

# C.T - P.T Test Setup (Up to 220kV System Voltage)

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

Output: 415V, 3 - Phase, A.C, 50Hz & 60Hz, ±5%

Panel Loading Capacity: Up to 600V, 3 - Phase, A.C with 100A Current Capacity at L.V Side

I.S Compliances: IEC 61869 / IS 16227 & Other Standards

# Test Performed (Associated with panel):

1) C.T Accuracy Test

- 2) C.T Knee Point / O.V.I.T test
- 3) P.T Accuracy Test
- 4) P.T Induced Over voltage Test
- 5) High Voltage Test
- 6) Partial Discharge Measurement

#### **Panel Operating Modes:**

- 1) Manual / Semi Automatic
- 2) Complete Computerized with Manual
- 3) Complete Computerized

# **Capability of Testing:**

#### **For Current Transformer**

#### 1) For C.T Accuracy Test:

# (A) High Current Source:

**Input:** 400V, A.C, 50Hz & 60Hz

Output(1): Up to 2400A, 3.33V, 1.1% Over range Capacity (Series) & 800A, 10V (Parallel) (3 - Limb Design)

Output(2): Up to 4800A, 5V, 1.1% Over range Capacity (Series) & 1250A, 20V (Parallel) (4 - Limb Design)

System Voltage: Suitable Up to 220kV C.T

Type: Open with Enclosure / Oil Cooled with M.S Tank

Winding Material: Copper

# (B) Standard Current Transformer:

Ratio: 1A to 3200A / 5A & 1A, 50Hz & 60Hz (Addition of Rating Can be implement on request)

Accuracy: Up to 0.005%

**VA:** 2.5

System Voltage: Suitable Up to 220kV C.T

Type: Open with Enclosure Winding Material: Copper



# (C) C.T Burden Box

Current Capacity: 5A & 1A, 50Hz & 60Hz

**VA Tappings:** 1.25 - 1.875 - 2.5 - 3.75VA (UPF), 5 - 7.5 - 10 - 15 - 30VA (0.8 P.F)

Accuracy: 3%

Type: Inside Panel / Open with Aluminium Enclosures

# 2) For C.T Knee Point Voltage Test / O.V.I.T Test:

# A) Secondary Side Injection:

Multitap Output Ranges: 50V (5A) - 200V (5A) - 750V (5A) - 2200V (1A) - 4400V (1A) - 6600V (1A) -

8800V (1A)

Type: Open Type

#### **B) Primary Side Injection:**

**Measurement Range:** 0 - 10kV, Peak (2 - Pole Charge Method)

(High Impedance Measurement Meter for 4.5kV Peak)

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

# 3) High Voltage Test:

# (A) 1 - Phase O/P High voltage Source:

Input: 400V, A.C, 1 - Phase / 2 - Phase , 50Hz & 60Hz

**Output:** Up to 500kV, A.C, 1 - Phase, (P - E)

Type: Oil Cooled Tank
Installation: Indoor

Winding Material: Copper

Applicable: Suitable Up to 220kV System Voltage

# For Potential Transformer

### 1) For P.T Accuracy Test:

# (A) 3 - Phase O/P High voltage Source:

Input: 415V, A.C, 3 - Phase, 50Hz & 60Hz

Output: 40kV, A.C, 3 - Phase, Star - Connection

**Type:** Resin Cast **Installation:** Indoor

Winding Material: Copper

Applicable: Suitable Up to 33kV System Voltage



# (B) 1 - Phase O/P High voltage Source:

Input: 400V, A.C, 1 - Phase / 2 - Phase , 50Hz & 60Hz

**Output:** Up to 150kV, A.C, 1 - Phase, (P - E)

Type: Oil Cooled Tank
Installation: Indoor

Winding Material: Copper

Applicable: Suitable Up to 220kV System Voltage

# (C) Standard Potential Transformer:

Range 1: 220V - 440V - 660V - 1100V - 2200V - 3300V - 4400V / 110V & 63.5V

Range 2: 6.6kV - 11kV / 110V & 63.5V

Range 3: 22kV - 33kV / 110V & 63.5V Range 4: 66kV - 110kV - 132kV / 63.5V

Range 5: 220kV / 63.5V

**Accuracy:** 0.05% - 0.1% - 0.2%

VA: 2.5 or Best Burden

Type: Resin Cast / Oil Cooled Tank

Applicable: Suitable Up to 220kV System Voltage

#### (D) P.T Burden Box:

Voltage: 110V & 63.5V, 50Hz & 60Hz

**VA Tappings:** 1.25 - 1.25 - 2.5 - 5VA (UPF)

Accuracy: 3%

Type: Inside Panel / Open with Aluminium Enclosures

# 2) Induced Over Voltage Test:

# (A) Motor - Generator Set:

**Loading Capacity:** Up to 50kVA (Suitable to 220kV System Voltage)

Generator Output: 500V, A.C., 100Hz to 200Hz

**Generator O/P Current Capacity: 58A** 

Type: Belt Drive / Couple Drive

Operating of this M-G Set will be from Control Panel through Manually / Computerized.

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

#### **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), 3) Outdoor

Asthetic 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) C.T P.T Manufacturer
- 2) C.T P.T Repairing units
- 3) NABL Accredited Laboratories