Application

This experimental setup is designed to measure current, voltage, and power in a single-phase R–L–C series circuit excited by an AC supply.

The unit enables analysis of impedance, phase relationship, and power characteristics under varying supply conditions, making it suitable for engineering laboratories and technical training institutes.

System Configuration

Each setup consists of the following modules:

Variable AC Power Supply

- Type: Dimmer controlled AC supply
- Output Voltage Range: 0–230V AC
- Current Rating: 2A
- Smooth voltage variation for controlled experimentation

Multifunction Meter

- Measurement Parameters: Voltage, Current, Power (Watt)
- Voltage Range: 0–300V
- Current Range: 0–10A
- Power Range: 0–300W
- Digital display for accurate monitoring of electrical parameters

Load Specification

- Rated Load Current: 1A
- Configured for safe operation within experimental limits

Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.

Single-Phase R–L–C Load Bank

- Series configuration of Resistor (R), Inductor (L), and Capacitor (C)
- Designed for AC circuit analysis
- Suitable for studying impedance variation and power factor behavior

Functional Features

- Enables practical study of R–L–C series circuit behavior
- Measurement of active power under varying voltage conditions
- Analysis of impedance and phase relationships
- Suitable for academic, laboratory, and demonstration purposes

Export Sales: +91-9829132777
India Sales: +91-9588842361

IT-2013, Ramchandrapura Industrial Area,
Sitapura Extension, Jaipur-302022, India.

info@tesca.in
www.tescaglobal.com