

Transformer Test Setup (Up to 200MVA)

Type: Automatic / Semi-Automatic / Manual

Input: 415V, 3 - Phase, A.C, 50Hz & 60Hz, $\pm 5\%$

Output: 0 - 470V, 3 - Phase, A.C, 50Hz & 60Hz, $\pm 5\%$

Panel Loading Capacity: Up to 600V, 3 - Phase, A.C with 1300A Current Capacity at L.V Side

I.S Compliances: IEC 60076 / IS 2026 / IS 1180 & Other Standards

Test Performed (Associated with panel):

- 1) Watt Losses Test
(A) No Load Test , (B) Load Loss Test
- 2) High Voltage Test / Separate Source Voltage Withstand Test
- 3) Induced Over Voltage Test
- 4) Magnetic Balance Test
- 5) Vector Group Verification Test
- 6) Temperature rise Test
- 7) Zero sequence impedance Test
- 8) Measurement of Magnetizing Current

Capability of Transformer Testing:

From 500kVA to 200MVA (Capability to Test 500kVA to 200MVA with Different ranges of Transformers)

Transformer Impedance Voltage: Up to 20% of Rated System Voltage Level

System Voltages:

L.V Side:- 433V / 690V / 800V / 3.6kV / 6.6kV, 3 - Phase

H.V Side:- 11kV / 22kV / 33kV / 66kV / 110kV / 132kV / 220kV, 3 - Phase (For Losses Measurement)

Panel Operating Modes:

- 1) Manual
- 2) HMI Based Semi - Automatic
- 3) Complete HMI Based
- 4) Computerized Based Semi Automatic
- 5) Complete Computerized
- 6) Computerized & HMI based with PLC

Capability of Supportive Equipments (Addition of rating can be implement on request)

- 1) High Voltage Transformer
Rating = Up to 500kVA
Output = Up to 500kV, A.C, (P - E), 1A @ H.V Side
- 2) Motor-Generator Set
Rating = Up to 1000kVA
Output = Up to 900V & 500V, 3 - Phase with 100Hz to 200Hz Frequency
- 3) High Voltage Divider
Range = Up to 500kV, A.C - D.C Both
Frequency = Up to 200Hz
Type = Oil Cooled

- 4) Current Transformer, System Voltage Up to 220kV (For Losses Measurement)
Ratio = 5A / 5A to 5000A Range (Wound Type / Ring Type)
Accuracy Class = 0.05% , VA = 5 / 10 / 15
- 5) Potential Transformer, System Voltage Up to 220kV (For Losses Measurement)
Ratio = 110V / 440V to 220kV Range (Open Type / Resin Cast / Oil Cooled)
Accuracy Class = 0.05% , VA = 2.5 / 5 / 7.5
- 6) L.T Capacitor Bank
Rating = Up to 5000kVAR
System Voltage = 440V, A.C, 3 - Phase (Delta Connected)
- 7) H.T Capacitor Bank
Rating = Up to 50MVAR (Based on Design of Intermediate Transformer)
System Voltages = 6.6kV / 11kV / 22kV / 33kV / 44kV (1 - Phase)
(By series - Parallel connection Capacity of bank can be enhanced)

(Note:- Addition of Rating can be implement on request.)

Measurement System:

Analog Metering / Digital Metering / Computerised or on HMI Data Monitoring

Consideration of Protection:

Consist MCB's , RCCB's , Fast Sensing Over Current Relays, Fast Sensing Over Voltage Relays, Earth Leakage Relays with Suitable CBCT, Fuses for Small Circuits, Necessary Isolation Transformers, Protection C.T'S etc

Key Features:

Consist Output On - Off Push Button, Output Increase - Decrease Push buttons, Flasher Lamps, Switches for L.T and H.T Capacitor & C.T - P.T Changeover, Tower lights, Metering Sections etc.

Data Reporting:

All Testing Data will Capture by one click and it will arranged in suitable reporting system.
(This System not be available on Manual operating Panel)

Operating Temperature: 2° to 60° Degree

Panel Body:

Mild Steel Fabricated Body with CNC / Laser Cutting and Banding with 90 to 95 Micron Powder Coated

Mounting Arrangements: Suitable to Single , Double & Triple Floor Design

Installation: 1) Indoor, 2) Mobile Vehicle (Limited to certain Ratings only)

Aesthetic Apperance: Can be customized Completely based on Customer Requirement and conviniences.

Associated Make of Equipments:

Schneider Electric, Siemens, Selec, Pheonix Contact, Omron, Esbee, Connectwell, Lumel, Nippen, Gorlan India, Pelican, Murr Electric, Raytech, YokoGawa, Hioki, Metrel, Sonel, Cimon, Lapp cables, Polycabs etc.

Applications:

- 1) Distribution and Power Transformer Manufacturer
- 2) Transformer Repairing Units
- 3) NABL Accredited Laboratories