

Coil Tester & Breaker Supply POB30DL

- Lightweight only 8 kg
- Powerful up to 30 A
- Voltage 1 V to 50 V DC
- Ripple free DC-voltage
- Output protection
- Fully automatic operation



Powerful DC power supply for a circuit breaker test

POB30DL is a power supply unit employing the latest power electronics technology. POB30DL generates ripple free DC-voltage and it is developed for regular maintenance tests of power circuit breakers. Output voltage is selectable from 1 V to 50 V DC.

The POB30DL is powerful and versatile unit, with possibility to generate at 230V mains supply initial current of 30 A as well as continuous current according to the table below:

Load Voltage	Mains Voltage	Max Current	Max load interval
115V/230V	5V	24A 20A 8A	20sec 60sec continuously
	15V	24A 20A 8A	20sec 60sec continuously
	25V	24A 20A 8A	20sec 60sec continuously

The set is equipped with thermal and overcurrent protection. POB30DL is easy to use and has accessory cable-set with touch-proof contacts.

The POB30DL 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

POB30DL is developed for use in switchyards, electric power and industrial environment. An important part of commissioning and maintenance testing is a circuit breaker testing. POB30DL 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

POB30DL 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. POB30DL is then used as a power supply unit. It is compatible with breaker analyzers from different vendors. POB30DL 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:

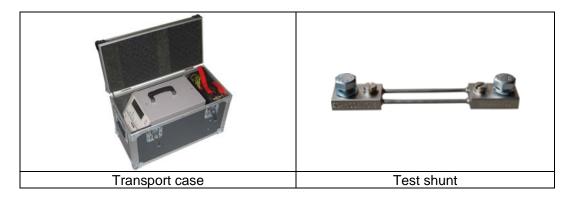
- 1. Make certain that the mains are de-energised on both sides of the breaker, safety grounded and that local safety regulations are followed.
- 2. Connect Power supply unit POB30DL to the breaker's coil circuit.
- 3. Set the minimal test voltage.
- 4. Set the step voltage.
- 5. Set the maximal voltage.
- 6. Press TRIG button.

Standard accessories

- √ Cable set 6 x 2 m 2,5 mm²
- √ Ground (PE) cable
- √ Transport case

Optional accessories

- √ Cable set 6 x 5 m 2,5 mm²
- √ Test shunt 50A/100mV



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
Motor output DC Voltage
Output Current
V to 50 V DC
max 30 A

3 - Measurement

Voltage 1 V – 50 V DC
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 $-25\,^{\circ}\text{C} - +70\,^{\circ}\text{C} / -13\,^{\circ}\text{F} - +158\,^{\circ}\text{F}$

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

5 - Dimensions and Weight

- Dimensions 198 mm x 255 mm x 380 mm

7,8 in x 10 in x 15 in

(W x H x D) without handle

- Weight 8 kg/17,5 lbs

6- Mechanical protection IP 43

7- Warranty two years

8- Safety Standards

European standards
International standards
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.

