# **Circuit Breaker** Test Equipment



# **POB series** – AC / DC Power Supply for Circuit Breaker Testing

The Coil Tester & Power Supply POB series instruments are powerful, lightweight, variable voltage power supply units ideal for testing circuit breakers, where substation battery is not connected or available. They are intended for operating breaker coils and spring-charging motors as a part of commissioning and maintenance testing. These devices are compatible with breaker analyzers from different vendors and eliminate use of station batteries during testing.



## Highlights

- Lightweight only 10.6 kg (23.4 lbs)
- Minimum trip voltage test of the circuit breaker's coils
- Power supply for spring-charging motors
- Providing a power supply during a test with breaker analyzers from different vendors

#### Main Features

- Powerful up to 40 A
- Lightweight
- True DC ripple-free voltage
- DC Voltage from 10 V to 300 V
- AC Voltage from 10 V to 250 V

|          | Max DC Current | Max AC current | Output DC Voltage | Output AC Voltage |
|----------|----------------|----------------|-------------------|-------------------|
| POB30AD  | 30 A           | 12 A           | 10 V – 300 V      | 10 V – 250 V      |
| POB40AD  | 40 A           | 15 A           | 10 V – 300 V      | 10 V – 250 V      |
| POB40ADL | 40 A           | 15 A           | 1 V – 50 V        | 1 V – 40 V        |
| POB50ADL | 50 A           | 15 A           | 1 V – 50 V        | 1 V – 40 V        |

|         | Max DC Current | Output DC Voltage |
|---------|----------------|-------------------|
| POB30D  | 30 A           | 10 V – 300 V      |
| POB40D  | 40 A           | 10 V – 300 V      |
| POB40DL | 40 A           | 1 V – 50 V        |
| POB50DL | 50 A           | 1 V – 50 V        |

## SAT Series – Circuit Breaker Coil Analyzer

These devices perform circuit breakers testing when a battery is either not connected or not available. They are compatible with breaker analyzers from different vendors as well. Tests can be performed in a stand-alone mode or connected to a PC running the DV-Win application set of functions. This instrument type can perform very efficiently as a combination with the CAT device models. This way test duration is significantly reduced. It is capable of connecting to a PC running the DV-Win set of applications enabling test step control, results extraction, storing, editing and displaying.

In addition to POB supported features the SAT series provide a Coil Resistance Measurement and Under Voltage Release test.

|              |                   | SAT30A      | SAT40A      |
|--------------|-------------------|-------------|-------------|
| Load voltage | Max load interval | Max Current | Max Current |
| 110 V        | 20 sec            | 24 A        | 30 A        |
| 110 V        | 60 sec            | 20 A        | 24 A        |
| 220 V        | 20 sec            | 12 A        | 15 A        |
| 220 V        | 60 sec            | 10 A        | 12 A        |



#### **Technical specification SAT Series**

| Power Output                                   |                                 |  |  |
|--|---------------------------------|--|--|
| Coils output DC voltage                        | 10 V DC - 300 V DC              |  |  |
| Coils output AC voltage                        | 10 V AC - 250 V AC              |  |  |
| Motor output DC voltage                        | 10 V DC - 250 V DC              |  |  |
| Coil resistance measurement                    |                                 |  |  |
| Measuring range                                | Resolution                      |  |  |
| 0.5 Ω - 99,9 Ω                                 | 0.1 Ω                           |  |  |
| 100 Ω - 999 Ω                                  | 1 Ω                             |  |  |
| Minimum trip voltage -<br>fully automatic test |                                 |  |  |
| Start voltage                                  | 10 V - 299 V DC 10 V - 249 V AC |  |  |
| Stop voltage                                   | 11 V - 300 V DC 11 V - 250 V AC |  |  |
| Step voltage                                   | 1 V - 20 V DC 1 V - 20 V AC     |  |  |
| Typical accuracy                               | ± (0.25 % rdg + 0.25 % FS)      |  |  |
| Operating temperature                          | -10° C – + 50 °C                |  |  |

## Highlights

- Lightweight only 9.20 kg / 20 lbs
- Coil current measurement
- Coil resistance measurement
- Minimum trip voltage test of the circuit breaker's coils
- Undervoltage release test
- Supplying spring-charging motors
- Providing a power supply for breaker analyzers from different vendors

# **CAT series** - Circuit Breaker Analyzers and Timers

These devices are either standalone or PC controlled digital instruments for circuit breakers' condition assessment. The robust design incorporates cutting edge technology with latest enhancements for safe and fast testing of medium or high-voltage circuit breakers with live or dead tank design.

The user can select any desired operational mode: Close (C), Open (O), Close-Open (C-O), Open-Close (O-C), Open-Close-Open (O-C-O). Test results can be stored in the instrument's internal memory, an USB memory stick or printed on a thermal printer (optional accessory) in both tabular and graphical form.

## Circuit Breaker Analyzer & Timer CAT64

- Safe and fast testing with BSG (Both Sides Grounded)
- Simple & easy to operate
- Timing and motion measurement
- 6 timing channels (3x2) for main and resistive contacts
- · 3 timing channels for auxiliary inputs
- · Resistance measurement of pre-insertion resistors
- 4 Analog inputs + 1 Transducer input
- Supports both digital and analog transducers
- Detailed analysis of test results using DV-Win software

## **Circuit Breaker Analyzer & Timer CAT126**

- Safe and fast testing with BSG (Both Sides Grounded)
- Timing and motion measurement
- 12 timing channels (3x4) for main and resistive contacts
- 6 timing channels for auxiliary inputs
- 3 transducer input channels
- 4 additional analog input channels
- Built-in Micro Ohmmeter 500 A
- Dynamic resistance measurement
- · Detailed analysis of test results using DV-Win software

