Coil Tester & Breaker Supply POB40ADL

- Lightweight - only 10,60 kg
- Powerful – up to 40 A
- Voltage 1 V to 50 V DC
- Voltage 1 V to 40 V AC
- Output protection
- Fully automatic operation

Powerful DC and AC power supply for a circuit breaker test

The Coil Tester & Breaker Supply POB40ADL is a powerful tool for testing circuit breakers, where a substation battery is not connected or available. It operates the circuit breaker coils and spring charging motors as a part of commissioning and maintenance testing.
The POB40ADL generates true DC (ripple free) or AC voltage and can also be used to test a minimum trip voltage of the circuit breaker coils. The output voltage is selectable from 1 V to 50 V DC or from 1 V to 40 V AC.
This device is a powerful and a versatile unit which, at 230 V mains supply, is capable of generating the initial current of 40 A as well as the continuous currents as presented in the tables below:

Mains Voltage	Load Voltage	Max Current	Max load interval
115 V / 230 V	5 V DC	30 A 24 A 10 A	20 sec 60 sec continuous
	15 V DC	30 A 24 A 10 A	20 sec 60 sec continuous
	25 V DC	30 A 24 A 10 A	20 sec 60 sec continuous

Mains Voltage	Load Voltage	Max Current	Max load interval
115 V / 230 V	5 V AC	15 A	continuous
	15 V AC	15 A	continuous
	25 V AC	15 A	continuous

The set is equipped with thermal and overcurrent protection. The POB40ADL is easy to use and has the accessory cable-set with touch-proof contacts.Thanks to a proprietary hardware and software design solution, it is capable of canceling electrostatic and electromagnetic interference in HV electric fields.

Application

The POB40ADL is used in switchyards, power and industrial environment, in manufacturing, in commissioning and as well in maintenance of the circuit breakers 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

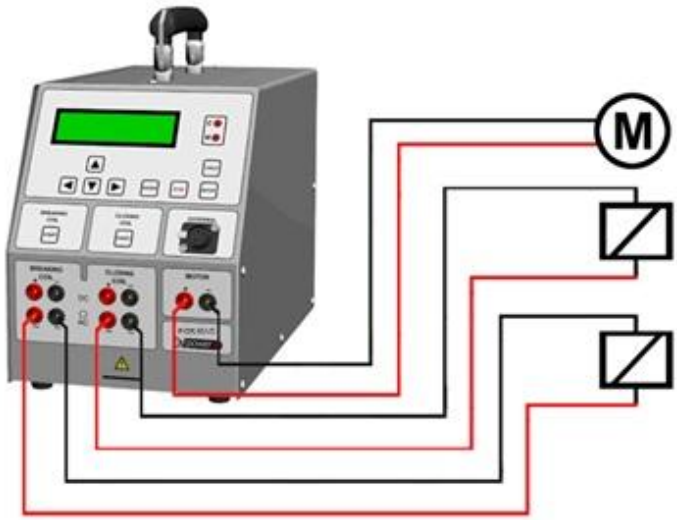
The POB40ADL has a built-in capability to perform automatic test of minimum trip voltage. The minimum trip voltage test is described in a number of international and national standards such as IEC 62271-100, ANSI C37.09 etc. Performing tests and acquiring of many other important parameters are possible with circuit breaker analyzers.
The POB40ADL is then used as a power supply unit. It is compatible with breaker analyzers from different vendors. The POB40ADL can also be used as a general power supply unit or temporary battery charger.

Automatic testing of the minimum trip voltage of a breaker

Procedure steps:

1. The circuit breaker mains terminals have to be de-energized and safety grounded on both sides and the auxiliary (control) circuit as well. The local safety regulations should be followed.
2. Connect Power supply unit POB40ADL to the breaker's coil circuit.
3. Set the minimum test voltage.
4. Set the step voltage.
5. Set the maximum voltage.
6. Press the TRIG key

Connecting the POB40ADL to the test object



Accessories

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
- External Trigger cable

Transport case

Cable set

External Trigger cable

Ordering information:

Art.No.	Description
POB40ADL-N-00	POB40ADL 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
TC-02-04MCBP	External Trigger cable set 2 m

Technical Data

1 - Mains Power Supply

• Connection	according to IEC/EN60320-1; UL498, CSA 22.2
• Voltage	90 V – 264 V AC, 50/60 Hz, Single phase
• Power consumption	1000 VA

2 - Output data

• Coils output DC Voltage	1 V to 50 V DC
• Coils output AC Voltage	1 V to 40 V AC; 50/60 Hz; true RMS
• Motor output DC Voltage	1 V to 50 V DC
• Output current	max 40 A

3 - Measurement

• Voltage	1 V – 50 V DC or 1 V – 40 V AC
• Current	1 A – 50 A
• Accuracy	± (0,25% rdg + 0,25% FS)

5 - Environment conditions

• Operating temperature	–10°C - +55°C / 14 F – 131 F
• Storage and transportation	–40°C - +70°C / -40 F – 158 F
• Humidity	Maximum relative humidity 95%, non-condensing

6- Dimensions and Weight

• Dimensions	205 mm x 287 mm x 480 mm 8,1 in x 11,3 in x 18,9 in (W x H x D) without handle
• Weight	10,60 kg / 23,37 lbs

7- Mechanical protection

IP 43

8 - Warranty

three years

9 - Safety Standards

• European standards	LVD 2006/95/EC (EN 61010-1)
• International standards	IEC 61010-1 UL 3111-1 CAN/CSA-C22.2 No 1010.1-92

10 - Electromagnetic Compatibility (EMC)

• CE conformity	EMC standard 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.