



Features

- ✓ Test Current : 25A, 10A, 5A, 1A, 100mA & 10mA
- ✓ Resolution of $0.1\mu\Omega$ with $\pm 0.1\%$ Accuracy
- ✓ 3 independent channels for resistance measuring
- ✓ Auto Range Facility
- ✓ Heat Run Test Facility
- ✓ 60V High Open Circuit Voltage for stable readings
- ✓ Demagnetization Facility
- ✓ OLTC Dynamic Resistance Test with Graph: Time vs Current
- ✓ Inbuilt Thermal Printer & Memory
- ✓ Bluetooth enabled for Motware Mobile App

XWRM-25A

Winding Resistance Meter

CAT III	IP	CE	USB	Bluetooth
600V	54			

XWRM-25A transformer is a Winding Resistance Meter designed for accurate & fast measurement of highly inductive loads such as Transformers, Reactors, Generator & HT Motors etc. The selectable smooth DC test current is useful to test transformer with different power ratings. Higher Open Circuit voltage saturate the core in quickly in order to get stable readings. The three resistance measurement channels for simultaneous measurement of three windings help to reduce testing time. The heat run test feature is available with graphical representation through software and also has demagnetization facility, which eliminates the magnetic remanence effects. XWRM-25A has facility to test make-before-break operation of on-load tap-changers which helps in the analysis of OLTC switch contacts. The Back EMF feature protects XWRM-10A from high inductive kickbacks. The large LCD display with keypad provides easy operation. It also has the Software for remote operation and detail report generation. Also have an internal memory to store 2000 test results and inbuilt thermal printer provided for onsite report.

XWRM25A has Bluetooth connectivity module with Motware mobile app for remote access of testing data & storage in the cloud for further analysis & record purpose.

Applications

Winding Resistance Test is an essential test which enables to identify shorted turns, loose connections, or deteriorating contacts in tap changers and measurements on all tap changer positions in transformer (if present) and compared to previous or factory test values for evaluating the condition of the transformer windings and leads. The acceptance criteria for the field-measured values should be within 3% of the factory values. A change greater than the acceptance criteria is indicative of short-circuited turns, poor joints, or bad tap changer contacts. This test should be performed during acceptance testing and when other maintenance electrical tests are conducted.

- Power Transformer
- Motor and Generator
- Reactor
- Heat Run Test
- OLTC Dynamic Test

Technical Details

XWRM-25A

Technical Specifications

Power Supply 115/230VAC, 50/60 Hz

Test Current

25A, 10A, 5A, 1A, 100mA & 10mA

Open-Circuit Test Voltage 60 VDC

Burden 1500 W

Resistance Measurement Range

Accuracy $\pm(0.1\%$ of rdg. ± 5 counts)

Test Current					Range (Ω)	Resolution (Ω)	Maximum Display (Ω)
25A	10A	1A	100mA	10mA			
✓					200 $\mu\Omega$	0.01 $\mu\Omega$	199.99 $\mu\Omega$
✓	✓				2m Ω	0.1 $\mu\Omega$	1.9999m Ω
✓	✓	✓			20m Ω	1 $\mu\Omega$	19.999m Ω
✓	✓	✓	✓	✓	200m Ω	10 $\mu\Omega$	199.99m Ω
	✓	✓	✓	✓	2 Ω	0.1m Ω	1.9999 Ω
		✓	✓	✓	20 Ω	1m Ω	19.999 Ω
			✓	✓	200 Ω	10m Ω	199.99 Ω
				✓	2000 Ω	0.1 Ω	1999.9 Ω

Test Current	Range (Ω)	Resolution (Ω)	Maximum Display (Ω)
5A	4m Ω	4 $\mu\Omega$	4.0000m Ω
	40m Ω	1 $\mu\Omega$	40.000m Ω
	400m Ω	10 $\mu\Omega$	400.00m Ω
	4 Ω	0.1m Ω	4.0000m Ω

General

Principle 4 wire measurement

Measurement Channel 3 Resistance & 1 Current channels

Temperature Channel 2 Channel

Temperature Range 0 - 100°C

Display	LCD
Indication	LED & Beep during test ON, & discharge.
PC Interface	USB
Internal Memory	2000 test readings
Printer	Inbuilt thermal printer

Safety & Standards

Safety & Standards : IP54

CE Certification

Safety : Meets requirement of IEC 61010-1

EMC : Meets requirement of IEC 61326-1

Environmental

Operating Temperature 0°C to 55°C

Storage Temperature -10°C to 60°C

Humidity 95% RH, Non condensing

Physical Specifications

Physical Specifications 525 x 437 x 213

Weight 15 Kg

Software Details

Type	Windows based analytical software
Data Transfer	Real time data transfer
Features	Online Data Acquisition Graph Plotting for Heat Run Test & OLTC Dynamic Test Remote Operation Test Report Generation

Accessories

Standard

- 15 meter measuring test lead set
- Mains cord
- Short links - 2Nos.
- Earthing lead
- User Manual
- Calibration Certificate
- Carry Case for Test leads

Optional

- OLTC Probe
- PC Software
- USB Cord
- Temperature Sensor
- Bluetooth application via cloud based Motware application

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 loXn 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.