

Switch Analyser SA10A

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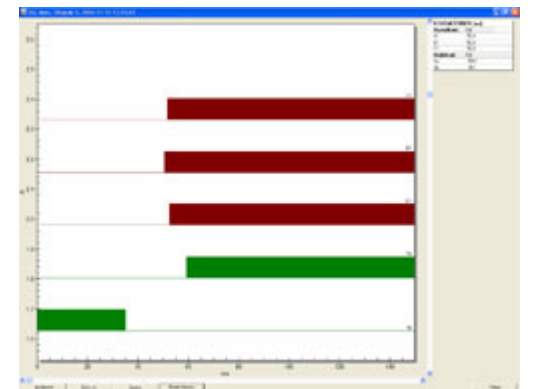
For professional circuit-breaker analysis.

The SA10A is the circuit breaker timer developed by professionals for professionals.

It has a built-in micro Ohm meter/Ductor for measuring of static and dynamic resistance of the breaker poles. It only weighs 11,6 kg. The versatility and precision that this unit offers is, without question unchallenged, and it will indeed be your best partner when testing circuit breakers. Tests in areas with high induction at known problematic substations has proven the SA10A to be the only circuit breaker timer that could withstand these extreme conditions. It's rugged, it's small and highly appreciated by our customers.

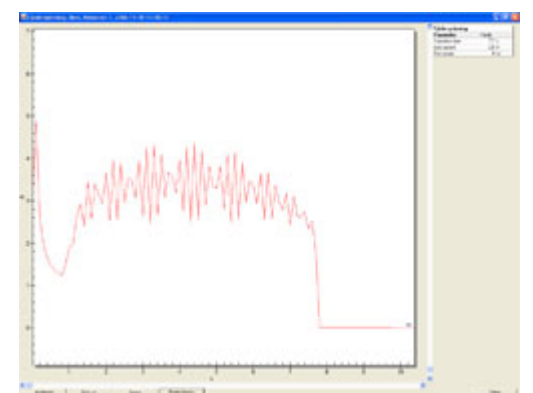
Contact timing

The contact input modules of SA10 supplies 120 VDC at open contacts and 100 mA at closed. The evaluation logic also distinguishes between a possible preinsertion and the main contact in the same operation. It is also possible to measure the value of the preinsertion resistor with a reference shunt. Timing for both the preinsertion and the main contact is guaranteed in any switchyard and at any system voltage. Number of main contact timing channels: 12(x2) Number of auxiliary contact channels: 6 (The aux inputs can in environments with low induction also be used as main contact inputs).



Coils and motor

Automatic measuring of circuit breaker coil and motor current/voltage. Together with an adjustable power unit it is very easy to perform minimum function voltage test on the coils. The SA10 uses 1 analogue channel to measure coil voltage and current and 1 channel to measure motor voltage and current. For the coil, 35 A AC/DC is possible for continuous measurement, and for the motor, 50A AC/DC. However, if necessary, higher currents will pass for shorter periods.



Motion measurements

The SA10A supports 3 digital or analogue transducers. A wide range of transducer fastenings can also be supplied. Elcon International is the official world wide supplier of transducer fastenings for ABB Breakers.



Static and dynamic resistance

As the only field test equipment on the market with a built-in micro ohm meter, it is a complete and versatile unit. It generates 200 ADC and the value is automatically recorded into the system together with your other measurements. In order to view the breaker pole's exact behavior during an operation, the dynamic resistance measurement function offers great diagnostic possibilities.

Both side grounded

To ensure the highest possible level of personal safety during testing it is recommended to have the circuit breaker grounded on both sides.

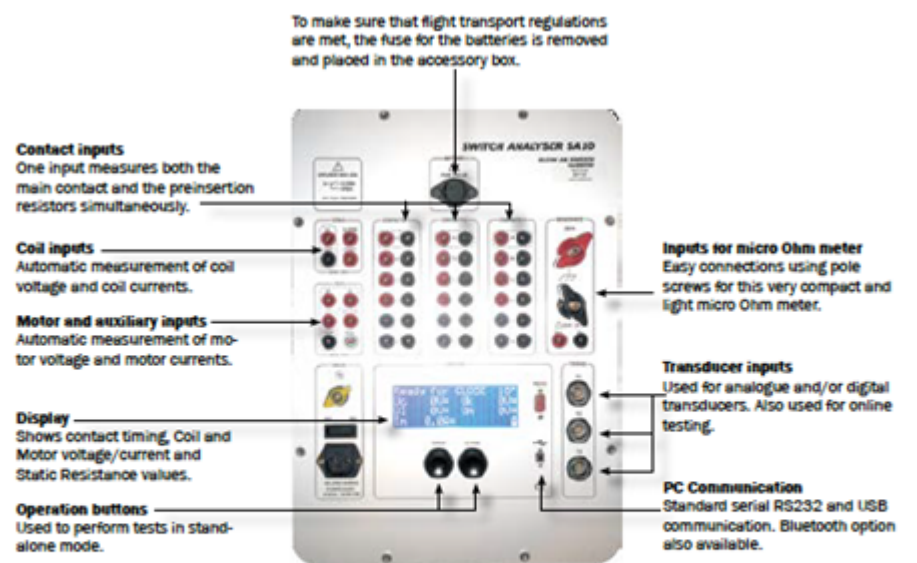
With the DCM unit it is very easy to fulfill the safety standards.

Analog inputs

All in all, the SA10A has 11 analog inputs. However, since our intention is to provide you with a test equipment that is user-friendly and circuit breaker-oriented, they have been preset to handle specific relevant functions such as coil and motor voltages, currents, analog motion transducers etc. It is of course possible to set most of the inputs to handle other types of related input signals, such as pressure sensors or temperature sensors or any other type of analogue signal that may be relevant.

Some SA10A features

- The well-known powerful analysing software BTS11 included.
- Built in a small metal carrying case.
- Fully compatible with our factory line test equipment.
- No panel switches, just two push buttons: Open and Close.
- Supports both digital and analogue transducers.
- The only field test equipment with a built-in micro ohm measuring function. 200A!
- Possibility to use the "first trip" analysing method.
- Weighs only 11,6 kg/26 lb.
- Automatic measurement of coil and motor current/voltage.
- Designed for both offline and online analysis of circuit breakers.



First-trip or on-line analysis

In order to fully evaluate the condition of the circuit breaker mechanism, the SA10 provides inputs to test the breaker during an on-line operation. By doing that you can capture the "First Trip" of a breaker that has been stationary for a long time, and by that display how the breaker would perform in an actual fault situation. Both trip and close operations are possible on-line.

Communication

Communication from PC with SA10A can be made with either RS232-DB9 or USB. However, in order to comply with safety regulations a Bluetooth communication kit is available, which allows communication with PC up to 100 meters away from the SA10A.

Switch sync breakers

Upon switching for example capacitor banks and shunt reactors it is common to use a switch-sync relay for the cb. The SA10 allows for full analysis of the point-on-wave switching technology.

SKU Switch_Analyser_SA10A

Brand Elcon AB