

**DIFFERENTIAL RELAY TESTING SYSTEM**

OMEGA TYPE 20 017

**OMEGA TYPE 20 017** Differential Relay Testing System is a versatile product for electrical laboratories. Various type of relays are used as protection devices in combination with circuit breaker in electrical system. The Different 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 LED with the differential current to perform the experiment with higher stability & accuracy. The students can understand the working of differential relay by measuring the operating characteristics. They can also learn the connection of this protection device in the electrical circuit.

**FEATURES:**

- 01 Electro mechanical relay to understand internal mechanism and its working.
- 02 Inbuilt Single Phase Variac.
- 03 Two variable current injection units.
- 04 Tripping function settings.
- 05 Exclusive and attractive design.
- 06 Diagrammatic representation of relay connection in transmission line.
- 08 Designed by considering all the safety standards.

**OBJECTS:**

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



**03 Single Phase Transformer**

- Input : 230V AC
- Output : 230V AC
- Current : 200mA

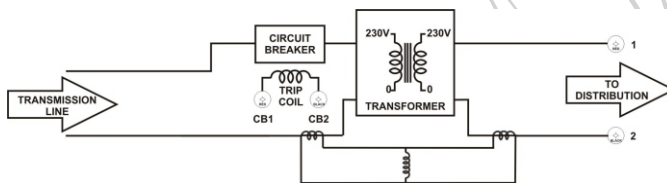
**04 Display Measurement**

- Digital AC Ammeter : 2Amp. 2 Nos.

**05 Differential Relay**

- Type : Electro mechanical
- CT Secondary : 1A, 50Hz
- Plug Setting : 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, & 0.8A

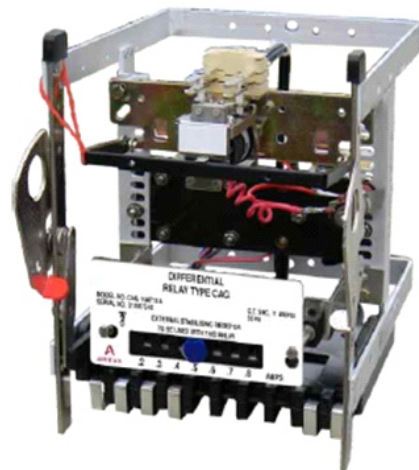
- 06 Load : Bulb 40W
- 07 Dimensions (mm) : L 800 x H 600 x D 350
- 08 Weight : 62 kg (Approx)



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

**TECHNICAL SPECIFICATION:**

- 01 Mains Supply : 230V AC ±10%, 50Hz
- Mains : On/Off by MCB 2Amp
- Indications : By Neon
- 02 Single Phase Variac.
- Input : 230V AC
- Output : 0 - 270V AC
- Current : 2A



**LIST OF ACCESSORIES:**

- 01 Shrouded Patch cord 4mm length 50/100cm Red ..11
- 02 Shrouded Patch cord 4mm length 50/100cm Black 12
- 03 Rheostat 220E 2.8Amp.....01

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