

Press release

Quick and easy three-phase testing of power transformers

New test system TESTRANO 600: Compact, powerful, unique.

With TESTRANO 600, OMICRON has developed the world's first portable, three-phase test system, which supports all common electrical tests on power transformers. Weighing just 44 lbs/20 kg, it is ideal for routine and diagnostic testing on-site and during factory acceptance tests (FAT). In addition, its innovative design significantly reduces wiring efforts, cutting down testing time to one third compared to conventional single-phase testing.

One system– multiple tests

With TESTRANO 600, operators need just one common setup to perform multiple tests, such as transformer turns ratio, exciting current, DC winding resistance, dynamic resistance, short-circuit impedance / leakage reactance as well as frequency response of stray losses (FRSL). By combining it with the accessory CP TD1, it can also test power/dissipation factor and capacitance up to 12 kV.

The magic number “3”

In order to work with TESTRANO 600, just three cables have to be connected: One to the high-voltage side, one to the low-voltage side and one to the tap changer. Three integrated sources ensure measurements with high accuracy and make TESTRANO 600 a powerful test system (3x 33 A DC and 400 V AC). Compared to conventional single-phase test sets, a true three-phase test system offers several advantages, such as shorter testing times when energizing all three phases at once, and a fully automated control of the tap changer during testing.

Flexible and smart operation

In order to fulfill individual customer requirements, TESTRANO 600 offers a flexible operating design. It can be operated via the smart TESTRANO TouchControl on the integrated touch display or by using the established Primary Test Manager™ software on the laptop.

Active discharge and quickdemagnetization

The controlled discharging function (patent pending) of TESTRANO 600 automatically discharges the winding within seconds, for example, after resistance tests have been performed. This increases efficiency and safety during testing.

Operators can also quickly demagnetize the power transformer's core before and after testing using TESTRANO 600. Demagnetization is recommended after DC has been applied on a power transformer, for example, during winding resistance tests. A demagnetized core reduces the risk of high inrush currents and avoids the influence of a magnetized core on subsequent tests, such as excitation current tests or sweep frequency response analysis.

Safety first

TESTRANO 600 follows the "safety first" principles and is equipped with an emergency stop button as well as safety and warning lights. The unique connector plugs and the simple wiring concept with labelled connection leads leave an extremely narrow margin for wiring errors.

Compact and rugged for on-site testing

With all its accessories, TESTRANO 600 comes in a portable case and is easy to transport. Its rugged design makes it ideal for on-site testing even in rough operating conditions. All in all, TESTRANO 600 brings on-site and factory acceptance testing of power transformers to a new level – it has never been so quick and easy.

Watch the TESTRANO 600 video

<https://www.omicronenergy.com/newTESTRANO600/>

Images



TESTRANO600, OMICRON's portable three-phase power transformer test system.



The integrated three sources and the simple wiring concept speed up and simplify power transformer testing.

Company profile

OMICRON is an international company serving the electrical power industry with innovative testing and diagnostic solutions. The application of OMICRON products allows users to assess the condition of the primary and secondary equipment on their systems with complete confidence. Services offered in the area of consulting, commissioning, testing, diagnosis and training make the product range complete.

Customers in more than 150 countries rely on the company's ability to supply leading edge technology of excellent quality. Service centers on all continents provide a broad base of knowledge and extraordinary customer support. All of this together with our strong network of sales partners is what has made our company a market leader in the electrical power industry.

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