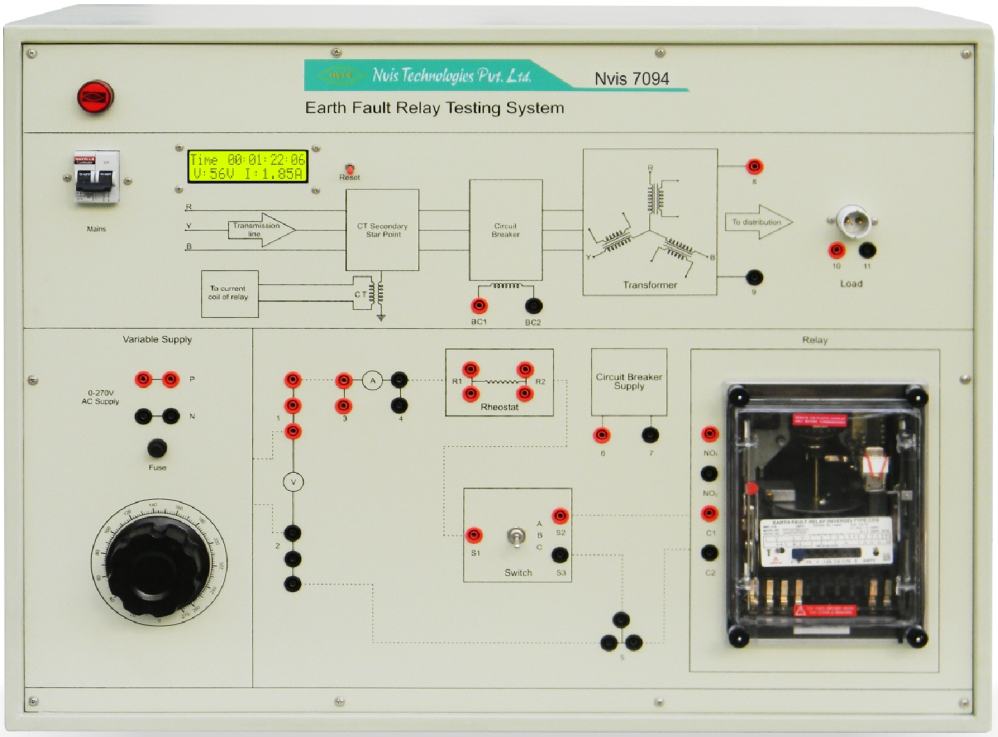
Earth Fault Relay Testing System

Nvis 7094



Nvis 7094 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.

Nvis 7094 provides complete learning platform related with the connection of Earth Fault Relay in transmission line and testing of Earth Fault Relay. After experimenting with Nvis 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**

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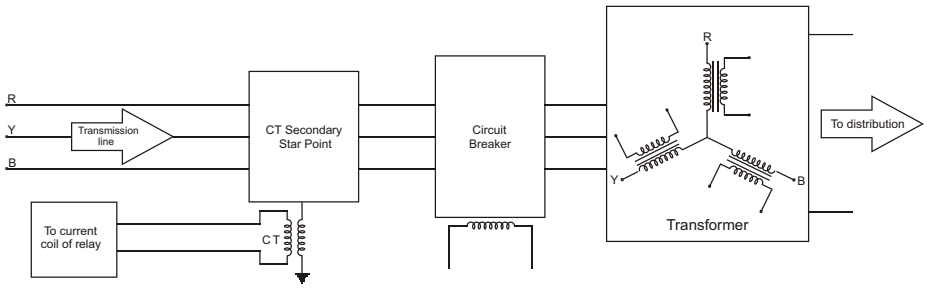
Scope of Learning

- 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

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 Voltage	:	0-230V
Earth Fault Relay		
Type	:	Electro-mechanical Inverse Time
Normal Voltage	:	110V AC, 50Hz
Plug Setting	:	0.5A, 0.75A, 1.0A, 1.25A, 1.50A,1.75A and 2A
Rheostat	:	110O, 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)



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.

Subject to change - Version 2.0

Designed & Manufactured in India by

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