

CIBRE-30 SERIES 3-CONTACT CIRCUIT BREAKER ANALYSER



CIBRE-30, 3-Contact Circuit Breaker Analyser is designed using advanced engineering technology to test contact timings of circuit breakers. CIBRE-30 has fast, easy and accurate measurement features through its user-friendly software. CIBRE-30 is a battery-powered device (optional feature), allowing users to perform tests even without a power supply during field tests.

Contact Timing Tests

Contact timing tests are performed to compare the breakers' main & resistor contact performance against the manufactures specifications. The breakers OPEN, CLOSE, OPEN-CLOSE, CLOSE-OPEN & OPEN-CLOSE-OPEN operations are timed in milliseconds (ms) and cycles and then compared with the manufacturers' specifications to determine the performance of the circuit breaker.

Motion Tests

CIBRE-30 can use to perform motion tests such as Transducer Speed, Stroke and Bounce. Slower transducer speed can reduce the breaking capacity of the main contact, while faster speed can cause mechanical damage to the damping components and cause excessive vibration. So it is necessary to test the transducer speed to compare it with the manufacturer's specifications.

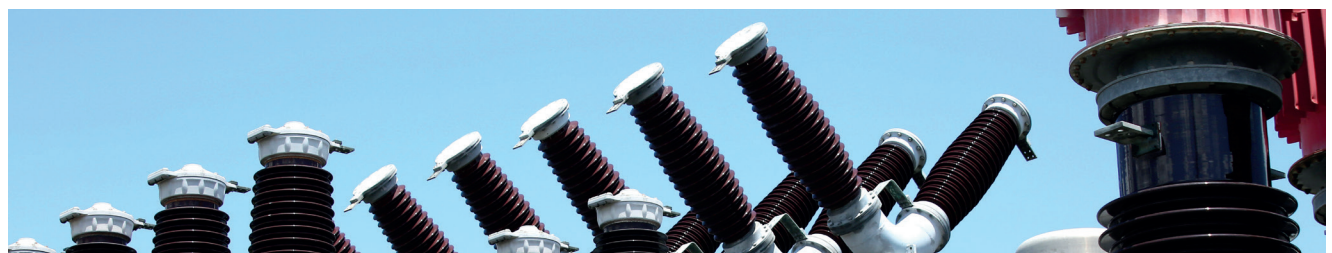
The HighTest data management platform (DMP Software) can also be used to analyse the test reports produced by CIBRE-30 on a PC, and the measurement results can be easily exported and stored on the PC.

CIBRE-30 features a 7-inch large colour touch display, which is visible under bright sunlight and dim light conditions. Operators can easily print the measurement results with the 2.28-inch built-in printer of CIBRE-30. The results can also save to a USB flash drive or the device's internal memory. Multi-language capability and user-friendly operation menu make it easy to control CIBRE-30.

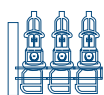
Despite its impressive capabilities, the CIBRE-30 Series remains compact and robust, boasting an IP67 protection class when the case is closed. Weighing in at a just 8 kg, this device is your lightweight, portable solution for Timing Tests that delivers uncompromising accuracy and efficiency.

Why do we need to test circuit breakers?

It is essential to test circuit breakers regularly. Contact Timing Tests and Motion tests are performed to determine the optimal performance of the breakers. The testing can determine improper breaker operations in case of system fault and improve system reliability.



DEVICE HIGHLIGHTS



Internal & External Triggered Operations

Breaker can be operated by CIBRE-30's internal trigger output or external trigger output.



Optional Rechargeable Li-Ion Smart Battery

CIBRE-30 comes with a 14.4V Li-Ion smart battery option which enables you to make tests while on field. CIBRE works on both main power and consuming battery power.



7-inch TFT Colour Touch Screen

CIBRE-30 has a built-in 7-inch TFT Colour Touch Screen which is visible under both bright sunlight and dim lit environment.



