

## **POWER & POWER FACTOR IN SERIES** LCR CIRCUITS USING SINGLE PHASE

**OMEGA TYPE ETB-131** 



**OMEGATYPE ETB-131** Experimental Training Board has been designed specifically to determine the Power and Power Factor in Series RLC circuit using Single Phase A.C. Supply. The board is absolutely self contained and requires no other apparatus.

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

### **OBJECT**

Determination of Power and Power Factor in series RLC circuit using Single Phase.

## **EXPERIMENTS**

- 01 Study of Series RLC Circuit using Single Phase A.C. and to determine
  - 1.1 Power
  - 1.2 Power Factor and also draw the vector diagram.
- 02 Study of Series R-L Circuit using Single Phase A.C. and to determine
  - 2.1 Power
  - 2.2 Power Factor and also draw the vector diagram.
- 03 Study of Series R-C Circuit using Single Phase A.C. and to determine
  - 3.1 Power
  - 3.2 Power Factor and also draw the vector diagram.

#### **FEATURES**

The board consists of the following built-in parts:

- 01 Mains transformer having Secondary tappings at 20V, 30V, 40V, 50V and 60V A.C. at 500mA
- 02 Two A.C. Voltmeters, 65mm rectangular dial to read 0-75V.
- 03 A.C. Voltmeter, 65mm rectangular dial to read 0-50V.
- 04 A.C. Milliammeter, 65mm rectangular dial to read 0-500mA.
- 05 High wattage resistance, capacitor and inductor.
- 06 Mains ON/OFF switch, Fuse and Jewel light.
- 07 The unit is operative on 230VAC ±10% at 50Hz.
- 08 Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length 50cm.
- 09 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections/ observation of waveforms.
- 10 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

11 Weight : 6.500 Kg. (Approx.)

12 Dimension: W415xH165xD315

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

# **OMEGA ELECTRONICS**