



Introduction

The Tube Light Study Kit is an educational training system designed to demonstrate the construction, working, and electrical characteristics of fluorescent lamps (tube lights).

This setup enables students to understand the functioning of essential components such as choke, starter, and capacitor, along with their role in lamp operation, power factor improvement, and circuit performance.

Training Objectives

- To study the working principle of fluorescent lamps
- To understand the function of choke, starter, and capacitor
- To observe starting and operating characteristics of tube light circuits
- To measure electrical parameters such as voltage, current, and power
- To evaluate power consumption and efficiency of the system

System Description

The training kit consists of a compact and well-labeled panel incorporating a complete fluorescent lamp circuit. All components are mounted on a front panel with clear schematic representation to facilitate easy understanding and safe experimentation.

The setup allows users to perform real-time measurements and observe the behavior of the lamp during starting and steady-state conditions.

Key Features

- Designed for academic and laboratory training
- Clearly marked schematic diagram on panel
- Rugged and compact construction
- Safe and easy-to-use configuration
- Provision for electrical parameter measurement

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



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



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



info@tesca.in
www.tescaglobal.com

- Demonstration of complete tube light circuitry

System Components

Fluorescent Lamp Assembly

- Standard tube light fixture
- Lamp holder with protective housing

Control Gear Section

- **Choke (Ballast)** – limits current and provides high starting voltage
- **Starter** – initiates lamp ignition process
- **Capacitor** – improves power factor and reduces flicker

Measurement Section

- AC Voltmeter : Suitable range for lamp operation
- AC Ammeter : For current measurement
- Wattmeter : For power consumption measurement

Technical Specifications

Input Supply

- Voltage : 230 V AC $\pm 10\%$
- Frequency : 50 Hz

Lamp Rating

- Type : Fluorescent Tube Light
- Typical Rating : 36 W / 40 W

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



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



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



info@tesca.in
www.tescaglobal.com