

## DATA SHEET

### NMR50A12K24D

- DIGITAL NGR MONITORING RELAY- NMR50A24D
- COUPLING DEVICE- HRG12K
- CURRENT TRANSFORMER – CTN50A CURRENT SETTING 1-50 A

( FOR 110 V AC TO 230 V AC External adapter will be supply)

### APPLICATION :

THIS RELAY IS SUITABLE FOR 12 KV, 50A A NGR SYSTEM

### GENERAL DETAILS :

The SYNACT Monitor Relay is a combination neutral grounding resistor (NGR) monitor and ground fault relay. In distribution systems employing resistance grounding the SYNACT Monitor Relay protects against ground faults .

The SYNACT Monitor Relay measures the current through the NGR, the transformer neutral-to-ground voltage and the checking continuity of Earth PIT & Transformer neutral cable though pulse. The relay compares the measured values against the field settings of the relay and provides relay outputs and LED display indications when an abnormal condition is detected.



## SPECIFICATION :

- **Auxiliary Supply : 24 V DC, FOR 110 V AC TO 230 V AC**  
External adapter will be supply
- **Mounting Type : Flush Type**
- **Current Setting: 1 – 50 Amp**
- **Time Setting : 1 Sec – 60 Sec.**
- **LED DISPLAY Indication : E/F Trip, NGR Trip**
- **Potential free Contact :**
  - 1) **1 NO Potential free CONTACT FOR EARHT FAULT**
  - 2) **1 NO Potential free CONTACT FOR NG FAULT**
  - 3) **1 NO Potential free CONTACT FOR COMON EARHT & NG FAULT**
- **Relay Model – NMR50A24D**
- **Coupling Sensor – HRG12K**
- **Current Transformer : CTN50A**

**Rated insulation voltage AC 1.1 KV**

**Rated impulse withstand voltage/contamination level 2.5 kV/3**



### VOLTAGE RANGES :

- Supply voltage - Aux. supply 24 V DC , FOR 110 V AC TO 230 V AC External adapter will be supply
- Fuse recommended: 2 A

### RESIDUAL CURRENT MONITORING :

- Response value, residual current adjustable – 1 A To 50 A
- Accuracy- + - 0 ... - 25 %
- Response delay adjustable - 0 - 1 sec to 60 sec
- Accuracy of response delay  $\pm 20$  %

### INPUTES :

- Connection to the residual current transformer:  
Flexible type 2 core wire 2.5 sq mm
- S1 & S2 CT TERMINAL
- HRG P1 & P2 Terminal

### OUTPUTS :

- 1 NO CONTACT FOR EARTH FAULT TRIP
- 1 NO FOR NGR FAULT TRIP
- 1 NO COMMON TRIP FOR EARTH FAULT & NGR FAULT .



### SWITCHING ELEMENTS :

- Rated contact voltage - AC 250 V / DC 300 V
- Limited making capacity - AC/DC 5 A
- Limited breaking capacity - AC/DC 2/0.2 A
- Permissible number of operations 10000 cycles

### GENERAL DATA :

- Operating temperature - 0 °C ... + 60 °C (32 ... 140 K)
- Storage temperature - 30 °C ... + 80 °C (86 ...140 K)
- Operating mode continuous operation
- Mounting Flush Type
- Connection screw terminals
- Wire cross section, single wire 0.5 SQ MM TO 2.5 SQ MM MAX
- Built- in components IP 30
- Terminals- IP 00
- Weight approx. - 300 g





### REGISTERED ADDRESS

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