

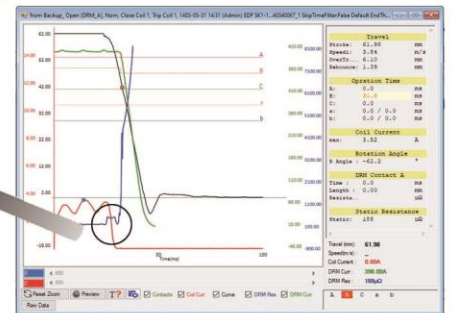
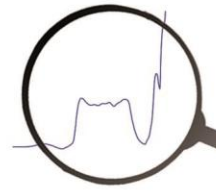
CBA50

Circuit Breaker Analyzer System

سیستم تست کلیدهای قدرت با قابلیت DRM



A complete toolbox for simultaneous testing and analysis of the time, motion, and resistance performance (static and dynamic) of circuit breakers.



Tests

- Timing Test: Contact Closing/ Opening time, Out of sync, Bounce, etc.
- Travelling Test: Curve of contact movement, Closing/ Opening speed, Overtravel, Rebound, etc.
- Dynamic Contact Resistance Measurement(DRM): Curve of dynamic resistance during opening operation, calculating Resistance, Length and Time of arcing contact, curve of applied current
- Static Contact Resistance Measurement
- Electrical Equipment Test: Curve of coil and motor current, spring charge time, anti-pumping and under-voltage relays test, current of blocking coil and heater, etc.
- Special tests: For contactors and non-operating mechanism breakers
- Calculating Minimum Voltage Of Coil Operation

Features

- Linear and rotary (encoder) sensor inputs
- Applying 400A DC current, Resistance measurement range from $1\mu\Omega$ to 130m Ω
- Portable and heavy-duty case
- Thermal printer
- BTSoft10-Powerful software:
 - o Controlling all tests and necessary operations
 - o Graphical results for quick interpretation
 - o Extremely reliable and easy to use

Applications

- Circuit breaker manufacturers
- Power transmission, distribution repair and maintenance companies
- Electrical power plant EPC companies
- Electrical power labs
- Big factories e.g. Steel, petrochemicals, refineries, and...

CBA50 Specifications

**Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F).
Specifications are subject to change without notice.**

General

Type	Portable Circuit Breaker Analyzer with Dynamic/ Static Contact Resistance Metering
Main Voltage	220V AC , 50 Hz
Dimensions (L x W x H)	Basic Unit: 2 x (460 x 330 x 120 mm)
Weight	2 Basic Unit: 10.5 kg and 9 kg

Resistance Metering Operation

Resistance Measurement Range	1μΩ To 16mΩ (±1 μΩ) 10μΩ To 130mΩ (±10 μΩ)
Output Test Current	30 to 400 A DC
Output Voltage	Up to 5 V DC
Accuracy	±1% reading ± 1dgt
Sampling Frequency	10 kHz
Maximum Continuous Test Time (With Thermal Protection)	15 Seconds @ 200 A, 25°C Ambient 3 Seconds @ 400 A, 25°C Ambient

Breaker Analyzer Operation

Sequences (C: Close, O: Open)	C , O , C-O , C-T-O , O-T-C , O-T-C-O
Close / Open1 / Open2 Coil Voltage And Current	0-250V AC/DC (Set Automatically) , 50 Hz , 10A
Motor Voltage And Current	0-250V AC/DC (Set Automatically) , 50 Hz , 10A

Time Measurement

Contact Inputs	16 Input Channels (3 Main , 13 Auxiliary)
Time Spring Charge Range	40 s
Resolution	0.1 ms
Inaccuracy	0.01% Of Printed Value ± 0.1 ms
Start Time Measurement	With Operation Mechanism (Coil Energizing) Without Operating Mechanism (With the start of movement or change in the main contact)
Time Difference Between Control Pulse And Timer Start	< 0.1 ms

Motion Analyzer

Measurement Resolution	< 0.1 mm
Basic Inaccuracy	0.5%
Time-Base Inaccuracy	0.02%
Sampling Frequency	10 kHz
Analog Travel Transducer Input	One Resistive Transducer / 100 Ω to 10 kΩ
Digital Travel Transducer Input	One Rotary Encoder / 2500 Pulse/r

CE Marking

BT12D	EMC 2004/108/EC LVD 2006/95/EC
MOM400D (@ 200A)	EMCD 2014/30/EU

Environment

Operating Temperature	-20 to 55 °C (-4 to 131 °F)
Storage Temperature	-30 to 70 °C (-22 to 158 °F)
Humidity	20% – 95% RH , Non-Condensing

Miscellaneous

Storage Capacity For Over 96 Test Records, 500 Ohm Value and 140 Ohm Curve
Internal Thermal Printer
USB and RS-232 Interface
PC Software

Accessories

Motor Test Lead Set (4 x 4m) 	Coil Test Lead Set (5 x 4m) 
Main Contacts Test Lead Set (3 x 8m with Clamps) 	Current Test Lead Set (2 x 4m with Clamps) 
Voltage Test Lead Set (2 x 4m with Clamps) 	Earthing Cables (2 x 4m with Clamps) 
	Trig Cable (1m) 
2 x (Case Cover & Cable Bag) 	2 x (Power, USB & RS232) Cables 

One Year Warranty, Five Years After Sales Services