

Safe Circuit Breaker Test with Both Sides Grounded

- Option for ISA Circuit breaker Analyzers CBA 1000 and CBA 2000.
- Work safely while testing.
- Save circuit breaker testing and analysis time.
- Preserve all timing and motion test integrity.
- BSG 1000 allows the test of circuit breakers using Graphite Nozzle.
- This method applies to all kinds of circuit breakers.

I N T R O D U C T I O N

With the BSG option it is possible to perform the circuit breaker timing test with both sides grounded.

The grounding connection is NOT removed during the test, as it has to be with conventional test equipment.

Safety is becoming more and more important, and several laws and regulations all around the world prescribe that, at the work location in high voltage installation, all parts which are to be worked on, shall be earthed (grounded) and short circuited. While testing a Circuit Breaker in high voltage substations the situation may become dangerous due to the high electric potential. This can be caused by a capacitive coupling from a close conductor or when lightning strikes the line somewhere, or when a fault occurs during the test and a high potential reaches the circuit breaker.

To improve personnel safety, reduce hooking time and preserve the test set integrity, the use of BSG 1000 is the best practice.

BSG 1000 is also the best solution for testing Circuit Breakers equipped with Graphite Nozzles.



DESCRIPTION

Two BSG 1000 types are available:

- BSG 1000- type 1 for testing one break per phase;
- BSG 1000- type 2 for testing two breaks per phase.

Each BSG 1000 is made of the following elements:

- . Three BSG Remote Heads, connected close to the main breaker contacts.
- . *Remote Heads for BSG 1000- type 1:*
 - . Each head has two cables, 2.5 m long, cross section 4 mm², terminated with crocodile clamps.
 - . One bipolar shielded cable, 3 m long, terminated with crocodile clamps.
 - . One 8 m long cable, terminated with multi-pole connectors for the connection between Remote Heads and the BSG Main unit.
- . *Remote Heads for BSG 1000- type 2:*
 - . Each head has three cables, 2.5 m long; cross section 4 mm², terminated with crocodile clamps.
 - . Two bipolar shielded cables, 3 m long, terminated with crocodile clamps.
 - . One 8 m long cable, terminated with multi-pole connectors for the connection between Remote Heads and the BSG Main unit.
- . One BSG Main unit, connected to the CBA 1000 or CBA 2000 circuit breaker analyzer.
- . Connection of BSG Main Unit to CBA 1000: via a cable 1 m long, terminated with a multi-pole connector.



BSG 1000 - Remote Head, type 1

SPECIFICATION

- . Number of main contact inputs (type BSG 1000-1): 3, divided in three groups.
- . Number of main contact inputs (type BSG 1000-2): 6, divided in three groups of two each.
- . Test current injection: 20 A DC nominal.
- . Maximum test duration (each test): 1 s
- . Graphite nozzles test selection in the menu.



CBA 1000 connected to BSG 1000

Mains supply

- . From 85 to 265 V AC; 50-60 Hz, and:
- . From 100 to 350 V DC.
- . Maximum supply current: 1 A @ 85 V AC.

Weight and dimensions

BSG 1000 main unit

- . Case: aluminium case, with hinged removable cover and handles.
- . Weight: 6 kg
- . Dimensions: 325 x 180 x 285 (W x H x D)

BSG 1000 remote heads (three units)

- . Case: die-cast aluminium case.
- . Weight: 0,7 kg (without cables)
- . Dimensions: 125 x 56 x 125 (W x H x D)

BSG 1000

ORDERING INFORMATION

CODE	MODULE
22166	BSG 1000 One break per phase including: . No 3 BSG Remote Heads Type1 . No 1 BSG Main unit . No 1 Cables kit
21166	BSG 1000 Two breaks per phase including: . No 3 BSG Remote Heads Type2 . No 1 BSG Main unit . No 1 Cables kit
17166	Heavy duty plastic transport case for BSG 1000

The document is subject to change without notice.



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