




Features:

- 3Ø-3 Wire, 3Ø-4 Wire Input
- Monitors Under voltage, Over voltage, Under frequency, Over frequency, Phase asymmetry, Phase failure and Phase sequence
- True RMS measurement
- Power ON delay, Trip time delay and Recovery time delay
- Adjustable switching hysteresis
- Two separate alarm relays
- LCD
- Din Rail mount

Size: 35mm (Width)

Certifications:  RoHS

Technical Specifications

Display

Display	Liquid Crystal Display
Digits	3

Input Specifications

Functions	
Measurements	Under voltage, Over voltage, Under frequency, Over frequency, Phase asymmetry, Phase failure 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	Self powered
Operating Range	280 - 520V AC (L-L) 160 - 300V AC (L-N)
VA Rating	30VA max.
Frequency	45 - 65Hz
Measuring Range	
(RMS Value)	0 - 520V AC (L-L)* 0 - 300V AC (L-N)*
Trip Settings	
Under Voltage	280 to 520V AC (L-L) [for 3Ø-3 wire] 160 to 300V AC (L-N) [for 3Ø-4 wire]
Over Voltage	280 to 520V AC (L-L) [for 3Ø-3 wire] 160 to 300V AC (L-N) [for 3Ø-4 wire]
Under Frequency	45 - 65Hz
Over Frequency	45 - 65Hz
Phase Failure	Yes
Phase Sequence	Yes

Input Specifications

Trip Time Settings	
Power ON Delay	2 - 99.9sec
Trip Time Delay	0 - 99.9sec
Recovery Time Delay	0 - 99.9sec
Response Time	<200ms
Hysteresis	
Voltage	1.0 - 99.9V
Frequency	0.2 - 2Hz
Asymmetry	2 - 20%
Resolution	
Voltage	1V
Frequency	0.1Hz
Accuracy	
Voltage	±1% of set value
Frequency	±0.3Hz
Time Setting Accuracy	±5% of setting + 200ms

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 (Green)	Power ON
LED2 (Red)	Relay1 (Continuously ON after trip)
LED3 (Red)	Relay2 (Continuously ON after trip)

* For 3Ø-3W, at least 2 phase must be present ; * For 3Ø-4W, at least 1 phase must be present

Environmental Specifications

Ambient Temperature	Operating Temperature: 0°C to 55°C Storage Temperature : -20°C to +70°C
Humidity (non-condensing)	95% RH
Pollution Degree	2
Degree of protection	IP50 Faceplate IP30 Housing IP20 Terminals

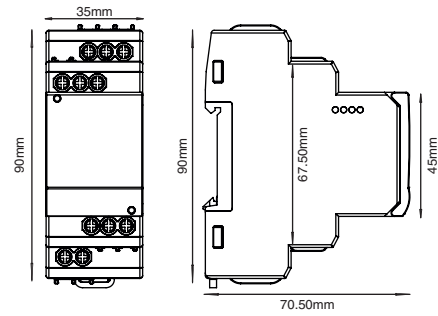
Mechanical Specifications

No. of Push Button	3
Size	35mm width
Mounting	Din Rail Mount
Weight	135 g
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

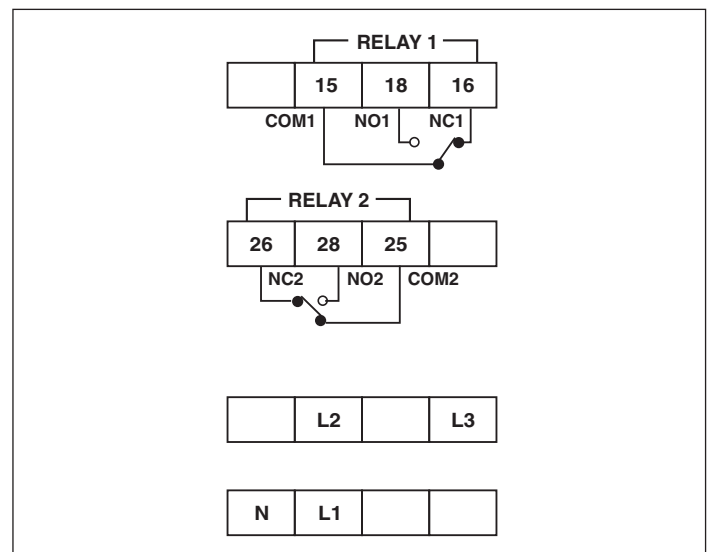
EMC

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 1000 MHz
Conducted Susceptibility: IEC 61000-4-6	Level II
Voltage Dips and Interruption: IEC 61000-4-11	Dips: 0% residual voltage/1 cycle (Crit B.), 40% residual voltage/10 cycles 50 Hz / 12 cycles 60 Hz (Crit C) 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.

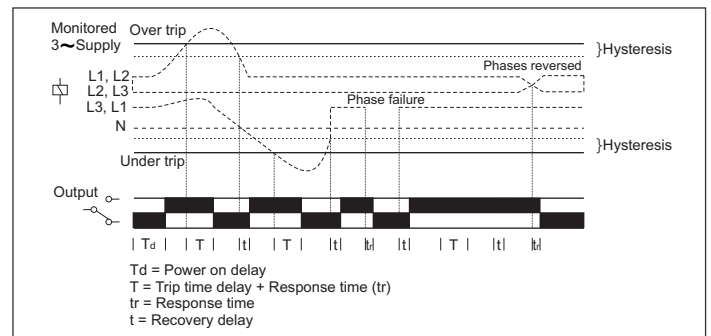
Dimensions



Terminal Connections



Timing Diagram



Ordering Information

Part No.	Supply Voltage	Certification
900VPR-2-280/520V-CE	280-520V AC	CE RoHS
900VPR-2-280/520V	280-520V AC	-

Note: 900VPR-2-280/520V can not be used with AC/DC drives.