

## SECONDARY CURRENT INJECTION TEST SET (RELAY TEST SET)

# MODEL : CIE/RTS-5

**SCOPE :** "CIE" Relay Test Set is ideal for Testing Protective relay, over current relay, earth fault relay by secondary injection method with help of digital timer.

#### RATING

**INPUT** : 230Volts. Single phase 50Hz AC.

- **OUTPUT** : 1) Continuously variable between
  - a) 0-1 Amp. at 14Volts/4Volts.
  - b) 0-2 Amp. at 14Volts/4Volts.
  - c) 0-5 Amp. at 14Volts/4Volts.
  - d) 0-10 Amp. at 14Volts/4Volts.
  - e) 0-20 Amp. at 14Volts/4Volts.
  - f) 0-50 Amp. at 4Volts.
  - g) 0-100 Amp. at 4Volts.
  - h) 0-200 Amp. at 4Volts.

or

i) 0-250Volts A.C. at 2A

2) output fixed Voltage 50V & 110VAC at 2A

**DUTY** : Intermittent i.e. 5mins. 'ON' or 10mins. 'OFF'

#### 3) DIGITAL TIMER HAVING RANGES.

- i) 9.999 sec. Resolution 1 milli sec.
- ii) 99.99 sec. Resolution 10 milli sec.

#### 4) METERING :

i) One rectangular pattern multi range digital amp. meter having range of

0-1/2/5/10/25/50/100/200 amps. Meter reading will be 0-100% at selected range.

ii) One rectangular pattern AC. Volt meter having range 0-300 V / AC.

**NATURE OF COOLING** : Air natural cooling type.

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## **OPERATIONAL INSTRUCTION :**

- 1. Make the unit earthed properly.
- 2. Connect the proper output Current terminal i.e. Com. & any one output terminal to the relay current terminal properly. Connect the AC Voltage output to relay Voltage coil if required.
- 3. Connect the auxiliary protential free contact of relay under test to the corresponding set "Relay mode connection" terminal. If available auxiliary contant is 'NO' then 'Relay' mode selection switch keep on 'NO' position or it is 'NC' then keep it on 'NC' position which indication by relay mode lamp.
- 4. Select relay time range switch at 9.999sec. or 99.99sec. position as required.
- 5. Connect the mains power supply cord to the nearest power supply (230V-AC)
- 6. Make the set 'ON' by mains 'ON' switch which is indicated by glowing 'Mains On' indicating Lamp.
- 7. Keep the Volt/ Current regulator knob at zero position.
- 8. Then make the output ckt. 'ON' by "Start" green push switch which is indicated by green start lamp. Output ckt. Cannot be energised if auxiliary relay mode contact not connected properly & selection of relay mode switch i.e. 'NO' or 'NC' position.
- 9. After making output ckt. 'ON' set the output current by regulator. After setting output current make the output ckt. 'OFF' by relay mode switch or mains 'ON' switch. Then reset the timer by pressing reset push switch. Then make output ckt. 'ON' by output 'Start' green push switch.
- 10. As soon as the relay under test is actuated the set output automatically tripped off & timer stop counting & clasped time lach on the timer display.

## NOTE :

- 1) Make the unit earthed properly.
- 2) Don't change the relay mode switch during test condition.
- 3) 0-250V AC & output current can't get simultineously i.e. output avail 0-250V AC or current which selectable by "Volt/Current selection switch."

'CIE' in a continuing effort to offer excellent products at a fair value, reserves the right to change models, specifications and designs without notice.

# CAMBRIDGE INSTRUMENTS & ENGG. CO.