

Coil Tester & Breaker Supply POB30D

- Lightweight only 8 kg
- Powerful up to 30 A
- Voltage 10 V to 300 V DC
- Ripple free (true DC) voltage
- Output protection
- Fully automatic operation



Powerful DC power supply for a circuit breaker test

POB30D is a variable DC voltage power supply unit ideal for testing circuit breakers, where substation battery is not connected or available. The POB30D is intended to operate breaker coils, and spring charging motors as a part of commissioning and maintenance testing.

POB30D generates true DC (ripple free) and can test minimum trip voltage of power circuit breakers. Output voltage is selectable from 10 V to 300 V DC.

The POB30D is powerful and versatile unit, with possibility to generate at 230 V mains supply initial current of 30 A as well as continuous current according to the tables below:

Mains Voltage	Load Voltage	Max Current	Max load interval
230 V	110 V DC	24 A 20 A 10 A	20 sec 60 sec continuous
230 V	220 V DC	12 A 10 A 7 A	20 sec 60 sec continuous
445.V	110 V DC	12 A 10 A 7 A	20 sec 60 sec continuous
115 V	220 V DC	7 A 6 A 5 A	20 sec 60 sec continuous

The set is equipped with thermal and overcurrent protection. POB30D is easy to use and has accessory cable-set with touch-proof contacts.

The POB30D has very high ability to cancel electrostatic and electromagnetic interference in HV electric fields. It is achieved by very efficient filtration. The filtration is made utilizing proprietary hardware and software.



Applications

POB30D is developed for use in switchyards, electric power and industrial environment. An important part of commissioning and maintenance testing is a circuit breaker testing. POB30D is possible to use for:

- √ operating circuit breakers
- √ supplying spring-charging motors
- √ minimum trip voltage-test of the circuit breaker's coils

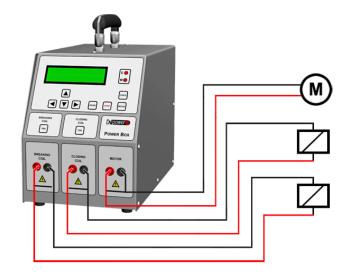
The POB30D have built-in capability to perform automatic test of minimum trip voltage. The minimum trip voltage test is described in a number of international and national standards such as IEC 62271-100, ANSI C37.09 etc. Many other important parameters are possible to test with a breaker analyzer. POB30D is then used as a power supply unit. It is compatible with breaker analyzers from different vendors. POB30D can also be used as general power supply unit or temporary battery charger.

Automatic testing of the minimum trip voltage of a breaker

Procedure steps:

- 1. Make certain that the mains are de-energised on both sides of the breaker, safety grounded and that local safety regulations are followed.
- 2. Connect Power supply unit POB30D to the breaker's coil circuit.
- 3. Set the minimal test voltage.
- 4. Set the step voltage.
- 5. Set the maximal voltage.
- 6. Press TRIG button.

Connecting a test object to POB30D





Included accessories

- √ Mains power cable
- √ Ground (PE) cable

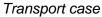
Recommended accessories

- √ Cable set 6 x 2 m 2,5 mm²
- √ Device bag
- √ Cable bag

Optional accessories

- √ Cable set 6 x 5 m 2,5 mm²
- √ Transport case







Cable set

Ordering information:

Art.No.	Description
POB30D-N-00	POB30D device with ground cable
C6-02-02BPBP	Cable set 6 x 2 m 2,5 mm2
DEVIC-BAG-00	Device bag
CABLE-BAG-00	Cable bag*

Art.No.	Description
C6-05-02BPBP	Cable set 6 x 5 m 2,5 mm2
HARD-CASE-00	Transport case



Technical data

1 - Mains Power Supply

- Connection according to IEC/EN60320-1; UL498, CSA 22.2

- Voltage single phase 110 V – 240 V AC, +10% - –15%

- Frequency 50/60 Hz

2 - Output data

Coils output DC VoltageMotor output DC Voltage10 V to 300 V DC10 V to 250 V DC

- Output current max 30 A

3 - Measurement

Voltage
Current
10 V – 300 V DC
1 A – 50 A

- Accuracy $\pm (0.5 \% \text{ rdg} + 0.5 \% \text{ FS})$

4- Environment conditions

- Operating temperature $-10^{\circ}\text{C} - +55^{\circ}\text{C} / 14^{\circ}\text{F} - +131^{\circ}\text{F}$ - Storage and transportation $-40^{\circ}\text{C} - +70^{\circ}\text{C} / -13^{\circ}\text{F} - +158^{\circ}\text{F}$

- Humidity 5 % – 95 % relative humidity, non-condensing

5 - Dimensions and Weight

- Dimensions 198 mm x 255 mm x 380 mm

7,8 in x 10 in x 15 in

(W x H x D) without handle

- Weight 9 kg / 19,8 lbs

6- Mechanical protection IP43

7- Warranty three years

8 - Safety Standards

- European standards LVD 2006/95/EC

EN 61010-1

- International standards IEC 61010-1

UL 61010-1

CAN/CSA-C22.2 No. 61010-1, 2nd edition, including Amendment 1

9 - Electromagnetic Compatibility (EMC)

- CE conformity EMC directive 2004/108/EC

- Emission EN 61326-1 - Immunity EN 61326-1

All specifications herein are valid at ambient temperature of + 25 °C and recommended accessories. Specifications are subject to change without notice.