



Order Code - 46625 Three Phase Over Current & Earth fault Numeric Relay Testing System is a useful product for Electrical Power System Laboratories. The main purpose of protection relay is to detect and identify faults and interrupts power to the equipment to avoid the entire network to fail or cause more damages to personnel or equipment. An Over Current Relay operates when the load current exceeds a preset value, whereas the function of Earth Fault Relay is to protect any system from earth fault.

46625 includes inbuilt Microcontroller based Three Phase Over Current and Earth Fault Numerical Relay with facilities to select various characteristic curves at different Time Multiplier Settings (TMS) and Current Settings. The setting and selection of characteristic curves are carried out by a soft touch keypad provided on the front panel of the Numeric Relay. There is a large font

LCD to display all necessary parameters in a single frame. 46625 also provides facility to inject and adjust the current to analyze the Numerical Relay at different current values. All the requisite protective devices such as MCB, Fuses, etc. Have been used for utmost safety.

## **FFATURES:**

- 01 Four element (Three Phase + Earth Fault) Non Directional Over Current IDMT/DMT Numeric Relay
- 02 Numeric Relay provides with Curve's Selection Facility: Normal Inverse 1(C1), Normal Inverse 2(C2), Very Inverse (C3), Extremely Inverse (C4), Long time Inverse (C5) and define Time (C6)
- 03 Compatible for Internal calculation of zero sequence current (31o) under earth fault
- 04 Provided with CT Secondary Selection Facility (1A or 5A)
- 05 Large Font LCD
- 06 LED Three phase input current display.
- 07 LED Tripping time display
- 08 Provided with Current Injection Source
- 09 Microcontroller based Numeric Relays Demonstration
- 10 Designed by considering all the safety measures
- 11 Diagrammatic Representations for the ease of connections

## **OBJECTS:**

- O1 Study and verify Operating Characteristics of Three Phase Over Current and Earth Fault Numeric Relay with different Time Multiplier Settings (TMS) and Current Setting
- 02 Study and use of Time Setting Multiplier (TMS) in Numeric Relay
- 03 Study about working and connection of Three Phase Over Current and Earth Fault Numeric Relay in Transmission Line

## TECHNICAL SPECIFICATION:

01 Mains Supply : Three Phase,  $415V \pm 10\%$ , 50Hz

02 Auxiliary Supply :  $230V \pm 10\%$ , 50Hz

03 Display Measurements Current Input : >100mA Time Accuracy : 1 Second

04 Over Current and Earth Fault Relay

Input Current : Suitable for CT Secondary 5A (or) 1A

Pick up : Within 1.1 times of set value Reset value : 90% to 95% of pickup Auxiliary Supply : 18-250V AC/DC

MCB (TPN) : 10A

05 LED Three phase input current display.

06 LED Tripping time display

07 Dimensions : W800 x D350 x H600 (mm) 08 Weight : 33kg (approximate)

Note: Specifications are subject to change.

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