ALL-IN-ONE INSULATION & MILLIOHM MULTIMETER

A SINGLE HANDHELD INSTRUMENT FOR TESTING THE SAFETY AND FUNCTION OF ELECTRIC MACHINES







Multimeter and Milliohmmeter, Insulation and Coil Tester for Service and Diagnostics at Electric Machines and Systems

METRAHIT IM XTRA BT SW Set (with Bluetooth and Software IZYTRON.IQ) ARTICLE NO. M273C

Information regarding packages and accessories is included in the data sheet.













600 V CAT IV 1000 V CAT III



METRAHIT IM XTRA

The METRAHIT IM XTRA is a portable, extremely rugged multimeter designed for use in the field.

It's suitable for maintenance, service and diagnostics at electric machines, drive units and systems, for example in automotive, energy and automation applications.

The all-in-one instrument includes all of the measuring functions of a TRMS digital multimeter, an insulation resistance measuring instrument, a milliohmmeter with 4-wire measuring technology and a coil short circuit tester. And thus it's ideal for safety testing and diagnostics at electric and hybrid vehicles, as well as all types of electric machines.

ADDITIONAL FEATURES

- Bluetooth or WIFI interface
- Color graphic display with analog bargraph
- ABS: automatic blocking sockets
- Including software license for IZYTRON.IQ Business Starter
- DAkkS calibration certificate

INTERTURN SHORT-CIRCUIT TEST

Surge tests within an inductance range of 10 μ H to 50 mH (at 100 Hz) in combination with the optional COIL TEST ADAPTER. This range corresponds to motors in accordance with DIN standards with power ratings of roughly 15 kVA to 80 MVA.

A universal adapter for motors with medium power ratings is in preparation.

MILLIOHM MEASUREMENT

- Kelvin connection for 4-wire milliohm measurement. Compensates for influences resulting from cable and contact resistances which mustn't be neglected when measuring very small resistances. Measuring current can be set to 200 mA or 1 A. Measurement of contact resistances, for example at welded and riveted joints and on aircraft outer skins (lightning protection and wick test), or equipotential bonding is measured in accordance with UN ECE R100 in hybrid and electric vehicles.
- 2-wire R_{low} measurement with 200 mA test current.
 Low-resistance measurement per EN 61557-4 / VDE 0413, part 4, for earth, protective and equipotential bonding conductors.

SPECIAL FEATURES

Modular power supply

Standard quick-change rechargeable lithium battery, optional WPC module for inductive charging and mains module with USB port, module replacement without interrupting the measuring circuit thanks to touch protected module socket.

Push/print function

Transfers measured values to application software by simply pressing a key

Programmable sequences

Test routines with data storage

Probe with keys Start/stop and store

ALL-IN-ONE

All relevant safety tests and multimeter functions for troubleshooting and diagnostics at electric machines in a single handheld instrument:

- Insulation measurement up to 3.1 GΩ with max. 1 kV
- 4-wire milliohm measurement with Kelvin clips/probes
- Coil interturn short-circuit test with 1 kV test voltage
- Extensive multimeter measuring functions

INSULATION RESISTANCE MEASUREMENT

- Insulation resistance measurement up to 3.1 GΩ with detection of interference voltage; test voltages: 50 V, 100 V, 250 V, 500 V and 1000 V
- EN 61557-2 / VDE 0413-2
- DAR: dielectric absorption rate
- PI: polarization index

MULTIMETER FUNCTIONS

- Multimeter for: V_{AC, DC, AC+DC, FIL}, A_{AC, DC, AC+DC, FIL}, Hz, Ω, F, °F/°C, continuity/diode, %, RPM, low-pass filter
- TRMS AC / AC+DC measurement for current/voltage up to 10/100 kHz
- Data hold function
- Data logger
- Measuring category: CAT III 1000 V / CAT IV 600 V



GMC INSTRUMENTS



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