



## Relay Test Set

The set is capable of testing of all types of single phase equipment, over-current, under & over-voltage, leakage current, power, differential and directional relays etc. Other fields of operation are plotting Excitation Curves and Ratio Tests of CT's and PT's.

The set comprises of the auto variable transformers, current transformer, contactor, automatic cut-off, electronic time interval meter, capacitor & resistors for phase shifting, operating switches and meters for output parameters, housed in a cabinet made of FRP. Suitable switches are provided for selection of voltage and current ranges and type of relay contacts viz. NC/NO. The output current and voltage are continuously variable. The output is automatically cut off as soon as relay under test operates. The time interval meter indicates the time taken by the "Relay under Test" to operate. Separate terminals are provided for output voltage & current ranges and relay connections. The toggle & push switches, indicators, voltmeter, ammeter and variac knobs are provided on the control panel. Sturdy carrying case is provided for easy transportation. The T.I. Meter can also be programmed to measure pick-up and dropout time of contactors, independently.



## Technical Specification

**Input:** 240 V±10%, 50 Hz., Single phase

Models:	RTS – 02	RTS – 02X	RTS – 03
<b>Output:</b>			
Main	0-1/5/25/50/100 A AC OR 0-250 V/3A AC OR 0-250 V/2 A max. DC	0-1/5/25/50/100 A AC OR 0-250 V/1 A max. AC OR 0-250 V/2 A max. DC	0-1/5/25/50/100 A AC OR 0-250 V/2 A max. AC OR 0-250 V/2 A max. DC
Auxiliary			
1.	0-250 V/2 A AC OR 0-250 V/1.5 A DC	0-250 V/1 A max. AC OR 0-250 V/1 A max. DC	0-250 V/2 A max. AC OR 0-25 A max. AC
2.	230 V AC	110/230 V AC±10%	0-250 V/1.5 A max. DC

**Metering:**

1. Digital Ammeters, AC RMS, 3.5 dig., accuracy - +/- 1% for Main & Auxiliary output currents.
2. Digital Voltmeter, AC/DC RMS 3.5 dig. for Main & Auxiliary outputs voltages, Accuracy - +/-1 %.
3. Digital Time Interval Meter (Programmable), Range 0.0001-9999 sec, Accuracy - +/- 0.05%.

**Phase Shifting:** 30, 45 and 60 degrees can be attained by R/C network provided in models RTS - 02 & 03 only.

**Other Provisions:**

1. Make & Break Contact for testing under/over-voltage relays.
2. The programmable timer, provided as below, can be used externally also.

**Cabinet:** RTS 02X is housed in 20" VIP suitcase and RTS - 02 & 03 in FRP case.

**Dimensions:** 18" x 12" x 8" (approx) for RTS 02 & 03.

**Weight:** 30 Kgs. (approx) for RTS 02 & 03.  
20 Kgs. (approx) for RTS 02x.

**Accessories:** 1. Set of Testing leads.  
2. Carrying case for transportation, measuring 20" x 14" x 10" (approx). for RTS-02 & 03.

**Relay Test Set : Model RTS-04**

The set is similar to our model RTS-02 except that the AUXILIARY OUTPUT is 0-110 V AC on single phase input. A phase shifter has been provided for which 3 phase input is required. In that case, this auxiliary AC output of 110 V AC is fixed but can be shifted continuously w.r.t. current (Main Output) by 0-360 degrees, with coarse & fine adjustment. A "Make & Break" contact is also provided to test the "Under & Over voltage" relays.

**Technical Specification**

**Input:** 240 V, 50 Hz. Single phase or 415 V, 50 Hz. 3-phase.

**Output:**  
Main 0-1/5/30 A AC or 0-250 V AC, continuously variable, isolated.

Auxiliary 0-110 V AC, isolated in case of 1 phase input, and 110 V AC (fixed) but with variable phase shift of 0-360 degrees w.r.t Main Output in case of 3 phase input.

**Other Provisions:**

1. Phase shifter, 0-360 degrees, continuously variable.
2. Make & Break Contact for testing under/over-voltage relays.
3. The programmable timer, provided as below, can be used externally also.

**Metering:**

1. Digital Ammeter, AC RMS, 3 1/2 dig., accuracy -  $\pm$  0.5% for output current.
2. Digital Voltmeter, AC/DC RMS, 3 1/2 dig. for Main & Aux. output voltages, Accuracy -  $\pm$  1% .
3. Digital Time Interval Meter (Programmable), 4 dig., Range 0.0001-9999 seconds, Accuracy -  $\pm$  -0.05%.
4. Digital Phase Angle Meter, Range : 0-360 degrees. Accuracy - 0.25%  $\pm$  1 digit.

**Dimensions:** Fibre-glass Case - 18" x 12" x 8" approx.  
Outer MS Transport Case - 20" x 14" x 10".