



## Features:

- 1Ø - 2 Wire, 3Ø - 4 Wire Input
- Monitors Under voltage, Over voltage, Phase asymmetry, Phase failure & Phase sequence
- True RMS Measurement
- Power ON delay, Trip Time Delay & Recovery time delay
- Adjustable Switching Hysteresis
- One relay with two change over
- LCD with backlight
- DIN Rail Mount

Size: 35mm (Width)

Certifications:  RoHS

## Technical Specifications

### Display

Display	Liquid Crystal Display with backlight
Digits	3

### Input Specifications

<b>Functions</b>	
Measurements	Under voltage, Over voltage, Phase asymmetry, Phase failure & Phase sequence
Time Setting	Power ON delay, Trip time delay, Recovery time delay
Alarm Indications	Trip
Latching	Selectable
Reset	Auto / Manual
<b>Electrical Connection</b>	1Ø - 2Wire, 3Ø - 4Wire
<b>Auxiliary Supply</b>	
Supply Voltage	Self powered
Nominal Input Voltage, Un	230V AC (L-N)
Operating Voltage	127 to 288V AC (L-N)
VA Rating	5VA max
Frequency	48 - 63Hz
<b>Trip Settings</b>	
Under Voltage	127 to 219V AC (L-N)
Over Voltage	242 to 288V AC (L-N)
Phase Sequence	Yes
Phase Failure	Yes
Phase Asymmetry	5 - 30%
<b>Trip Time Settings</b>	
Power On Delay	0.5-300 sec
Trip Time Delay	0-300 sec
Recovery Time Delay	0-300 sec (In auto reset mode)
Response Time	<150ms

### Hysteresis

Voltage	1.0 - 99.9V for voltage
Asymmetry	2 - 20% (Only for 3Ø 4wire)

### Resolution

Voltage	1V
Time Setting	
0-10sec	0.1sec
10-99sec	1sec
100-300sec	10sec

### Accuracy

Voltage	±1% ±2 digits
Time Setting Accuracy	±5% of setting ± 150ms

### Output Specifications

No. of Relays	1
Type of Output	2 C/O (DPDT)
Contact Rating	NO, NC : 5A @ 250V AC
Electrical Life	1 x 10 <sup>6</sup> (1000000)
Mechanical Life	1 x 10 <sup>7</sup> (10000000)

### LED Indication

LED (Red)	Relay (Continuously ON after trip)
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### Environmental Specifications

Ambient Temperature	Operating Temperature: -10°C to 55°C Storage Temperature : -25°C to +70°C
Humidity (non-condensing)	Upto 95% RH
Pollution Degree	2
Degree of protection	IP50 Faceplate IP30 Housing IP20 Terminals

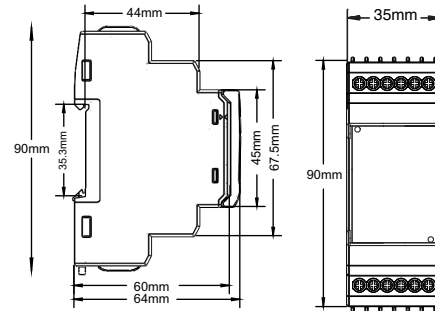
## Mechanical Specifications

No. of Push Button	3
Enclosure	UL 94V0
Size	35mm (width)
Mounting	DIN Rail
Weight	112gms
Protection Level	IP20 for Terminals IP40 for Enclosure
Conductor cross section (Solid)	1 x (0.5 to 4) Sq mm
Conductor cross section sleeved (Stranded)	2 x (0.5 to 1.5) Sq mm 1 x (0.5 to 2.5) Sq mm
Screw tightening torque	0.5 N-m

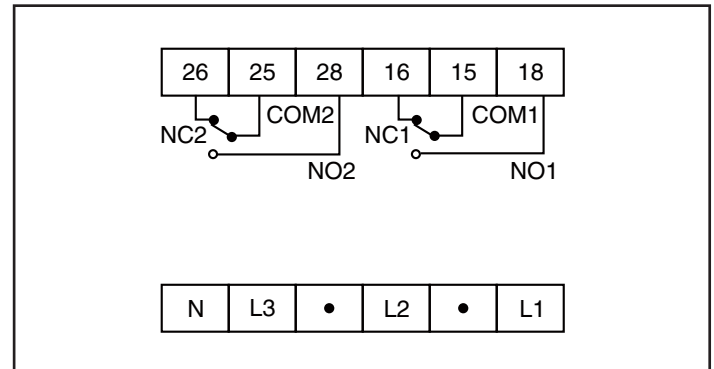
## Standards

<b>EMI/EMC</b>	IEC61326-1 (2005-12)
Electromagnetic compatibility	IEC 61326-1
ESD Immunity: IEC 61000-4-2	Level III
Surge Immunity: IEC 61000-4-5	+/- 2 kV common mode, +/- 1 kV differential mode
Radiated Susceptibility: IEC 61000-4-3	Level III, 80 to 1000 MHz Level II, 1GHz to 2GHz Level I, 2GHz to 2.7GHz
Conducted Susceptibility: IEC 61000-4-6	Level II
Voltage Dips and Interruption: IEC 61000-4-11	Dips: 0% residual voltage/1 cycle (Crit A), 40% residual voltage/10 cycles 50 Hz / 12 cycles 60 Hz (Crit A) 70% residual voltage / 25 cycles 50 Hz / 30 cycles 60 Hz (Crit C) Interruptions: 0% residual voltage / 250 cycles 50 Hz / 300 cycles 60 Hz (Crit C)
Conducted Emissions	CISPR-11 & IEC 61000-6-3
Radiated Emissions	CISPR-11
Electrical Fast Transient: IEC 61000-4-4	Level 3.
Safety	IEC61010-1 (2010)
Breakdown Voltage	IEC61010-1 (2.5kV)

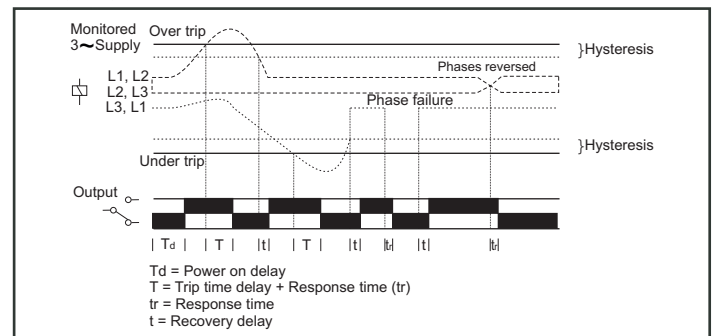
## Dimensions



## Terminal Connections



## Timing Diagram



## Ordering Information

Part No.	Supply Voltage	Certification	Backlight
VPRD2M-BL-CE	127 to 288V AC (L-N)	CE RoHS	Yes