

**MEASUREMENT OF THE POWER IN A SINGLE-PHASE CIRCUIT BY (I) THREE-VOLTMETER METHOD (II) THREE- AMMETER METHOD**  
OMEGA TYPE ES-311



**OMEGA TYPE ES-311** Experimental Set-Up has been designed specifically to study the measure of power in a single phase circuit using (i) Three-voltmeter method. (ii) Three-Ammeter method. The set-up consists of Voltmeter, Ammeter, Variac, Fixed resistance in three steps and Variable load.

The set-up is complete in all respects and requires no other apparatus.

Practical experience on this set up carries great educative value for Science and Engineering Students.

**OBJECT**

01 To measure the power in a single-phase circuit using three Voltmeters.

02 To measure the power in a single-phase circuit using three Ammeters.

**FEATURES**

The complete Experimental Set-up consists of the followings :

**01 MOVING IRON AC PORTABLE** : In housed in bakelite case with knife edge pointer & anti parallax mirror scale of 140mm voltmeter / ammeter length, spring controlled movement, having accuracy class 1.0.

1.1 Voltmeter range 0–300 Volt : 3 Nos.

1.2 Ammeter range 0–10 Amp. : 3 Nos.

**02 VARIAC** : Variable voltage transformer table/floor mounting with enclosure input 230V, output 0–270V at 8 Amp.

**03 VARIABLE LOAD** : Uses 6 heating rods of 50-70E, 750 Watt each, based on cement asbestos sheet of size 7.75 x 23.75 inch, Output are on terminal with connecting series & parallel connections by switches, to obtain different loads 8.33 to 70 ohms app.

**04 FIXED RESISTANCE** : In three steps Uses 2 heating rods of 50-70E, 750 Watt each, based on cement asbestos sheet of size 6.75 x 14 inch, Output are on terminal with connecting series & parallel connections by switches, to obtain different resistance 100-140E, 50-70E, 25- 35E app.

05 Set of connecting wires

06 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

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