

OMEGATYPE ES-333 Experimental setup has been designed Specifically to study the performance of transformer and determine open circuit test, short circuit test, efficiency and voltage regulation of $1 f$ Transformer. The setup consist of voltmeters, ammeters, wattmeters, load resistors variac and transformer.

The setup is complete in all respect and requires no other apparatus. Practical experience on this setup carries a great educative value for Science and Engineering students.

## OBJECT

01 To perform open circuit test of $1 \phi$ Transformer.
02 To perform short circuit test of $1 \phi$ Transformer.
03 To determine efficiency and regulation of $1 \phi$ Transformer.
04 Verification of transformation ratio of $1 \phi$ Transformer.

## FEATURE

The board consists of the following built-in parts :
01 Moving Iron AC portable Voltmeter / :
Housed in bakelite case with knife edge pointer \& anti parallax mirror scale of 140 mm Ammeter/Wattmeter length, spring controlled movement, having accuracy class 1.0 .
1.1 Two moving iron AC Voltmeter $0-300 \mathrm{~V}$.
1.2. One moving iron AC Voltmeter $0-25 \mathrm{~V}$.
1.3 Two moving iron AC Ammeter 0-10 Amp.
1.4 One moving iron AC Ammeter 0-1.0 Amp.
1.5 Two Wattmeter single phase, dynamometer type, Multi range, current coil 5/10Amp. Potential coil 75/150/300 Volt.
1.6 Wattmeter single phase, dynamometer type current coil 0.5 Amp. Potential coil 300 Volt.
02 Variac Variable voltage transformer table/floor mounting with enclosure input 230 V , output $0-270 \mathrm{~V}$ at 8 Amp .
03 Transformer for study Input 230V Output 150V at 5 Amp .
04 Fixed Resistance in three steps : Use two heating rods of 50-70 ohm, 750 Watt each, based on cement asbestos sheet of size $6 \times 12$ inch, output are on terminal with connecting series \& parallel connections by switches, to obtain different resistance 100-140 ohm, 50-70 ohm, 25-35 ohm approx.
05 Weight : 44 Kg . (Approx.)
06 The unit is operative on $230 \mathrm{VAC} \pm 10 \%$ at 50 Hz .
07 Set of connecting wires.
08 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

## OMEGA ELECTRONICS

