

### PROK DEVICES PRIVATE LIMITED

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# ZERO SEQUENCE VOLTAGE/NEUTRAL DISPLACEMENT RELAY

#### **Description**

Prok Dvs an ISO 9001:2008 Company indigenously develops the power system protection relays and panel meters for power system.  $\mu P$  based Zero sequence voltage relays are the state of the art design, to monitor and protect the costly equipments against unbalance voltages.

The Relay Continuously monitoring all the three phase Line to Line Voltages, if any abnormal condition persists in the system internal Relay activated with predetermined set value of definite time.

The Unit Displays Line to Line Voltages on LCD display, Healthy and Fault /Trip status Information through LED Display.

#### **Features**

- ❖ Accurate and reliable measurement .of residual voltage.
- Display of voltage magnitudes, using 8 character 2 line LCD
- User friendly Setting Parameters through key pad switch
- Wide range for Selection of residual voltage
- User configurable Definite tripping time (DMT)
- ❖ Fast tripping response(<500mS) when Phase and Neutral are Interchanged</p>
- Industrial Rugged design in Din rail mounting as well as Panel Mounting.
- Healthy, Trip Status provided through LED visual indications.
- Auto Reset provided on Healthy voltage resumption

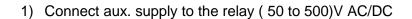
#### **Application**

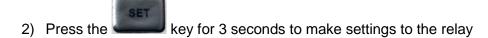
- Voltage Unbalance/Earth fault protection
- Protection of Equipments/Components against Phase and Neutral Interchange

### **Technical Specifications**

- \* Rated System Voltage (Un): 415V AC
- ❖ Tripping characteristic: DMT
- ❖ Model: DMPND
- ❖ Voltage setting range: (1-50) Volts in steps of 1V
- ❖ Trip Time setting range: (1-30) Sec In steps of 1Sec
- ❖ Trip Time when Ph. & Neutral interchanged: 500mS (Approx)
- Output Relay: 230VAC 5Amp /24VDC 5Amp
- ❖ Auto Reset provided on Healthy voltage resumption
- ❖ AUX. Voltage: 85-275V AC/DC Universal input, 50-60Hz
- ❖ Display: 8 chars 2 line LCD with backlit
- ❖ **LED:** For Visual indications of healthy & Trip status.
- Mounting: Flush mounting
- ❖ Dimensions: FLUSH MOUNTING: 96x96x65 mm (w x h x d) +/- 1mm Tolerance DIN MOUNTING: 79x93x73 mm (l x h x b) +/- 1mm Tolerance

# **Setting procedure:**





3) Display Shows



- 4) Press Key for 3Sec
- 5) Display changes to



- 6) Press key
- 7) Display Changes to





Save the value by using the Key

8) Display changes to

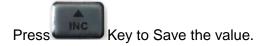


Use Key to set the desired operating time and operate

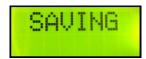
Set key to save the selected value.

## 9) Display shows





## 10) Display shows

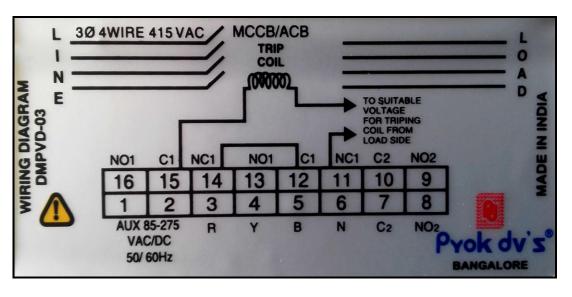


This completes the setting procedure for the relay.



The moment 3Ph, line to line voltage is applied to the Relay starts measuring and Displaying the line voltages of the system.

## **CONNECTION DIAGRAM**



# **WIRING DIAGRAM**

