

SELEC VPRA2M
Operating Instructions



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

VA RATING

5VA

RESET

Auto

TRIP SETTING

Under Voltage : 55 to 95% of Un

127 to 219V AC (L-N)

Over Voltage : 105 to 125% of Un

242 to 288V AC (L-N)

Phase asymmetry : >10%

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

HYSTERESIS

7V ± 2V of trip Setting

OUTPUT SPECIFICATIONS

1 Relay : 2 C/O (DPDT)

RELAY RATING

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

LED INDICATION

- Green : Power ON
- Blink : L2 / L3 Phase Loss
- OV : Over Voltage
- UV : Under Voltage
- ON : Phase Reverse
- Blink : Phase asymmetry

ENVIRONMENTAL CONDITIONS

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

Storage : - 25°C to 70°C

Humidity : Up to 95% non-condensing

MECHANICAL SPECIFICATIONS

Mounting : Din rail mounting

Dimension : 35 x 90 x 60mm

Enclosure : UL94V0

Screw tightening torque : 0.5 N-M

Degree of Protection

IP 20 for Terminal

IP 40 for Enclosure

IP 50 for Faceplate

WEIGHT

150gms

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

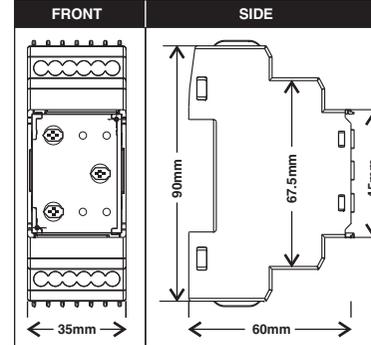
WARNING :

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.

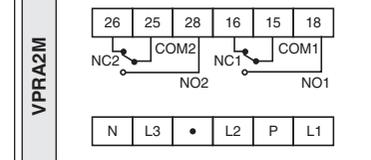
CAUTION :

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

MECHANICAL INSTALLATION



TERMINAL CONNECTIONS



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	OFF
PHASE REVERSED	ON	OFF	OFF	ON
PHASE ASYMMETRY	ON	OFF	OFF	BLINK
L2/L3 PHASE FAIL	BLINK	OFF	OFF	OFF

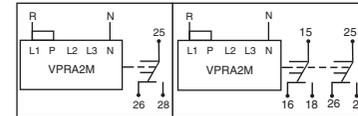
OPERATING MODES

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

A) Single Phase Mode :

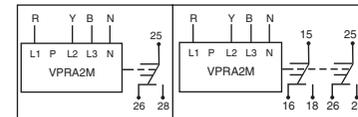
Connect R-Phase at L1, P and Neutral at N terminal. L2 and L3 connections are kept open. In single phase mode device monitors only L1 phase for OV and UV condition.

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



Fuse Protection on each Phase : 0.5A

ORDER CODE INFORMATION

PRODUCT	CERTIFICATION	
	CE	RoHS
VPRA2M	—	—
VPRA2M-CE	■	■

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

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