SELEC

Operating Instructions

VPRA2M



#### **FEATURES**

- Under Voltage, Over Voltage, Phase Asymmetry, Phase sequence, Phase Failure and Neutral loss detection
- Adjustable over and under voltage trip level Adjustable operate time and trip time delay
- DPDT Relay Output (5A Resistive)
- . Din Rail mounting

### **SPECIFICATIONS**

#### **FUNCTION**

Voltage and Phase controls WIRING INPUT 1 Ø - 2 wire, 3 Ø - 4 wire AUXILIARY Self powered

Nominal Supply (Un) 230V AC (L-N)

**OPERATING RANGE** 127 - 288V AC(L-N)

**FREQUENCY RANGE** 

48 - 63Hz

**VARATING** 5VA RESET

Auto TRIP SETTING

Under Voltage

127 to 219V AC(L-N) Over Voltage : 105 to 125% of Un 242 to 288V AC(L-N) Phase asymmetry: >10%

: 55 to 95% of Un

Setting accuracy : ±5% of full scale (Trip) ± 10% of full scale (Time)

TIME DELAY

Power ON Delay : 0-15 Sec For 0 setting : <400msec

Trip Time Delay : 0-15 Sec For 0 setting : <100msec Recovery Time Delay: 5 Sec. ±200ms For L1 / Neutral loss Trip Delay: <200ms

For Phase Sequence Trip Delay: <250ms

HYSTERISIS 7V ± 2V of trip Setting

**OUTPUT SPECIFICATIONS** 1 Relay: 2 C/O(DPDT)

**RELAY BATING** 

5A (Res) @ 250V AC/28V DC

LED INDICATION Green

: Power ON Blink :12/13 Phase Loss OV : Over Voltage

LIV : Under Voltage ON : Phase Reverse

Blink : Phase asymmetry **ENVIRONMENTAL CONDÍTIONS** 

Temperature: Operating: - 10°C to 55°C

Storage : -25°C to 70°C Humidity : Up to 95% non-condensing MECHANICAL SPECIFICATIONS

: Din rail mounting Mounting Dimension : 35 x 90 x 60mm Enclosure : UL 94VO

Screw tightening torque: 0.5 N-M Degree of Protection

IP 20 for Terminal IP 40 for Enclosure IP 50 for Faceplate

WEIGHT 150ams

## SAFETY PRECAUTIONS

All safety related codifications, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument

If there is physical damage to the unit then do not use it. Read complete instructions prior to installation of unit.

## WIRING GUIDELINES

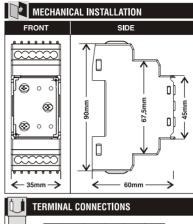
## WARNING:

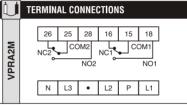
# 1. To prevent the risk of electric shock, power supply

- to the equipment must be kept OFF while doing the wiring arrangement.
- 2. Wiring shall be done strictly according to the terminal layout. Confirm that all connections are correct.

#### CAUTION:

- 1. To ensure the safe operate of unit check wiring connection
- 2. It is recomm, to test the unit period to satisfy resolutions.





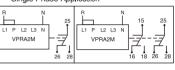
LED INDICATION CHART					
SUPPLY	POWER LED	UNDER VOLTAGE LED	OVER Voltage Led	PHASE REVERSE / ASYMMETRY	
NOMINAL CONDITION	ON	OFF	OFF	OFF	
UNDER VOLTAGE	ON	ON	OFF	OFF	
OVER VOLTAGE	ON	OFF	ON	0FF	
PHASE REVERSED	ON	OFF	OFF	ON	
PHASE ASYMMETRY	ON	OFF	OFF	BLINK	
L2/L3 PHASE FAIL	BLINK	OFF	OFF	0FF	

# **OPERATING MODES**

Product operates in single phase as well as three phase mode.

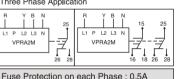
#### A) Single Phase Mode:

Connect R-Phase at L1. P and Neutral at N terminal, L2 and L3 connections are kept open. In single phase mode device monitors only L1 phase for OV and UV condition. Single Phase Application



#### B) Three Phase Mode:

Connect three phase at L1, L2, L3 and Neutral at N terminal, Keep 'P' terminal open. Three Phase Application



ORDER CODE INFORMATION				
PRODUCT	CERTIFICATION			
	C€	RoHS		
VPRA2M				
VPRA2M-CE	•	•		

(Specifications subject to change as development is a continuous process.)

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