

#### **Features**

- Specially designed for measurement of contact resistance of circuit breakers
- 100A DC test current
- Mains and Battery operated
- Minimum resolution of 0.1μΩ
- Internal memory of 99 test results
- Built in thermal printer & PC interface through USB
- CE Compatible
- Direct mV drop reading
- Tri colour LED for Mains/Battery/LOBAT
- Date & time display
- Calibration due indicator
- Rust removing 'C' clamp



# **PCRM-100S**

### **Contact Resistance Meter**

The Motwane make Contact Resistance Meter (Model:PCRM-100S) 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 fixed at 100A. 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 99 records is provided for onsite data storage. Thermal printer is the additional feature provided to print the test results.

## **Applications**

PCRM-100S is specially used to measure static contact resistance of HT circuit breaker contacts installed in live 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
- Electrode resistance measurement
- Bus bar joints
- Isolator contacts
- Weld joints
- Bond resistance

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### **PCRM-100S**

# **Technical Specification**

**Test Currents** : 100A DC

Range & Resolution :  $200\mu\Omega$  with  $0.1\mu\Omega$ 

2000μ $\Omega$  with 1μ $\Omega$ 

Measurement Principle: Four wire measurement **Basic Accuracy** : ± 2% of reading ± 1 Digit.

(From 10% of the range).

: 99 reading storage facility. Memory Storage

Computer Interface : USB

Thermal Printer : For printing the test results. : Custom Built 3 ½ digit LCD Display Display with Backlit.

**Physical Specifications** 

**Enclosure Material** : ABS.

Dimensions : 365mm x 465mm x 185mm.

(DXWXH)

**Gross Weight** : 20Kg Approx.

(Instrument with Standard

Accessories )

**Power Supply** 

: 230V ±10%, 50Hz ±10Hz Mains

Single phase AC supply.

**Battery** : 12V-7.5AH.

(Rechargeable)

: 35VA, 6.0 Watt on battery. **Power Consumption** 

**Environmental** 

Operating Temperature: 0°C to 55°C. Storage Temperature : 0°C to 50°C.

Humidity : less than 95% RH, Non

condensing.

Safety

Directives for CE Certification:

LVD: 2006/95/EC EMC: 2004/104/EC. Relevant Standard Specification (S):

EN61010-1, EN61326-1.

#### **Accessories**

#### **Standard Accessories**

22 meter strong cable with C Clamp 75mm opening

Master Earthing Cable with battery clip (7 meter)

Mains power cord

User Manual

Calibration Certificate

Carrying Case

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 opening)

Software CD

**USB Cord** 

### Software Details

Type : Windows based software

: USB Interface

Data Transfer : real time data Internal DataStorage : 99 Test results **Features** : Data down loading

Analysis and report generation







#### Notes

1. The Instrument is accompanied with Test & calibration sheet. 2. Test Facilities can be provided at the factory with the available test set-ups only. 3. The Company's policy is continuous improvement of its products. we therefore reserve the Right of any deviation from illustration or specifications without notice. 4. Stated accuracies are valid from 1/10th of range to FS. 5. Accuracy Specified for temperature range of  $25^{\circ}$ C  $\pm$   $5^{\circ}$ C&  $\pm$   $5^{\circ}$ C&  $\pm$   $10^{\circ}$ M.

Designed and Manufactured by:





# The Motwane Manufacturing Company Pvt. Ltd.

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DBS/PC/LR-07/Rev-03