MotorAnalyzer

Universal tester for electric motors

RS232

PC

I/O

The MotorAnalyzer is a universal tester for testing electric motors and winding material. This user-friendly and mobile unit comprises ten different test methods.

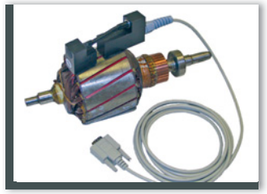
With the combination of the test methods, the extremely compact design and the battery operation, the MotorAnalyzer is the ideal tool for service on site, even for difficult installation positions.

For testing a 3-phase motor, the three winding connections and the motor frame are connected to the tester. Via surge test and resistance test, now, the MotorAnalyzer analyzes the motor fully-automatically. Afterwards, a high-voltage test is performed at the motor in order to be able to evaluate the quality of the motor quickly and clearly.

For testing the winding, the tester generates surge waves with low level. The patented automatic surge-voltage comparison between the windings or to a reference test object enables precise statements on the symmetry of the windings. Asymmetries are detected by the MotorAnalyzer automatically.

Winding detection at a rotor with induction test probe

MotorAnalyzer in measurement case suitable as hand luggage

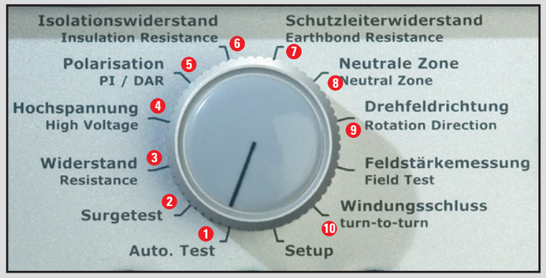


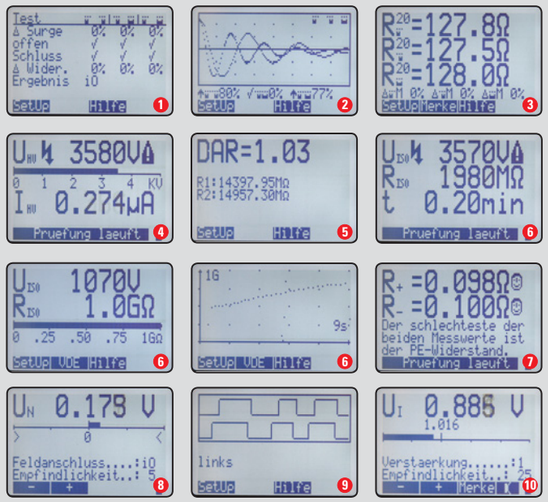
Winding detection at a rotor with flexible induction test probe

Resistance test at an armature between the lamellas

Highlights

- ten test methods
- fully-automatic quality assessment
- automatic switch-over between the three motor-connection leads
- manual and automatic testing
- localization of turn-to-turn faults
- mains and/or battery operation
- light weight
- available in a solid measurement case
- rotary switch for quick selection of test methods
- integrated result storage for transmission via RS232 interface
- storing and printing test results via PrintCom



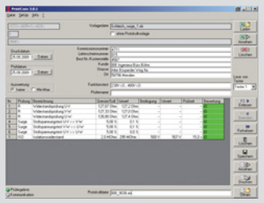


The resistance test is performed with high precision in 4-wire configuration. The evaluation of the symmetry of the three winding resistances or the comparison with nominal values take place automatically. If required, a temperature compensation converts the copper resistance to 20° Celsius.

For the high-voltage test, the insulation-resistance test and the polarization-index test, the MotorAnalyzer generates an extremely stable test voltage of 50...4000V (MotorAnalyzer II 5000V) DC.

With an induction test probe, you locate the slot at the stator or armature, where the turn-to-turn fault is located. The probe also serves to detect rotor faults at squirrel-cage rotors.

The graphical indication of the misadjusted position of the brushes facilitates the adjustment of the “neutral zone” at DC motors.



If a PC is available, you can use our Windows® software PrintCom to store the test results directly on the PC.

Winding detection at a stator with induction test probe

Motor testing

Test protocol with surge curve

Refer to: