

# A.C. HIGH VOLTAGE BREAKDOWN TEST SET

MODEL : CIE /5050A



## SPECIAL FEATURES

- ROBUST POWDER COATED SHEET METAL CASE
- ELEGANT LOOK
- KV METER TO READ THE OUTPUT VOLTAGE
- MILLIAMMETER TO SHOW LEAKAGE CURRENT
- SPEEDY AND ACCURATE TESTING OF BREAKDOWN/WITHSTAND TEST OF ELECTRICAL & ELECTRONIC COMPONENTS, MATERIALS, EQUIPMENT, PANEL BOARD ETC.

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## **APPLICATION:**

'CIE' A.C. High Voltage Breakdown Test Set is ideal for fast accurate & reliable testing of withstand/Breakdown test of electrical & electronic materials, components, equipments, panel boards, etc.

## **DESCRIPTION:**

The test set is housed in a robust, sturdy and elegant looking powder coated M.S. Cabinet provided with handles. Attractive & Informative front Panel Consists of:

- Mains 'ON'/'OFF' switch
- FUSE
- Mains 'ON' LED (Green) indicating Lamp
- H.T. 'ON' Green push button switch
- H.T. 'ON' LED (Red) indicating Lamp
- H.T. 'OFF' Red push button switch
- Variac to set kV (with zero start inter locking)
- KV meter to read the output voltage
- Milliammeter to show leakage current
- Toggle switch to select mA range (Tripping range)
- One pair of H.V. probe along with cable
- Yellow push button switch for memory

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## THE H.V. TEST SET MAINLY CONSISTS OF ONE H.V. TRANSFORMER AND CONTROL CIRCUIT.

The H.V. Transformer used in the test is of cast resin type. The H.V. winding of the high voltage testing transformer is of graded insulation. This testing transformer is specially designed to withstand frequent sparkover or momentary short circuit conditions under which such testing transformers are supposed to operate.

### CONTROL CIRCUIT:

The control circuit consists of the following:

- One continuously variable auto transformer for smooth variation of output voltage.
- Zero start interlocking is provided to ensure that the H.V. circuit cannot be energised unless the regulating transformer is at zero position or brought back to zero position.
- Lamp to indicate L.T. on.
- Lamp to indicate H.T. on.
- Memory device along with push button switch enables the test set meter to show the breakdown voltage by pressing the memory switch even after the high voltage circuit is tripped off.

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## **PROTECTION:**

Beside main switch and fuse in the input side, tripping mechanism is provided to protect the set from over currents rush while the sample under test fails the H.V. Test.

## **METER AS PER IS 1248 : 1983**

- AC moving iron type voltmeter, generally connected to the L.T. side and scaled in K.V.
- AC moving iron type milliammeter to show the leakage current.

## **TECHNICAL SPECIFICATIONS:**

**Input Voltage: 230V,  $\pm 10\%$ , 50Hz, 1 phase A.C.**

**Output Voltage: Continuously variable from**

(i) 0 to 3 KV AC for 3 KV Test Set

(ii) 0 to 5 KV AC for 5 KV Test Set

**Capacity: 50 mA maximum in the H.V. side**

**Tripping Current: 25mA & 50mA (Toggle switch provided)**

**Duty Cycle: Intermittent i.e., 5 minutes 'ON' & 10 minutes 'OFF'**

**Mode of Operation: Manual**

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**\* TRIPPING CURRENT SET POINT OTHER THAN STANDARD SETTING  
CAN BE PROVIDED AT EXTRA COST.**

**CAMBRIDGE INSTRUMENTS & ENGINEERING CO.**

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