

**OMEGA TYPE 20 016** 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.

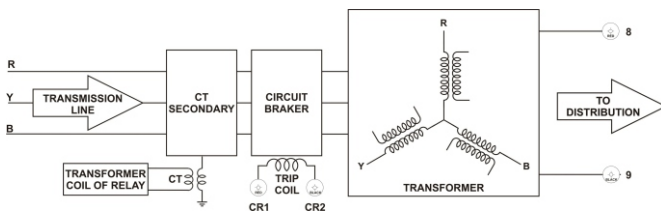
**OMEGA TYPE 20 016** provides complete learning platform related with the connection of Earth Fault Relay in transmission line and testing of Earth Fault Relay. After experimenting with OMEGA TYPE 20 016 the students will be able to use Earth Fault Relay in Power Systems.

**FEATURES**

- 01 Inbuilt variable source
- 02 LED Display for better visibility
- 03 Isolation transformer is provided for safe operation
- 04 Exclusive and rugged designed panel
- 05 Designed by considering all the safety precautions
- 06 Diagrammatic representation for the ease of connections

**OBJECTS**

- 01 To study and verify the operating characteristics of Earth Fault Relay with different plug setting
- 02 To study connection of Earth Fault Relay in transmission line
- 03 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.

**TECHNICAL SPECIFICATIONS:**

- 01 Mains Supply : 230V AC ±10%, 50Hz
- Mains : On/Off by MCB 5Amp
- Indications : By Neon



**02 Single Phase Variac**

- Input : 230VAC
- Output : 0 - 270VAC
- Current : 4A

**03 Isolation Single Phase Transformer**

- Primary voltage : 230VAC
- Secondary voltage : 230VAC
- Rating : 1KVA (4.34Amp.)

**04 Single Phase Transformer**

- Primary voltage : 230VAC
- Secondary voltage : 230VAC
- Rating : 40W

**05 Display Measurement**

- Digital AC Ammeter : 5Amp.
- Digital AC voltmeter : 300V.
- Timer : 10mSec to 30Minute with reset.

**06 Earth Fault Relay**

- Type : Electro mechanical Inverse time
- Plug Setting : 0.5A, 0.75A, 1.0A, 1.25A, 1.50A, 1.75A and 2A.

- 07 Load : Bulb 40W
- 08 Dimensions (mm) : W 800 x H 600 x D 350
- 09 Weight : 62 kg (Approx)

**LIST OF ACCESSORIES:**

- 01 Shrouded Patch cord 4mm length 50/100cm Red ...07
- 02 Shrouded Patch cord 4mm length 50/100cm Black..07
- 03 Rheostat 110E 5Amp.....01

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.