KOCOS - THE TECHNOLOGY GROUP | WHERE PRECISION MEETS QUALITY

PROMET SE High-Precision Ohm Meter





KOCOS MESSTECHNIK AG



50.0 μΩ 🔂

Switchgear #1

5 of

KoCoS

5.0 μΩ 🖓

CT

250 mV



PROMET SE is a compact, battery-operated ohm meter with an adjustable test current of up to 200 A. Two current outputs and two voltage measurement inputs allow the resistance to be determined at two measurement points simultaneously. Flexible handling with battery operation and the high functionality and precision which are characteristic of the popular PROMET product range make this universal measuring device particularly suitable for portable use in switching stations or industrial environments. Four-wire measuring technology enables PROMET SE to meet the most stringent accuracy requirements, making it ideal for the high-precision determination of resistances in the $\mu\Omega$ range.

Ideal for difficult conditions

Because the device weighs just 1.5 kg and features a compact housing fitted with a carrying strap, it can even be used in situations where it cannot be put down, for example when working on ladders or hoisting platforms. The powerful lithium-ion battery guarantees operation independent of the power supply even for periods of several hours and longer.

Determination of resistance at two measurement points

Because the device is equipped with two current outputs and two voltage measurement inputs, it is possible to carry out parallel measurements at two measurement points in order to be able to assess the quality of connections, for example. In addition, when

used in combination with an ACTAS switchgear test system, up to 12 main contacts can be tested in parallel.

Constant test currents up to 200 A

A current source based on state-of-the-art power electronics and capacitor technology provides constant output for test currents up to 200 A, even during battery operation. The test currents are load-independent and adjustable.

Assessing the quality of connections

Because there are two voltage measurement inputs, the quality of connections such as screw connections on busbars can be determined quickly and easily using the quality factor. The quality factor is defined by the ratio of the resistance of the connection over the overlap length to the resistance of the busbar over the same length.



Measurement with temperature compensation

PROMET SE can measure resistances with temperature compensation. The temperature at the measurement point is measured using a sensor and the resistance value is calculated for the reference temperature. A material database for the temperature compensation of various different materials is saved in the device and can be extended as and when needed.

Precise determination of contact resistances

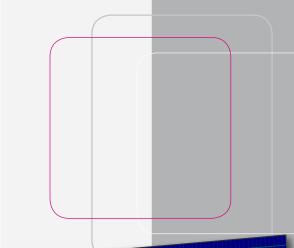
Regular measurements of the contact resistance allow an accurate assessment of the condition of contact systems. Using PROMET SE, excessively high transfer resistances resulting from poor connections can be identified by measuring the static contact resistance. This ensures that maintenance requirements can be identified at an early stage and down times kept to a minimum.

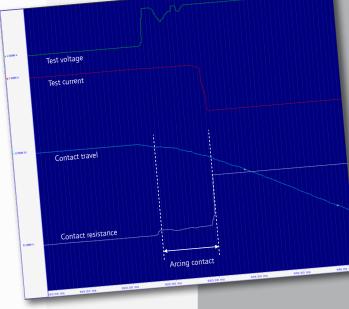
Integration in circuit breaker testing with ACTAS

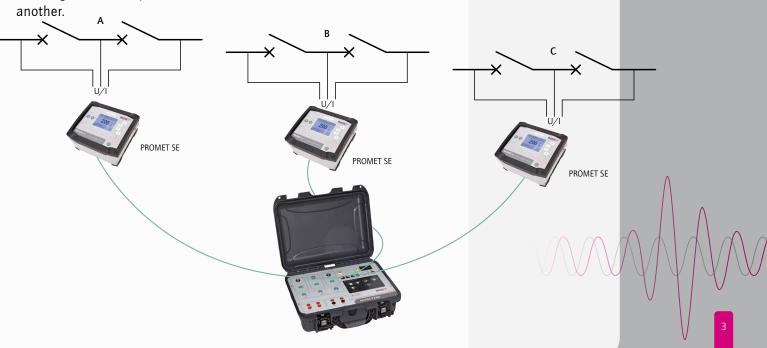
PROMET SE is equipped with interfaces for connection to ACTAS test instruments. Using the ACTAS testing software, resistance measurement can easily be integrated in circuit breaker tests. This makes it simple to automate tests and carry out a comprehensive analysis of the test results. The measured values are used for the evaluation of tests and are included in the test report.

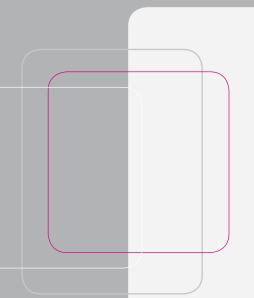
Dynamic resistance determination for up to 12 main contacts

When used in combination with ACTAS, PROMET SE can carry out dynamic contact resistance measurements on three poles and on 4 main contact chambers per pole simultaneously. This means that the measurement can be carried out on all the contacts of a switchgear device in a single operation. This eliminates timeconsuming connection and disconnection procedures and ensures that the measurement is carried out under identical conditions, allowing direct comparison of the contact resistances with one another.









Simple and intuitive operation

The resistive $3\frac{1}{2}$ " touch screen and function keys make for simple and intuitive operation. All test parameters are displayed clearly and can be set directly. The resistance values determined during measurements are displayed as results on the screen and can be saved in the internal memory with a time and date stamp.

Results management and test report output via PC

PROMET SE can be connected directly to a PC. Downloading and managing the data saved in the device is made easy by the user-friendly software. The measurement results, which are displayed in a clearly structured form, can also be exported to an Excel spreadsheet or presented in a test report.

Current source	
Test current	5200 ADC
Outputs	2
Output voltage	2.5 V
Voltage measurement	
Range	2.5 VDC
Inputs	2
Resistance measuring ra	1ge Up to 250 mΩ
Power supply	Battery operation independent of the power supply, charging adapter
Connections	9 mm high-current sockets and 4 mm safety sockets
Housing	Portable plastic hand-held housing with carrying/fixing strap
Dimensions	200 x 178 x 100 mm
Weight	1.5 kg (without accessories)
Screen	High-resolution, resistive 3½" touch screen
Operation	Touch screen, four function keys and two start keys (R1, R2)
Interfaces	
PC interfaces, control	RJ45, USB-B
Temperature	Two-wire

Technical data





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