



Power Box POB30D

- Lightweight - only 8kg
- Powerful – up to 35A
- Voltage 10V to 300V DC
- Ripple free DC-voltage
- Output protection
- Fully automatic operation



Powerful DC power supply for a circuit breaker test

POB30D is a power supply unit employing the latest power electronics technology. POB30D generates ripple free DC-voltage and it is developed for regular maintenance tests of power circuit breakers. Output voltage is selectable from 10V to 300V DC.

The POB30D is powerful and versatile unit, with possibility to generate at 230V mains supply initial current of 35A as well as continuous current according to the table below:

| Load Voltage | Mains Voltage | Max Current | Max load |
|--------------|---------------|--------------------------|---|
| 48V | 230V | 32A 26A 22A 10A | 2 sec 30 sec 90 sec continuously |
| | 115V | 32A 26A 22A 10A | 2 sec 30 sec 90 sec continuously |
| 110V | 230V | 30A 24A 20A 9A | 2 sec 30 sec 90 sec continuously |
| | 115V | 18A 14A 12A 5A | 2 sec 30 sec 90 sec continuously |
| 220V | 230V | 15A 12A 10A 5A | 2 sec 30 sec 90 sec continuously |
| | 115V | 9A 7A 6A 3A | 2 sec 30 sec 90 sec continuously |

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:

- ✓ minimum trip voltage-test of the circuit breaker's coils
- ✓ supplying spring-charging motors
- ✓ power supply at test with breaker analysers

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 analyser. POB30D is then used as a power supply unit. It is compatible with breaker analysers 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:

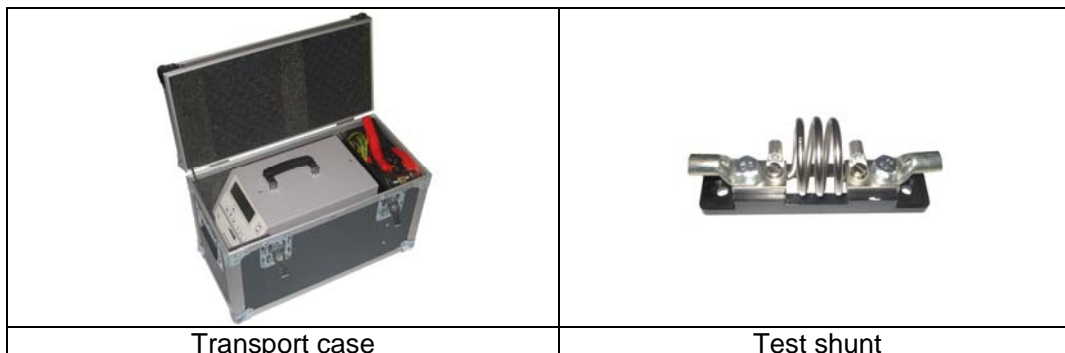
1. Make certain that the mains are de-energised on both sides of the breaker, safety grounded and that local safety regulations are followed.
2. Connect Power supply unit POB30D to the breaker's coil circuit.
3. Set the minimal test voltage.
4. Set the step voltage.
5. Set the maximal voltage.
6. Press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

Standard accessories

- ✓ Cable set 6x2m 2,5mm²
- ✓ Mains power cable
- ✓ Ground (PE) cable
- ✓ Transport case

Optional accessories

- ✓ Cable set 6x5m 2,5mm²
- ✓ Test shunt 50A/100mV



Technical data

1 - Mains Power Supply

- Connection according to IEC/EN60320-1; UL498, CSA 22.2
- Voltage single phase 110 - 240V AC, +10% - -15%
- Frequency 50/60Hz

2 - Output data

- Coils output DC Voltage 10V to 300V DC
- Motor output DC Voltage 10V to 250V DC
- Output Current max 35A

3 - Measurement

- Voltage 10V - 300V DC
- Current 1A - 50A
- Accuracy $\pm(0,5\% \text{ rdg} + 0,5\% \text{ FS})$

4- Environment conditions

- Operating temperature $-10^{\circ}\text{C} - +50^{\circ}\text{C} / 14^{\circ}\text{F} - +122^{\circ}\text{F}$
- Storage and transportation $-25^{\circ}\text{C} - +70^{\circ}\text{C} / -13^{\circ}\text{F} - +158^{\circ}\text{F}$
- Humidity 5% – 95% relative humidity, non-condensing

5 - Dimensions and Weight

- Dimensions 198 x 255 x 380mm
7,8 x 10 x 15in
(W x H x D) without handle
- Weight 8kg/17,5lbs

6- Mechanical protection

IP 43

7- Warranty

two years

8- Safety Standards

- European standards EN 61010-1
- International standards IEC 61010-1
UL 3111-1
CAN/CSA-C22.2 No 1010.1-92

9- Electromagnetic Compatibility (EMC)

- CE conformity EMC standard 89/336/EEC
- Emission EN 50081-2, EN 61000-3-2/3
- Interference Immunity EN 50082-2

Specifications are subject to change without notice.



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