




Features:

- Under voltage, Over voltage, Under frequency, Over frequency, Phase asymmetry, Phase failure, Neutral loss and Phase sequence monitoring in 3Ø system
- True RMS measurement
- Power ON delay, Trip time delay and Recovery time delay
- Adjustable switching hysteresis
- Two separate alarm relays
- LCD with backlight

Size: 35mm (Width)

Certifications:   RoHS

Technical Specifications

Display

Display	LCD with backlight
Digits	3

Input Specifications

Functions	
Measurements	Under Voltage, Over Voltage (V_{L-N} , V_{L-L}), 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
Alarm Indications	Trip
Latching	Selectable
Reset	Auto / Manual
Electrical Connection	3Ø-3 wire, 3Ø-4 wire
Auxiliary Supply	
Supply Voltage	85 - 270V AC/DC 50/60 Hz
Operating Range	50 - 288V AC (L-N) 85 - 500V AC (L-L)
Nominal Voltage	240V (L-N) 415V (L-L)
VA Rating	4VA max.
Frequency	45-65Hz
Measuring Range	
(RMS Value)	50 - 288V AC (L-N) 85 - 500V AC (L-L)
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
Response Time	<120msec
Hysteresis	
Voltage	1.0 - 40V
Frequency	0.1 - 2Hz
Asymmetry	2 - 20%
Resolution	
Voltage	1V
Frequency	0.1Hz
Time Settling	
0-10sec	0.1sec
10-99sec	1sec
100-300sec	10sec
Accuracy	
Voltage	±1%, ±2 digits
Frequency	±0.5%, ±1 digit
Time (Recovery Time, Trip Delay, Power ON Delay)	±5% of setting + 120ms

Output Specifications

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

LED Indication

LED1 (Red)	Relay1 (Continuously ON after trip)
LED2 (Red)	Relay2 (Continuously ON after trip)

Environmental Specifications

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

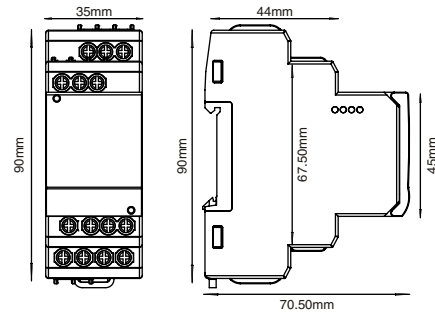
Mechanical Specifications

No. of Push Button	3
Size	35mm width
Mounting	Din Rail Mount
Weight	150gms
Conductor cross section (Solid)	1 x (0.5 to 4) Sq mm
Conductor cross section sleeved (Standard)	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

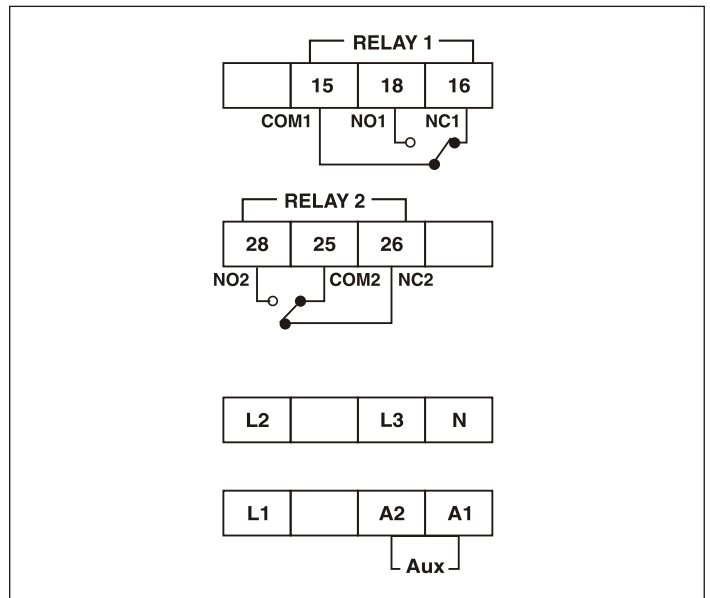
EMC

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 1000MHz 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-22
Electrical Fast Transient: IEC 61000-4-4	Level 3.

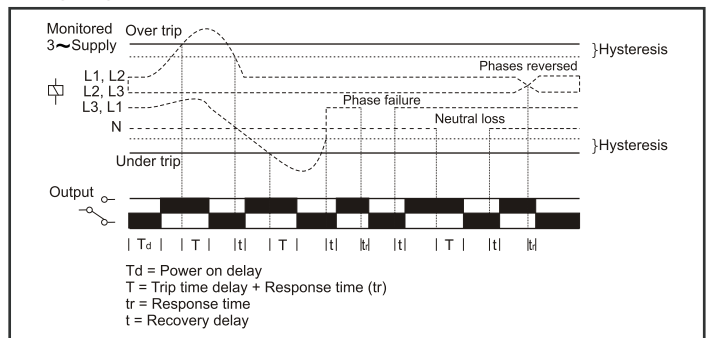
Dimensions



Terminal Connections



Timing Diagram



Ordering Information

Part No.	Supply Voltage	Certification
900VPR-U	85-270V AC/DC	-
900VPR-U-CE	85-270V AC/DC	CE RoHS