



## **SECONDARY CURRENT INJECTION TEST SET (REAY TEST SET)**

This is a portable testing kit in one unit suitable for testing protective relay over current relay earth fault relay protective device, circuit breaker, tripping coils etc. The set is designed for both laboratory and field use.

### **TECHNICAL FEATURES :**

- INPUT : 230Volts Single Phase, 50Hz AC.
- OUTPUTS : 1) **2 Independent Current Output :**
- a) 0-5 Amp. At 20Volts (for continuous duty)
  - b) 0-10 Amp. At 20Volts (for continuous duty)
  - c) 0-25 Amp. At 10Volts (for 10 minutes duty)
  - d) 0-50 Amp. At 10Volts (for 5 minutes duty)
  - e) 0-100 Amp. At 10Volts (for 60 second duty)
  - f) 0-150 Amp. At 10Volts (for 30 second duty)

Current output is continuously variable and the output is taken out through a multi range C.T. The secondary is connected to an ammeter scaled in 0 to 100% 5A, 10A & 25A Current ranges are selected by selector switch and 50A, 100A & 150A are dedicated terminals with com. Terminal

**2) AC Voltage Output :**  
Continuously variable 0-250V AC  
Capacity : 250VA (Max)

**3) DC Voltage Output :**  
Continuously variable 0-250V DC  
Capacity : 500VA (Max)

**4) Time Measurement :**  
0-9.999 Secs. & 0-99.99Secs in two ranges.  
Accuracy : 1%

### **CURRENT CIRCUIT :**

#### **Loading Transformer :**

Double winding loading transformer of suitable burden to provided corresponding current output specified before.

#### **Measuring CT :**

Multi ratio wound primary current transformer  
Ratio : 5-10-25-50-100-200A/5A

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**Variable auto transformer :**

For smooth variation of current output at various ranges selected

**Tripping Circuit :**

The current output will be cutoff incase of any overload or even if the relay under test actuated.

**Metering :**

Digital meter. Basic Range- 0 to 5A AC.

Scaled in 0 to 100% for all selected range

Accuracy – 1.5% of full range.

**VOLTAGE CIRCUIT**

**Variable auto transformer :**

For smooth variation of voltage output for AC & DC 0-250VAC/DC.

Isolation transformer of suitable burden is provided for AC/DC output.

**Metering :**

Digital meter. Basic Range –0 to 300V AC/DC. Accuracy – 1.5% of full range.

**Timer circuit :**

Dual range digital time interval meter

**Ranges :** i) 0-9.999 Sec.

ii) 0-99.99 Sec. in two switching range.

Selector for NO & NC contacts. Reset push button.

“Start” timer signal is potential free closing or opening of auxiliary contacts of the set contactors.

**GENERAL ARRANGEMENT**

The test kit will be in one unit. Meters, terminals, indicators, regulator knobs, timer display etc. will be fitted on the horizontal panel of the set which can be approached by opening the top lid. An input chord of 2 meters length will 3pin plug will be provided. Loading transformer, measuring CT & protection circuit will be housed within the same unit.

Operation manual , schematic circuit diagram, work test report, suitable earth leads & current leads, guarantee certificate will be supplied along with the set.

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