

# PCRM 200S

Contact Resistance Meter



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## Contact Resistance Meter

The Motwane make Contact Resistance Meter (Model:PCRM-200S) is a digital micro-ohmmeter, specially designed to measure extremely low resistances in micro ohm. The Instrument is based on Kelvin 4- wire connection method for measurement of low resistance.

The Current injection is 100A/200A. Test information like current injected with measured resistance & voltage drop is displayed with real time data on large LCD with backlit.

This User friendly Instrument and it's accessories are housed in easy transportation case. Advanced Windows based software is provided for data downloading, analysis and report generation. Internal memory of 199 records is provided for onsite data storage. Thermal printer is the additional feature provided to print the test results.

## Applications

PCRM-200S is specially used to measure static contact resistance of HT / LT circuit breaker contacts installed in energised switchyards. High accuracy and repeatability makes it a reliable tool for Quality Assurance and easy operation makes it a very handy tool for quick maintenance checks in various industries.

Typical resistance measurement applications are:

- Circuit Breaker contact resistance
- Bus bar joints
- Isolator contacts
- Weld joints
- Bond resistance

## Features

- Direct mV drop reading
- 100A /200A DC test current
- Measurement from 0.1 $\mu\Omega$  to 20m $\Omega$
- Minimum resolution of 0.1 $\mu\Omega$
- CE Compatible
- IP 54 compatible
- Built in thermal printer
- Internal memory of 199 test results
- PC interface for test result analysis, remote operation data downloading and report generation
- Specially designed for measurement of contact resistance of EHV circuit breakers
- Mains and Battery operated
- Tri colour LED for Mains/Battery/LOBAT
- Date & time display
- Specially designed leads for ease of connection with rust removing 'C' clamp
- Calibration due indicator



## Technical Specification

Test Current Injection	: 100A & 200A DC
Test ON Alert	: BEEP
Range & Resolution	: 20 $\mu\Omega$ with 0.1 $\mu\Omega$ 200 $\mu\Omega$ with 0.1 $\mu\Omega$ 2000 $\mu\Omega$ with 1 $\mu\Omega$ 20m $\Omega$ with 0.01m $\Omega$
Measurement Principle	: Four wire measurement
Basic Accuracy	: $\pm$ 2% of reading
Memory Storage	: 199 reading storage facility.
Computer Interface	: USB
Thermal Printer	: For printing the test results.
Display	: Custom Built 3 1/2 digit LCD Display with Backlit.

### Physical Specifications

Enclosure Material	: Industrial grade Polypropylene
Dimensions	: 188 mm (D) X 395mm (W) x 502 mm (L)
Gross Weight	: Instrument : 14 Kg Approx.

### Power Supply

Mains	: 230V $\pm$ 10%, 50Hz $\pm$ 10Hz Single phase AC supply
Battery	: 12V - 7.2 AH. Sealed Rechargeable Lead Acid
Power Consumption	: 35VA, 6.0 Watt on battery .

### Environmental

Operating Temperature	: 0°C to 55°C.
Storage Temperature	: -10°C to 55°C.
Humidity	: less than 95% RH, Non condensing.

### Safety Standards

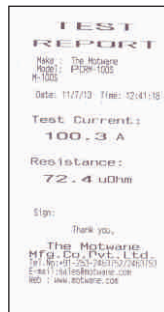
Safety	: According to EN 61010 - 1
EMC	: According to EN 61326 - 1
IP Rating	: IP 54
Measurement Category	: CAT II
CE certification	: LVD: 2006/95/EC
EMC certification	: 2004/104/EC.



Sample Test Leads

## Software Details

Type	: Windows based software
Interface	: USB
Data Transfer	: Real Time Data
Internal DataStorage	: 199 Test results
Features	: Remote Operation Data down loading Analysis and report generation



Sample Print Report



Sample Software Template

Trending of data can reveal vital information about deterioration, the enables user to take informed decision regarding maintenance.

## Accessories

### Standard Accessories

- 1 set of 22 meter strong cable with C Clamp 75mm opening
- 1 set of Master Earthing Cable (7 meter)
- Mains power cord
- User Manual
- Calibration Certificate
- Thermal Paper Role
- Spare Fuse (250mA/250V slow blow)

### Optional Accessories

- 22 meter strong cable with
  - : C Clamp 50mm jaw size
  - : C Clamp 100mm jaw size
  - : C Clamp 150mm jaw size
- Heavy Crocodile clip 25mm jaw size
- 03 meter cable (Heavy Crocodile clip 25mm jaw)
- Software
- USB Cord

