

CBT-3500

HIGHEST ACCURACY & LOWEST COST



Digital Circuit Breaker Analyzer

CBT-3500

Open, Close, Open - Close and Close - Open.

Timing a breaker's contact and relays (V_{trigger} : 30-300V).

LCD screen, "QWERTY" keypad, printer and USB Interface.

Store up to 128 test records.

amperis

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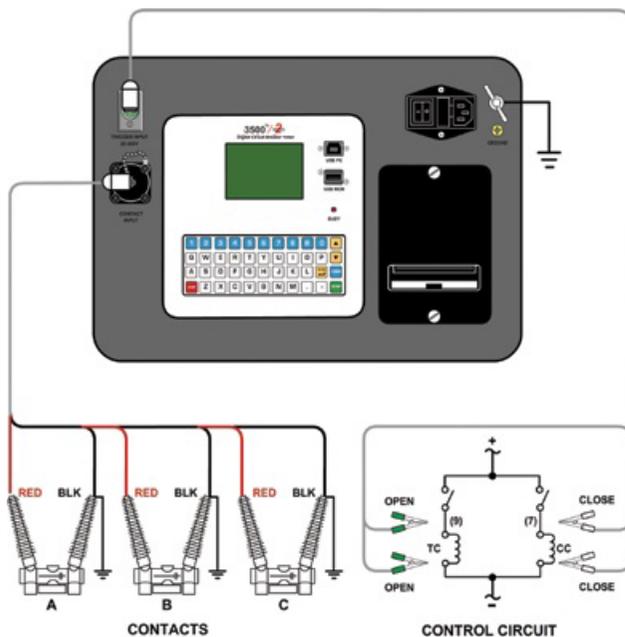
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The CBT-3500 is Amperis' second generation, stand-alone, digital, microprocessor controlled, circuit-breaker timer. It measures the elapsed time from the instant a breaker coil is energized to the instant of opening or closing of a circuit-breaker's dry contacts. In addition to timing a breaker's contact response time, the CBT-3500 can also time relays or other switching functions that use an initiating trigger voltage (30 - 300 Volts DC or AC). The timer-triggering voltage starts three independent electronic timers. Each timer is individually stopped by its respective dry-contact closing or opening. The CBT-3500 can fully analyze the timing of all circuit breaker operations (Open, Close, Open - Close, and Close - Open). Timing results are displayed in milli-seconds and cycles on the unit's back-lit LCD screen and can be printed on the built-in 2.5-inch wide thermal printer.

CBT-3500 Connections



Contact Timing Inputs

The CBT-3500 features three dry-contacts, timer-channel monitoring inputs. The dry-contact channel power supply is fuse-protected. All inputs are shunted to ground until the instant a test is initiated. All contact timing inputs are protected against static discharge. A contact self-test cable-mode is also available for testing cables or connections to the breaker.

User Interface

The CBT-3500 features a back-lit LCD screen (128 x 64 pixels) that is viewable in both bright sunlight and low-light levels. A rugged, 44-key, "QWERTY" membrane keypad is used to control the unit and input data. The unit's built-in 2.5-inch wide thermal printer can be used to print test reports.

Internal Test Record Storage

The CBT-3500 can store up to 128 test records in Flash EEPROM. Test records can be retrieved and printed on the built-in thermal printer, or they can be transferred to a PC via the unit's USB interface. The USB interface can also be used for diagnostic testing and for updating firmware. The CBT-3500 also features a USB Flash drive interface that can be used to store test records on an external USB Flash drive.

A Windows®-based Circuit Breaker Analysis application is provided with each unit and can be used to transfer test records to a PC. Test records can also be reviewed, printed or exported in Excel, PDF, and XML formats for further analysis.

CBT-3500's Controls



CBT-3500's Specifications

Type	Portable digital circuit-breaker analyzer
Physical specifications	16"W x 7"H x 13" D (40.6 cm x 17.4 cm x 33 cm). Weight: 14 lbs. (6.4 Kg)
Input power	100 - 240 vac, 50/60 hz
Dry-contact inputs	3 channels
Trigger input voltage	Open/close: 30 ~ 300 V, DC or peak AC
Breaker operations	Open, close, open-close, close-open
Timing resolution	±0.1 millisecond; accuracy: 0.05% of reading ±0.1 ms
Display	Back-lit LCD screen (128 x 64 pixels); viewable in bright sunlight and low light conditions
Keypad	Rugged, 44-key "QWERTY" membrane keypad
Printer	Built-in 2.5-inch wide thermal printer
Internal test record storage	Stores up to 128 timing records
Computer interface	One USB PC interface, one USB Flash drive interface
Pc software	Windows® based Breaker Analysis software included with purchase price
Safety	Designed to meet IEC61010 (1995), UL61010A-1, CSA-C22.2 standards
Environment	Operating: -10°C to +50°C (+15°F to +122°F); Storage: -30°C to +70°C (-22°F to +158°F)
Humidity	90% RH @ 40°C (104°F) non-condensing
Altitude	2,000 m (6,562 ft) to full safety specifications
Included Accessories	Furnished with full set of test leads (including 20-foot contact leads and 30-foot contact lead extensions). Cable carrying bag
Optional accessories	Transportation case
Warranty	1 year on parts and labor

CBT-3500 Thermal Printer Report

TEST RESULTS			
DATE: 04/16/12		TIME: 06:50:23	
COMPANY:			
STATION:			
CIRCUIT:			
MFR:			
MODEL:			
S/N:			
KVA RATING:			
OPERATOR:			
NOTES: _____			
TEST: OPEN			
CONTACT OPEN TIME			
CH	TIME (ms)	CYCLE 50 Hz	BOUNCE (ms)
A	15.80	0.79	0.00
B	15.90	0.79	0.00
C	15.80	0.79	0.00
DELTA TIME (ms) =			0.10

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