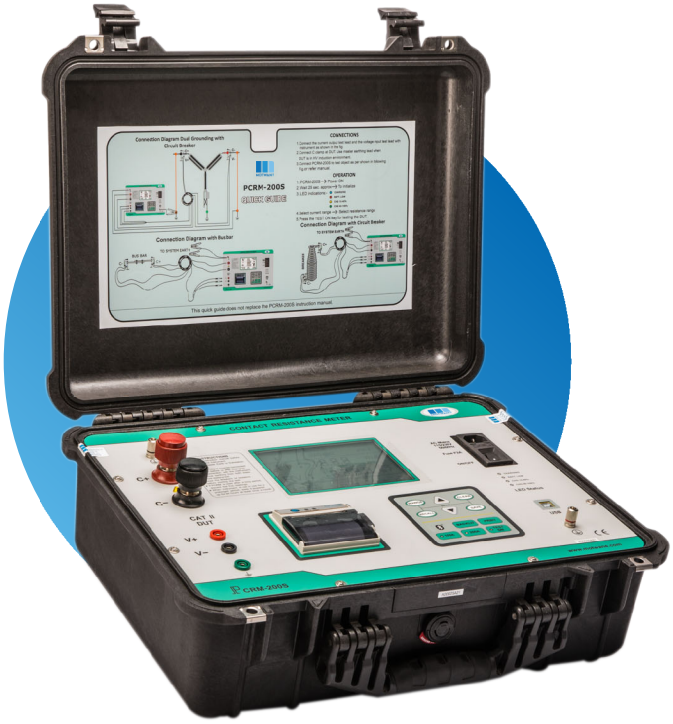

Features

- 100A /200A DC selectable Test Current
- Resistance Range : 0.1μΩ to 20mΩ
- Direct mV Drop Reading
- Built in Thermal Printer
- Internal Memory of 500 test results
- Mains and Battery Operated
- USB Interface for Data Transfer
- LED Indication for Mains/Battery/LOBAT
- Calibration Due Indicator
- Dual Grounding Facility
- Conformity IP54, CE
- Bluetooth enabled for Motware Mobile App

PCRM200S

Contact Resistance Meter

CAT II	IP
300	54

The Motwane's Digital Contact Resistance Meter, Model PCRM-200S is 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. User selectable current injection is 100A/200A. PCRM 200S has large LCD with backlight and display real time test information like injected current with measured resistance value & voltage drop. User friendly instrument and it comes with heavy duty cable with clamps for accurate measurement and accessories are housed in easy transportation case. Advance Windows based software is provided for data downloading, analysis and report generation. Internal memory of 199 records is provided for onsite data storage and inbuilt thermal printer to print the test results at the field.

PCRM 200S has dual ground technique to test circuit breaker with both side grounded, which is safer to conduct test in substation.

PCRM 200S has Bluetooth connectivity module with Motware mobile app for remote access of testing data & storage in the cloud for further analysis & record purpose.

Applications

Stationary and moving contacts are built from alloys that are formulated to endure the stresses of electrical arcing. However, if contacts are not maintained on a regular basis, their electrical resistance due to repeated arcing builds up, resulting in a significant decrease in the contact's ability to carry current and increase in resistance. Excessive corrosion of contacts is detrimental to the breaker performance. Hence to check contacts is to apply DC and measure the contact resistance or voltage drop across the closed contacts. The use of a higher current value gives more reliable results than using lower current values. The resistance value is usually measured in micro ohms (Qff).

PCRM-200S is specially used to measure static contact resistance of LV, HV, EHV 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

MOTWANE

Technical Details	PCRM 200S

Technical Specification

Test Current Injection	100A & 200A DC
Test ON Alert	BEEP
Range & Resolution	20μΩ with 0.1μΩ
	200μΩ with 0.1μΩ
	2000μΩ with 1μΩ
	20mΩ with 0.01mΩ
Measurement Principle	Four wire measurement
Basic Accuracy	± 2% of reading, ± 5 digits
Memory Storage	500 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	Industrial grade Polypropylene
Dimensions (DxWxL)	188mm x 395mm x 502mm
Weight	13 Kg

Power Supply

Mains	115V-230V, 50Hz / 60Hz Single phase AC supply
Battery	Rechargeable Li-ion
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 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

Software Details

Type	Windows based software
Interface	USB
Data Transfer	Real Time Data
Internal Data Storage	500 Test results
Features	Remote Operation
	Data down loading
	Analysis and report generation

Accessories

Standard

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

Optional

- 22 meter lead set with C Clamp 150mm jaw size
- 15 meter heavy duty lead set with alligator clip
- Software and USB Cord
- Bluetooth application via cloud based Motware application

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 includes continuous improvement of its product. We, therefore, reserve the right of any deviation from illustration or specifications without notice. **4.** Stated accuracies are valid from 10% of the range to 95% of the range. **5.** Accuracy specified for temperature range of 25°C ± 5°C & 55% RH ± 10%.

MOTWANE

This Product is Connected (MOT-WARE Enabled)

MOT-WARE Cloud Application

Motwane has designed and developed MOT-WARE – a cloud based test data platform to aid in accurate Asset Health Assessment. Through MOT-WARE, the test and measurement industry has taken a huge leap forward. MOT-WARE captures data from full range of BLE enabled Motwane testing equipment. It is a user-friendly platform as it is also accessible from a web-based, desktop as well as a mobile application. In addition, it offers an open architecture that can seamlessly integrate with any non Motwane test and measurement equipment for quick and authentic digital test data, captured periodically as well as streamed with real-time data via sensors from IoXn series of IOT devices.

MOT-WARE has a preloaded repository of test templates for various electrical assets as well as customizable test templates. A customized report builder in MOT-WARE allows the user to generate report in their own format. It also has a facility to upload historical test data and breakdown history of assets. Test results can also be viewed by various metrics, such as pass or fail.

Data Analysis is also done through MOT-WARE which includes Trend Analysis, MIS Reports and Pivot Tables. As an add-on, MOT-WARE also offers “Motwane AI Analytics” which uses a proprietary AI algorithm and Machine Learning to make accurate predictions about assets life, based on its behavioural patterns and operating conditions.

Being centralized test data, it helps in improving life of assets, its productivity and efficiency, cost reduction, etc. It can be used for various applications across customers' segments like Utilities, OEMs, Industry, Electrical contractors (Testing, O&M) or Field repairs & Service Provider, EPCs, commercial premise and many more.

Important Benefits

Accurate Digital Data

Centralized Data Access

Customizable Report Templates

Trend Analysis

Minimum Training

Scheduling Tests

Reach out to us at setup@motware.com to setup a new MOT-WARE account.