

# VOLTAGE-CURRENT RELATIONSHIP IN A R-L SERIES CIRCUIT

**OMEGA TYPE ES-308** 



**OMEGA TYPE ES-308** Experimental Set-Up has been designed specifically to find the Voltage & Current relationship in a R-L series circuit and to determine the Power Factor of the circuit. The set-up consists of Voltmeter, Ammeter, Wattmeter, Variac, Inductor and Fixed resistance in three steps.

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 find the voltage and current relationship in a R-L series circuit and to determine the power factor of the circuit.

#### **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 140mm length, spring controlled movement, having accuracy class 1.0.

- 1.1 TWO VOLTMETER RANGE 0-300 VOLT
- 1.2 AMMETER RANGE 0-10 AMP.
- 1.3 WATT METER SINGLE PHASE, dynamometer type, Multirange, current coil 5/10 Amp., Potential coil 75/150/300 Volt.
- 02 DIGITAL VOLTMETER: 3½ digits having range 200VAC. PRODUCT
- **03 VARIAC** : Variable voltage transformer table mounting with enclosure input 230V,

output 0-270V at 8Amp.

**04 FIXED RESISTANCE**: Three steps Uses 2 heating rods of 50-70 Ohm, 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 100-140 Ohm, 50-70Ohm, 25-35 Ohm approx.

**05 INDUCTOR** : One.

06 Set of connecting wires

O7 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.

## **OMEGA ELECTRONICS**