

# MOTR

## Motwane Oil Tan Delta & Resistivity Kit



### Features

- Dissipation factor, Volume Resistivity, Dielectric constant, Watt loss
- Oil test heating chamber with precise temperature control
- Test cell according to IEC 60247
- Preprogrammed & customized Test sequences
- Inbuilt Thermal Printer
- Internal Memory for 250 Test
- PC Interface for Report generation
- Portable calibrator for onsite calibration of kit
- User friendly functions & operation.
- Sample oil Auto drain facility

Motwane's MOTR is multifunctional automatic test kit designed for accurate measurement of the Dielectric Constant, Tan Delta, Resistivity & capacitance of transformer oil & other electrical insulating liquids. It has preprogrammed test sequences as per various International standards along with customized test sequences as per user requirements. Internal memory for 250 tests provided with PC interface & report generation facility. Inbuilt thermal printer for onsite results. Test cell is designed as per IEC 247 with calibrator for onsite calibration of kit.

# Technical Specifications

## Measurements

Parameter	Range	Resolution	Accuracy
AC Test Voltage	0 – 3000V AC	1V	±1% of Reading
Dissipation Factor	0 – 4.0	1 X 10e-5	±1% of Reading ±0.0001 (1 X 10-4)
Capacitance	0 -1600 pF	0.01 pF	0.1% of Reading + 0.1pF
Dielectric Loss	0 -10.0 watts	0.001 mili Watts	±1% of Reading ± 10-5 Watts
Dielectric Constant	1-20	0.001	0.1%
DC Test Voltage	100 – 1000V DC	1V	±1% of Setting
Resistivity	10 <sup>9</sup> Ω cm to 10 <sup>15</sup> Ω cm	3 Digits	± 2% of reading at 10 <sup>9</sup> – 10 <sup>13</sup> Ω cm ± 5% of reading at 10 <sup>13</sup> – 10 <sup>14</sup> Ω cm ± 10% of reading above 10 <sup>14</sup> Ω cm

## Test Cell

Constant : 620 Nominal  
Capacitance : 55pF ± 1pF  
Insulation : Teflon (PTFE)  
Electrode spacing : 2mm  
Volume of Oil : 60ml

## Heater

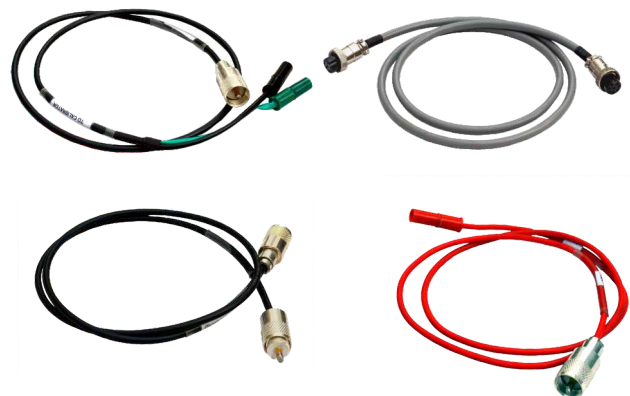
Temperature Range : 20° C - 150° C  
Temperature Control : One set point (max110°C)  
Heating Element : Induction Type  
Sensor : solid state (PT100)

## General

Test Sequences : IEC 60247, VDE 0380, BS 5737, ASTM D924, ASTM D1169, JIS C2101:2010,IS602 .  
Display : Alphanumeric LCD Display  
Printer : Inbuilt Thermal Printer  
PC Interface : RS 232 Port  
Memory : 250 Test  
Power Supply : 110V / 230V, 50/60Hz ±15%  
Operating Temperature : -10 to 50 Deg C  
Humidity : 90% non condensing  
Safety Standards : IEC61010-1 , IEC61326-1  
Weight : MOTR - 22Kg  
Heating Chamber - 14Kg

## Accessories

- Test Lead sets
- Oil Test cell with 3 terminals
- Standard Calibrator with Tan Delta, Capacitance&Resistivity values
- Transportation case



Note : Specification & design subject to change without prior notice.



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