



## Coil Tester & Breaker Supply POB30AD

- Lightweight - only 9 kg
- Powerful – up to 30 A
- Voltage 10 V to 300 V DC
- Voltage 10 V to 250 V 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 true DC (ripple free) voltage and it is developed for regular maintenance tests of power circuit breakers. POB30AD generates also AC voltage. Output voltage is selectable from 10 V to 300 V DC or from 10 V to 250 V AC.

The POB30AD 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<br>20 A<br>10 A | 20 sec<br>60 sec<br>30 min |
|               | 220 V DC     | 12 A<br>10 A<br>7 A  | 20 sec<br>60 sec<br>30 min |
| 115 V         | 110 V DC     | 12 A<br>10 A<br>7 A  | 20 sec<br>60 sec<br>30 min |
|               | 220 V DC     | 7 A<br>6 A<br>5 A    | 20 sec<br>60 sec<br>30 min |

| Mains Voltage | Load Voltage | Max Current | Max load interval  |
|---------------|--------------|-------------|--------------------|
| 230 V         | 110 V AC     | 10 A<br>5 A | 800 msec<br>30 min |
|               | 220 V AC     | 10 A<br>5 A | 800 msec<br>30 min |
| 115 V         | 110 V AC     | 10 A<br>5 A | 800 msec<br>30 min |
|               | 220 V AC     | 10 A<br>5 A | 800 msec<br>30 min |

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:

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

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 analyzer. POB30AD is then used as a power supply unit. It is compatible with breaker analyzers 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 6 x 2 m 2,5 mm<sup>2</sup>
- ✓ Extern trigger cable set 2 m
- ✓ Mains power cable
- ✓ Ground (PE) cable
- ✓ Transport bags

#### Optional accessories

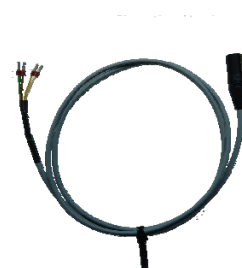
- ✓ Cable set 6 x 5 m 2,5 mm<sup>2</sup>
- ✓ Transport case



Transport case



Cable set



External Trigger cable

## 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 Voltage 10 V to 300 V DC
- Coils output AC Voltage 10 V to 250 V AC; 50 /60 Hz; true RMS
- Motor output DC Voltage 10 V to 250 V DC
- Output current max 30 A

### 3 – Measurement

- Voltage 10 V – 300 V DC or 10 V – 250 V AC
- Current 1 A – 50 A
- 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  $-40^{\circ}\text{C} - +70^{\circ}\text{C} / -13^{\circ}\text{F} - +158^{\circ}\text{F}$
- 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 EN 61010-1  
LVD 73/23/EEC
- 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**