



46619 Earth Fault Relay Testing System is designed to provide exposure of protection device used to prevent faults in electrical circuits due to earth leakage current. The protection of electrical system is required to maintain any device in operation without failure. There are various types of protective devices used in Power Systems. The knowledge of protective devices helps to use them smartly and avoid system breakdown. Earth leakage current gives rise to heat generation and progressive failure of insulation which leads to earth faults & sparks. The Earth Fault Relay detects the leakage current well before they cross threshold limit.

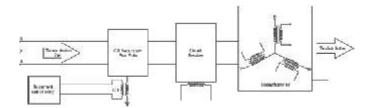
46619 provides complete learning platform related with the connection of Earth Fault Relay in transmission line and testing of Earth Fault Relay. After experimenting with 7094 the students will be able to use Earth Fault Relay in Power Systems.

## **Features**

- Inbuilt variable source
- Big font LCD display for better visibility
- Isolation transformer is provided for safe operation
- Exclusive and rugged designed panel
- Designed by considering all the safety precautions
- Diagrammatic representation for the ease of connections
- Learning material CD
- 2 Year Warranty

## **Scope of Learning**

- To study and verify the operating characteristics of Earth Fault Relay with different plug setting
- To study connection of Earth Fault Relay in transmission line
- To study testing of Earth Fault Relay



For understanding the role of relays in real time transmission system a circuit of transmission line is provided from source to distribution with proper placing of all its required components.

Note: Specifications are subject to change.

## **Technical Specifications**

Mains Supply : 230V±10%V AC, 50Hz

Variac

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

Isolation Transformer

Rating : 1kVA Primary Voltage : 0-230V Secondary Volatge : 0-230V

Earth Fault Relay

Type : Electromechanical Inverse

Time

Normal Voltage : 110V AC, 50Hz

Plug Setting : 0.5A, 0.75A, 1.0A, 1.25A,

1.50A, 1.75A and 2A

Rheostat : 110 ,5A

Display Measurement Unit

Design Technology : AVR RISC Microcontroller

Voltmeter : 25 - 300V

Measurement Method : Direct ADC interface

Display Resolution : 1V Ammeter : 0.2 - 5A

Measurement Method : CT based ADC interface

Display Resolution : 0.01A

Timer

Range : 10mSec - 30min

Operation : Automatic with relay start

operating

LCD Specification

No. of lines : 2

No. of Characters in

each line : 16 MCB : 6A (SPN)

Dimensions (mm) : W 830 x D 355 x H 630 Weight : 52kg (approximate)

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