



DIN 35mm

Features :

- 3Ø - 3 Wire, 3Ø - 4 Wire Input
- Monitors Under Voltage, Over Voltage, Under Frequency, Over Frequency, Phase Asymmetry, Phase Failure, Neutral Loss and Phase Sequence
- True RMS Measurement
- Power ON Delay, Trip Time Delay and Recovery Time Delay
- Adjustable Switching Hysteresis
- Two Alarm Relays with NO or NC Operation Selectable
- DIN Rail Mount

Certification : 

Display Specifications

Type	Digital
Display	Liquid Crystal Display with Backlight
No. Of LED	2
No. Of Push Button	3

LED Indication Chart

Condition	'R1' LED	'R2' LED
Nominal Condition	OFF	OFF
Fault Condition (If Programming Relay1)	ON	OFF
Fault Condition (If Programming Relay2)	OFF	ON
Fault Condition (If Programming for Both Relay)	ON	ON

Input Specifications

Functions	
Measurements	Under voltage, Over voltage, Under frequency, Over frequency, Phase asymmetry, Phase failure, Neutral loss and Phase sequence
Time Setting	Power on delay, Trip time delay and Recovery time delay, Response time
Alarm Indications	Trip
Latching	Selectable
Reset	Auto / Manual
Electrical Connection	3Ø - 3 wire, 3Ø - 4 wire
Measuring Range	
(RMS Value)	85 to 500V AC (L - L) 50 to 288V AC (L - N)
Trip Settings	
Under Voltage	85 to 500V AC (L - L) [for 3Ø - 3 wire] 50 to 288V AC (L - N) [for 3Ø - 4 wire]
Over Voltage	85 to 500V AC (L - L) [for 3Ø - 3 wire] 50 to 288V AC (L - N) [for 3Ø - 4 wire]
Under Frequency	45 / 65Hz
Over Frequency	45 / 65Hz

Phase Failure	Yes
Neutral Loss	Yes
Phase Sequence	Yes
Phase Asymmetry	5.0 - 30.0%
Trip Time Settings	
Power ON Delay	0.5 - 300sec
Trip Time Delay	0 - 300sec
Recovery Time Delay	0 - 300sec (In Auto Reset Mode)
Response Time	
Under Voltage	<120ms
Over Voltage	<120ms
Phase Asymmetry	<120ms
Phase Failure	<120ms
Phase Sequence	<250ms
Hysteresis	
Voltage	1.0 - 40V
Frequency	0.1 / 2Hz
Asymmetry	2 - 20%
Resolution	
Voltage	1V
Frequency	0.1Hz
Accuracy	
Voltage	±1% ±2 digits
Frequency	±0.5% ±1 digit
Time	±5% of setting ± 120ms

Output Specifications

No. of Relays	2
Type of Output (Relay1)	1 C/O (SPDT)
Type of Output (Relay2)	1 C/O (SPDT)
Relay Rating	NO / 5A@250V AC NC / 3A@250V AC

Auxiliary Supply Specifications

Supply Voltage	85 to 270V AC / DC
Operating Range	50 to 288V AC (L - N) 85 to 500V AC (L - L)
Nominal Voltage	240V (L - N) 415V (L - L)
Frequency	50 / 60Hz
Power Consumption	4VA max

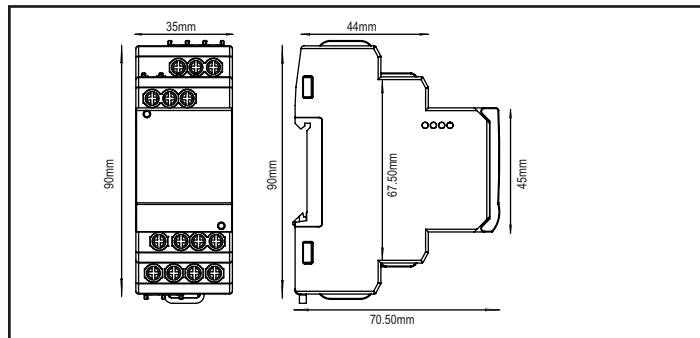
Environmental Specifications

Temperature	Operating Temperature : -25° 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

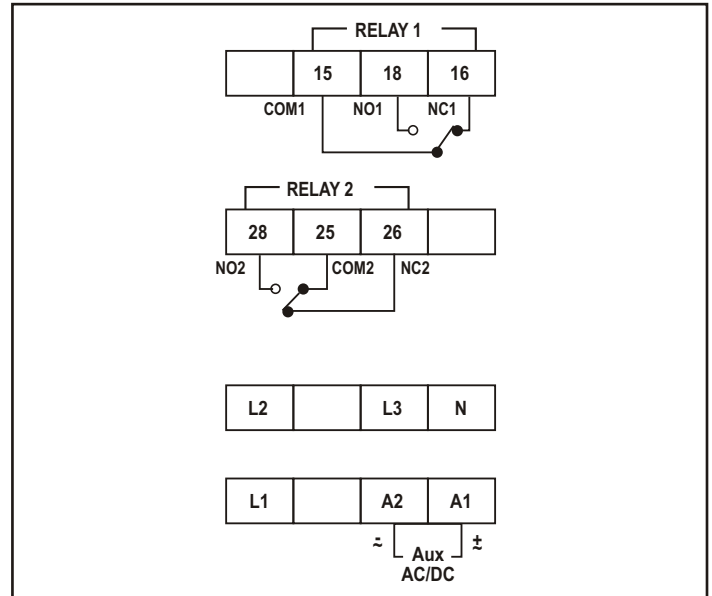
Mechanical Specifications

Mounting	DIN Rail
Weight	150gms
Screw Tightening Torque	0.5 NM

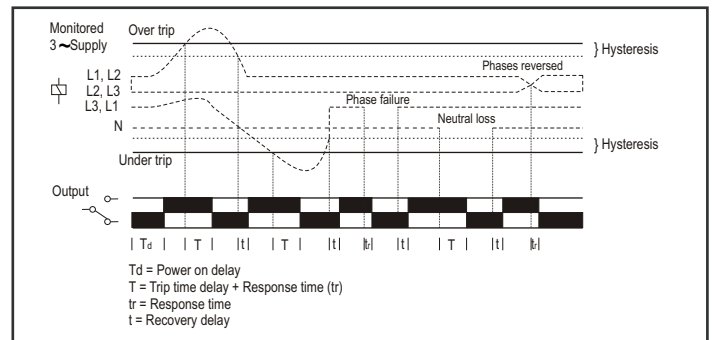
Dimensions



Terminal 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 / Burst	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	Supply Voltage	Certification
900VPR-BL-U-CE	85 to 270V AC/DC	CE