

# Single Phase Differential Relay Training System

## Introduction

Single Phase Differential Relay Training System is a versatile product for electrical laboratories. Various types of relays are used as protection devices in combination with circuit breaker in electrical system. The Differential Relay operates due to differential current flowing in the circuit. When current between two sections vary from a known and permissible value, the relay gets tripped and protects the connected device.

The Differential Relay requires two current sources for its operating & testing. For this, two current injection units are provided with the system. The current of both the injection units are displayed on meters with the differential current to perform the experiment with higher stability & accuracy.



\*\* Shown image is just for illustration original may differ

## Product Features

- Microcontroller based digital measuring instruments for accurate results
- Electromechanical relay to understand internal mechanism and its working
- Equipped with supply indication Lamp
- Tripping function settings
- Inbuilt Single Phase Variac with isolation
- Two variable current injection units
- Front board consist of MS Material with power coating / epoxy paint to avoid any rust
- Separate auxiliary supply to actuate digital measuring devices
- Specially designed BS10 Terminals and patch cords for electrical safety
- Earthing screw provided at the back side of the control set-up
- Product is provided along with protection fuses, colored patch cords, single phase cords, User's manual having theory operating procedure with connecting diagram, FAQ, Glossary, etc

## Technical Specifications

**Input Supply** : 230  $\pm$ 10%V AC, 50Hz

### Single Phase Variac

- Input : 230V
- Output : 0-270V, 2A

### Differential Relay

- Make : Alstom
- Type : Differential Relay (Fixed Biasing)
- Normal Voltage : 110V AC, 50Hz
- Current Setting : 0.2A TO 0.8A

### Measuring Instruments

- AC Voltmeter : 300V
- AC Ammeter : 10A
- Timer Range : upto 90Min

## Experiments Can be performed:

- To study and verify the operating characteristics of Differential Relay with different plug setting
- To study the connection of Differential Relay in electrical circuit

## Supporting Accessories supplied with Product

Patch Cords of different color scheme, Single/Three Phase Mains Cord, Extra Glass Fuses, Operating Manual (softcopy)

**\*\*Please feel free to share your queries or requirements by filling your details in ask query section or request a Quote section on the website, we will be happy to cater your requirement.**