VPRA2M

Voltage Protection Relay

DIN 35mm

Features :

- 1Ø - 2 Wire, 3Ø - 4 Wire Input
- Monitors Under Voltage, Over Voltage, Phase Asymmetry, Phase Failure, Phase Sequence
- LED Indication : Power ON / Phase Failure, Under Voltage, Over Voltage, Phase Sequence / Asymmetry
- DIN Rail Mount
- Adjustable Over and Under Voltage Trip Level
- Adjustable Trip Time Delay

Certification : CE

Display Specifications

Type	Analog
No. of LED	4
No. of Knob	3

LED Indication Chart

Condition	Power LED	Under Voltage LED	Over Voltage LED	Phase Reverse / Assymetry LED
Nominal Condition	ON	OFF	OFF	OFF
Under Voltage	ON	ON	OFF	OFF
Over Voltage	ON	OFF	ON	OFF
Phase Sequence	ON	OFF	OFF	ON
Phase Asymmetry	ON	OFF	OFF	Blink
Phase Failure (L2 / L3)	Blink	OFF	OFF	OFF

Input Specifications

Functions	
Measurements	Under Voltage, Over Voltage, Phase Asymmetry, Phase Failure & Phase Sequence
Reset	Auto
Electrical Connection	1Ø - 2 wire, 3Ø - 4 wire
Trip Settings	
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 Sequence	Yes
Phase Failure	Yes
Phase Asymmetry	>10%
Trip Delay	
Power On Delay	0 - 15sec (for 0 setting : <400msec)
Trip Time Delay	0 - 15sec (for 0 setting : <100msec)
Recovery Time Delay	5sec (Fixed) ±200ms
Phase Sequence Trip Delay	<250msec
Hysteresis	
Voltage	7V (±2V) of Trip setting
Accuracy	
Trip Setting Accuracy	±5% of Full Scale
Time Setting Accuracy	±10% of Full Scale

Output Specifications

Relay Contact	2 C/O (DPDT)
Relay Rating	5A@250V AC / 28V DC

Auxiliary Supply Specifications

Nominal Input Voltage	230V AC (L-N)
Operating Voltage	127 to 288V AC (L-N)
Frequency	48 / 63Hz
Power Consumption	5VA max

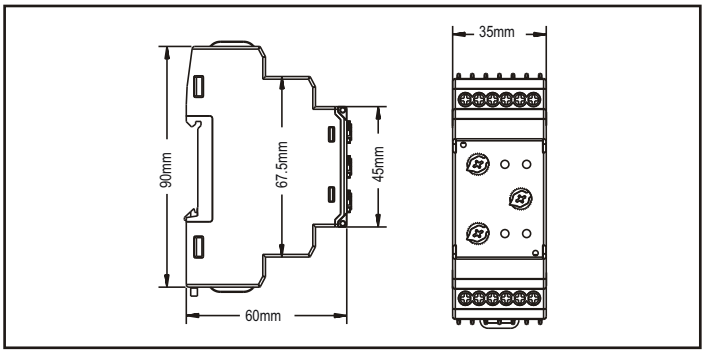
Environmental Specifications

Temperature	Operating Temperature : -10° to 55°C Storage Temperature : -25° to 70°C
Humidity (non-condensing)	Upto 95% RH
Pollution Degree	
For PCB	2
For Product	3
Degree of Protection Devices	IP20

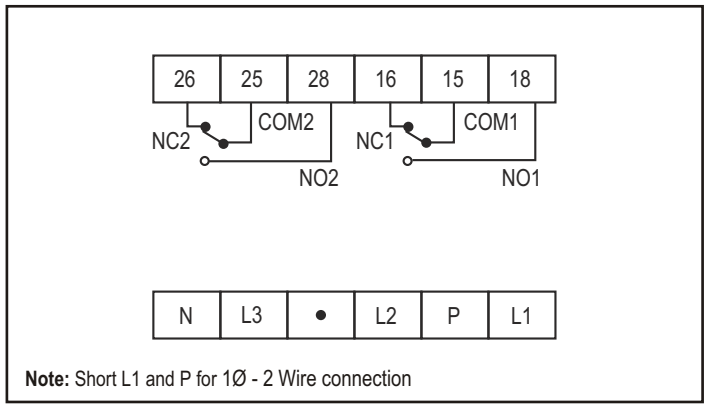
Mechanical Specifications

Mounting	DIN Rail
Weight	150 gms

Dimensions

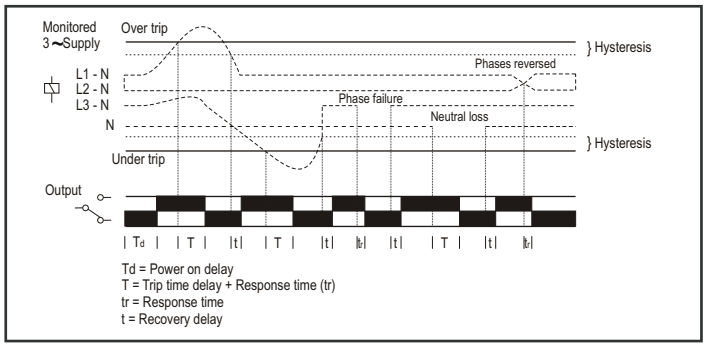


Terminal Connection



Note: Short L1 and P for 1Ø - 2 Wire connection

Timing Diagram



Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 60947-2		
Category	**Reference Standards**	**Testing Level**
Electrostatic Discharge	IEC 61000-4-2	Level-3
Electrical Fast Transient / Brust	IEC 61000-4-4	Level-3
Electromagnetic Field	IEC 61000-4-3	Level-3
Surge	IEC 61000-4-5	Level-3
Conducted RF	IEC 61000-4-6	Level-2
Rated Power Frequency	IEC 61000-4-8	Level-4
Voltage Dip / Short Interruptions	IEC 61000-4-11	Level-3
Conducted Emissions	CISPR-11	Class-B
Radiated Emission	CISPR-22	Class-A
Emission & Immunity	IEC 61326-1	
Safety	IEC 61010-1	

Ordering Information

Product Code	Operating Range	Certification
VPRA2M-CE	127 to 288V AC	CE