



Power Box POB30AD

- Lightweight - only 9kg
- Powerful – up to 35A
- Voltage 10V to 300V DC
- Voltage 10V to 250V AC
- Output protection
- Fully automatic operation



Powerful DC and AC power supply for a circuit breaker test

POB30AD is a power supply unit employing the latest power electronics technology. POB30AD generates ripple free DC-voltage and it is developed for regular maintenance tests of power circuit breakers. POB30AD generates also AC voltage. Output voltage is selectable from 10V to 300V DC or from 10V to 250V AC.

The POB30AD 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 2 A 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. POB30AD is easy to use and has accessory cable-set with touch-proof contacts.

The POB30AD 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

POB30AD is developed for use in switchyards, electric power and industrial environment. An important part of commissioning and maintenance testing is a circuit breaker testing.

POB30AD 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

POB30AD 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. POB30AD is then used as a power supply unit. It is compatible with breaker analysers from different vendors. POB30AD 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:

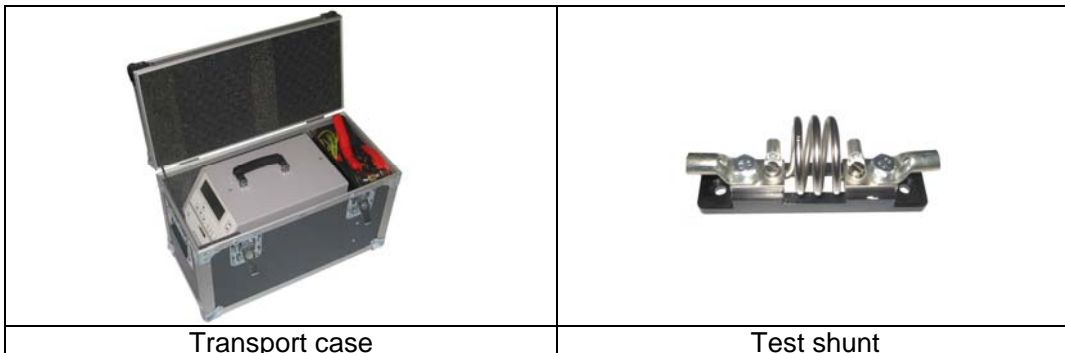
1. Make certain that the mains are de-energised on both sides of the breaker, safety grounded and that local safety regulations are followed.
2. Connect Power supply unit POB30AD to the breaker's coil circuit.
3. Set the minimal test voltage.
4. Set the step voltage.
5. Set the maximal voltage.
6. Press TRIG button.

Standard accessories

- ✓ Cable set 6x2m 2,5mm²
- ✓ Extern trigger cable set 2m
- ✓ 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
- Coils output AC Voltage 10V to 250V AC; 50/60Hz; true RMS
- Motor output DC Voltage 10V to 250V DC
- Output current max 35A

3 – Measurement

- Voltage 10V - 300V DC or 10V - 250V AC
- 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 9kg/19,8lbs

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.



IBEKO POWER AB