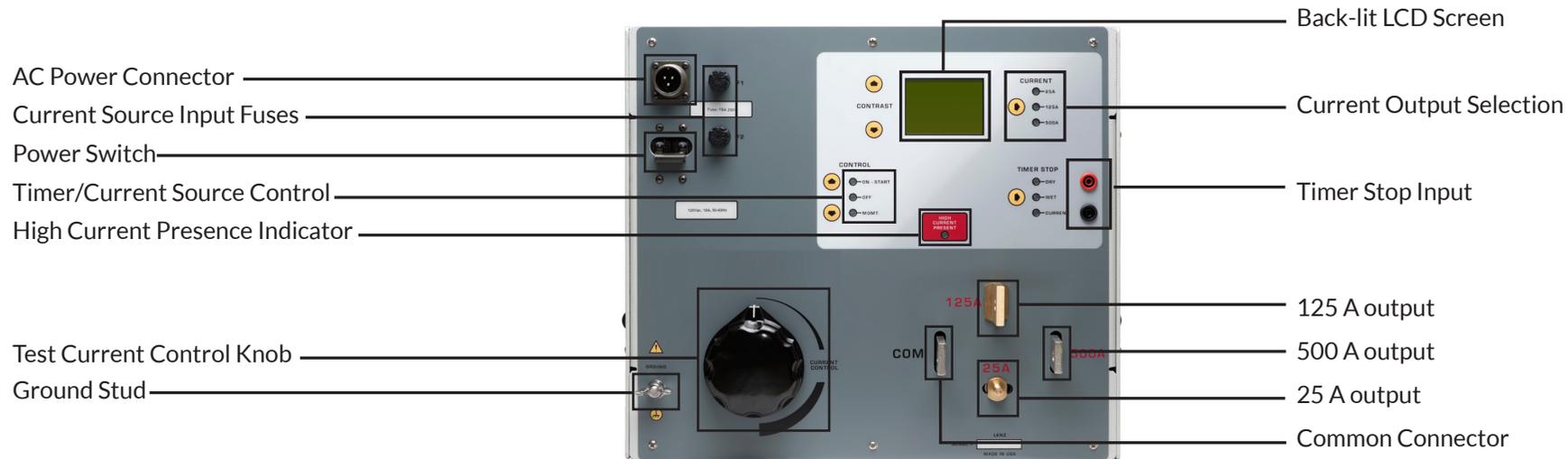


Sample Test Results Screen

AMCCB-500 Output Current and Duration Table

Current	Max On time	Max Off time
40% (200 A)	Continuous	Continuous
100% (500 A)	30 minutes	30 minutes

## AMCCB-500's Controls



## AMCCB-500's Specifications

<b>Type</b>	500 Ampere current source
<b>Physical specifications</b>	16"W x 14"H x 13" D (40.6 cm x 35.5 cm x 33 cm). Weight: 93 lbs. (42.2 Kg)
<b>Input power</b>	100 - 120 Vac or 200 - 240 Vac (factory pre-set), 50/60 Hz
<b>Output currents</b>	500A @ 4V, 125A @ 14V, 25A @ 70V
<b>Internal current meter</b>	1 A - 3000A; accuracy: 1% of reading, $\pm 2$ digits
<b>Measurement method</b>	Isolated CT
<b>Timer reading range</b>	0.1ms - 2 hours (also displayed in cycles); accuracy: 0.1% of reading, $\pm 0.1$ ms
<b>Timer stop inputs</b>	voltage input (20V - 300V, dc or peak ac), dry contact input, or removal of test current
<b>Display</b>	back-lit LCD screen (128 x 64 pixels); viewable in bright sunlight and low light levels
<b>Safety</b>	Designed to meet IEC61010 (1995), UL61010A-1, CSA-C22.2 standards
<b>Environment</b>	Operating: -10°C to +50°C (+15°F to +122°F); Storage: -30°C to +70°C (-22°F to +158°F)
<b>Humidity</b>	90% RH @ 40°C (104°F) non-condensing
<b>Altitude</b>	2000 m (6,562 ft) to full safety specifications
<b>Cables</b>	two 5-foot (1.5m) #2/0 current cables, two 8-foot (2.5m) external timer input cables with alligator clips, one ground cable, one power cord
<b>Furnished accessories</b>	Transportation case
<b>Warranty</b>	1 year on parts and labor

NOTE: the above specifications are valid at nominal voltage and ambient temperature of +25°C (+77°F). Specifications are subject to change without notice