MI 3252 MicroOhm 100A

MI 3252 MicroOhm 100A is a portable low resistance ohmmeter used to measure low contact resistances of breakers and switches, busbars using test current from 100 mA to 100 A.

MEASURING FUNCTIONS:

- Resistance measurement: wide measuring range (10 $\mu\Omega$ ... 20 Ω) with high accuracy 0.25 % of reading and resolution down to 1 nΩ, adjustable test current (100 mA ... 100 A);
- Voltage drop measurement;
- Bar graph: on screen resistance bar graph.

KEY FEATURES:

- Safe: sustain external voltages in case of wrong connection, protection level (CAT IV, 50 V); automatically detects continuity in current circuit.
- Single and continuous measuring mode.
- Portable: rugged carrying case with a handle and lightweight design enable easy moving the instrument between sites.
- High protection degree: IP 64.
- Custom limits: the limits can be set for PASS or FAIL evaluation of test result.
- Battery powered: the instrument enables measurements with 100 A for up to 10 minutes when powered from internal battery only.
- Memory: built-in memory enables storage of up to 1000 test results.
- Downloadable: downloads test results via RS232 or USB cable directly to the PC with the help of the software.

APPLICATION:

Measurement of the resistance of:
- High, middle and low voltage circuit breakers
- High, middle and low voltage disconnecting switches
- High current bus bar joints
- Cable splices
- Welding joints

STANDARDS:

Functionality:
IEC 62271-100;
IEC 62271-1;
ANSI C37.09;
ASTM B 539;

Spain: El Real Decreto 223/2008

Electromagnetic compatibility:
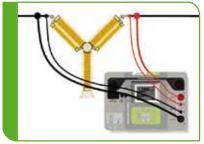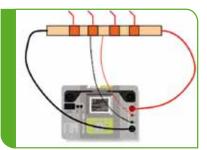IEC 61326-1

Safety (LVD):
EN 61010-1

METREL ®

Technical Specification

Function	Range		Resolution	Accuracy	Current
Resistance	10,000 … 199,999 μΩ 0,20000 … 1,99999 mΩ 2,0000 ... 19,9999 mΩ 20,000 … 199,999 mΩ 0,20000 … 1,99999 Ω 2,0000 … 19,9999 Ω		1 nΩ 10 nΩ 100 nΩ 1 μΩ 10 μΩ 100 μΩ	±0,25% of reading	100 A 100 A / 50 A 50 A / 10 A 1 / 10 A 1 A / 100 mA 100 mA

Function	Res. range	Voltage range	Resolution	Accuracy	Current
Voltage	200 μΩ 2 mΩ 20 mΩ 200 mΩ 2 Ω 20 Ω	1,000 mV … 20,000 mV 20,00 mV … 200,00 mV 10,00 mV … 100,00 mV 100,0 mV … 1,0000 V 20,0 mV … 200,0 mV 200,0 mV … 2,0000 V 20,0 mV … 200,0 mV 200,0 mV … 2,0000 V 20,0 mV … 200,0 mV 200,0 mV … 2,0000 V	1 μV 10 μV 10 μV 0,1 mV 0,1 mV 0,1 mV 0,1 mV 0,1 mV 0,1 mV 0,1 mV	±0,25% of reading	100 A 100 A 50 A 50 A 10 A 1 A 10 A 1 A 100 mA 100 mA

Power supply	230 / 115 VAC
Battery	12 VDC / 12 Ah
Overvoltage category	50 V / CAT IV
Display	320 x 240 LCD with backlight
Communications	2 x RS232 and USB
Memory	512 kB (1000 test results)
Dimensions	410 x 175 x 370 mm
Weight	11,8 kg

Typical applications

MI 3252 MicroOhm 100A can help you to find issues typically related with high contact resistance in circuit breakers, bus bars, weld joints, ground bonds. Those issues can lead to apparatus failure and damage of nearby components.

Example 1: Testing the contact resistance of high voltage **circuit breaker**. According to the IEC62271-100 this test should be performed with 50 A test current at least.

Example 2: Testing the **bus bar** contact resistance. By using higher currents bus bar resistance under similar condition as in normal use can be observed. This will give you more reliable result and easy decision about necessary maintenance.

Ordering information:

MI 3252   **Standard set**

- MI 3252 MicroOhm 100A
- Current test lead with crocodile clip, 5 m, 25 mm², 2 pcs
- Potential test lead, 5 m, 2 pcs (red, black)
- Test probe, 2 pcs (red, black)
- Crocodile clip, 2 pcs (red, black)
- Mains cable
- RS232 cable
- USB cable
- Bag for accessories
- PC SW HVLink PRO
- Instruction manual
- Calibration certificate

Optional accessories:

Photo	Order No.	Decription
	A 1333	Resistor SHUNT, 750 μΩ
	S 2046	Current test lead with insulated crocodile clip, 5 m, 25 mm², 2 pcs
	S 2052	Current test lead with crocodile clip, 10 m, 50 mm², 2 pcs