



OMEGA TYPE ES-310 Experimental Set-Up has been designed specifically to measure the power and power factor in a single phase A.C. circuit. The set-up consists of Voltmeter, Ammeter, Wattmeter, Power factor meter, Variac 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 connect a wattmeter and PF. meter in a single phase ac circuit for measuring the Power and Power Factor of a single phase load.
- 02 To verify the relation : $P = VI \cos \phi$ from actual measurement of Power, Voltage, Current and Power factor.

FEATURES

The complete Experimental Set-up consists of the followings :

- 01 Moving Iron AC portable voltmeter : In housed in bakelite case with knife edge pointer & anti parallax mirror scale of ammeter/wattmeter/power factor meter 140mm length, spring controlled movement, having accuracy class 1.0.
 - 1.1 Voltmeter range 0–300 Volt
 - 1.2 Ammeter range 0–10 Amp.
 - 1.3 Dynamometer type Wattmeter single phase, multi-range, current coil 5/10Amp., Potential coil 75/150/300 Volt.
 - 1.4 Power factor meter single phase current coil 5/10Amp. Potential coil 125/250/500 Volt
- 02 **VARIAC** : Variable voltage transformer table/floor mounting with enclosure input 230V, output 0–270V at 8Amp.
- 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 Set of connecting wires
- 05 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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