2.28-inch Built-in Thermal printer

CIBRE's built-in thermal printer let you print the results immediately during field test.

FEATURES

- Contact Timing (O, C, O-C, C-O and O-C-O)
- Motion Tests (Transducer Speed, Stroke, Bounce)
- 3 Dry Contact Inputs
- Timing Accuracy: 0.05% rdg ± 0.1 ms
- Timing Windows: 1s, 10s & 20s
- Contact Detection Range: Closed ≤20 Ω & Open ≥5000 Ω
- Optional Battery & Bluetooth Communication
- 2.28" Built-in Thermal Printer











TECHNICAL SPECIFICATIONS

Measurement Parameters	Contact Timing (O, C, O-C, C-O & O-C-O), Motion Tests (Transducer Speed, Stroke, Bounce)		
Dry Contact Inputs	3 dry input channels (each detects main) and insertion resistor contacts		
Timing Windows	1s, 10s, 20s		
Timing Resolution	1 s duration	10 s duration	20 s duration
	± 50 μs	± 500 μs	± 1 ms
Timing Accuracy	0.05% rdg ± 0.1 ms		
Dry contact channel protection	Fuses and Diodes protection, All contacts grounded until test		
Contact detection range	Closed	≤20 Ω	
	Open	≥5000 Ω	
Resistor detection range	20Ω - 5000Ω		
Trigger input voltage	24 - 300 V DC or AC _{peak}		
Trigger Types	Internal Trigger, External Trigger		
Breaker Operations	OPEN, CLOSE, OPEN-CLOSE, CLOSE-OPEN, OPEN-CLOSE-OPEN		
Voltage sensing input range	V1 (Analogue Input)	V2 (Presence/Absence Detector)	
	0 - 250 V DC or AC _{peak}	24 - 300 V DC or AC _{peak}	
Breaker Initiate Capacity	20 A, 300 V DC or AC _{peak}		
Digital Travel Transducer Input	5V/12Vdc TTL		
Initiate current reading range	0 - 20A DC, 5 kHz		
Input Power	100-240 V, 47/63 Hz		
Built-in Battery	Yes, 14.4 Vdc 6.9 Ah (Optional; Models: CIBRE-30B, CIBRE-30B BLUE)		
Display	7-inch Colour Touch Display		
Memory	Up to 200 records		
Communication	USB 2.0/1.1 Standard-A, USB 2.0/1.1 Standard-B Bluetooth (Factory install option; Models: CIBRE-30 BLUE & CIBRE-30B BLUE)		
Dimensions	16.9" x 12.9" x 9.3" (429 mm x 328 mm x 236 mm)		
Weight	8.2 kg (models with battery)		
Temperature	Working: -10 °C to +60 °C ; Storage: -30 °C to +70 °C		
Humidity	95% RH non-condensing		
Protection Class	IP67 (case closed)		
Scope of Supply	5m Contact Cable, 10m Contact Extension Cable, 3m Initiate Cable, 3m Initiate Extension Cable, 3m External Trigger Cable, 3m External Trigger Extension Cable, 3m Voltage Measurement Cable, 3m Voltage Measurement Extension Cable, Power Cable, Ground Cable, USB Cable, Printer Paper (x2), USB flash drive, Instruction Manual (Soft Copy), Cable Bag		
Options	325 mm Linear Encoder, Rotary Encoder, Battery, Bluetooth, Hard Carrying Case		

Specifications are valid at/under 25 °C temperature. *Content subject to change without notice.

ORDERING INFORMATION

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| CIBRE-30  | 3-Contact Circuit Breaker Analyser with Built-in Printer |
| CIBRE-30 BLUE   | 3-Contact Circuit Breaker Analyser with Built-in Printer & Bluetooth |
| CIBRE-30B   | 3-Contact Circuit Breaker Analyser with Built-in Printer & Battery |
| CIBRE-30B BLUE    | 3-Contact Circuit Breaker Analyser with Built-in Printer, Battery & Bluetooth |