

### **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 microohmmeter, 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

### PCRM-100S

### **Technical Specification**

Test Currents	:	100A DC
Range & Resolution	:	200μΩ with 0.1μΩ
		2000μΩ with 1μΩ
Measurement Principle	:	Four wire measurement
Basic Accuracy	:	± 2% of reading ± 1 Digit.
		(From 10% of the range).
Memory Storage	:	99 reading storage facility.
Computer Interface	:	USB
Thermal Printer	:	For printing the test results.
Display	:	Custom Built 3 ½ digit LCD
		Display with Backlit.

#### **Physical Specifications**

Enclosure Material	: ABS.	
Dimensions	: 365mm x 465mm x 185mm. (D X W X H)	
Gross Weight	: 20Kg Approx. (Instrument with Standard Accessories )	
Power Supply		

#### Power Supply

2	Mains	: 230V ±10%, 50Hz ±10Hz
		Single phase AC supply.
	Battery	: 12V-7.5AH.
		(Rechargeable)
	Power Consumption	: 35VA, 6.0 Watt on battery.

#### 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

- Туре
- : Windows based software
- Interface
- Data Transfer
- Internal DataStorage
- Features
- : USB : real time data
- : 99 Test results
- : 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  $25^{\circ}C \pm 5^{\circ}C \& 55\%$  RH  $\pm 10\%$ .

Designed and Manufactured by:



## The Motwane Manufacturing Company Pvt. Ltd.

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