

## **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: 35 mm (Width)

Certifications : **C** € RoHS (U) us

# **Technical Specifications**

## Display

Display	Liquid Crystal Display
Digits	3

#### Input Specifications

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Time Setting

Measurements Under voltage, Over voltage, Under

frequency, Over frequency, Phase asymmetry,

Phase failure and Phase sequence

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 - 65 Hz

## Measuring Range

(RMS Value)  $\begin{array}{c} 0 - 520 \text{V AC (L - L)}^* \\ 0 - 300 \text{V AC (L - N)}^* \end{array}$ 

**Trip Settings** 

Under Voltage 280 to 520V AC (L - L) [for 3Ø - 3 wire]

160 to 300V AC (L - N) [for 3Ø - 4 wire] 280 to 520V AC (L - L) [for 3Ø - 3 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 - 65 Hz
Over Frequency 45 - 65 Hz
Phase Failure Yes
Phase Sequence Yes

# $^*$ For 3Ø-3W, at least 2 phase must be present ; $^*$ For 3Ø-4W, at least 1 phase must be present. Phase Asymmetry : 5.0 - 99.9.1

## Input Specifications

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

## **Output Specifications**

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

#### LED Indication

LED 1 (Green)	Power ON
LED 2 (Red)	Relay1 (Continuously ON after trip)
LED 3 (Red)	Relay2 (Continuously ON after trip)

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## **Environmental Specifications**

0°C to 55°C **Operating Temperature** Storage Temperature -20 °C to +70 °C 95% RH Humidity (non-condensing) Pollution Degree 2

## **Mechanical Specifications**

No. of Push Button

Size 35 mm width Din Rail Mounting Weight 135 g

1 x (0.5 to 4) Sq mm Conductor cross section (Solid) Conductor cross section sleeved 2 x (0.5 to 1.5) Sq mm (Stranded) 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

Voltage Dips and Interruption Dips: 0% residual voltage / 1 cycle (Crit B.),

IEC 61000-4-11

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)

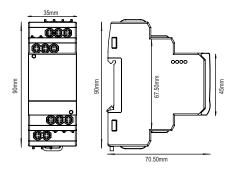
Interruptions: 0% residual voltage / 250 cycles 50 Hz / 300 cycles 60 Hz

Level II

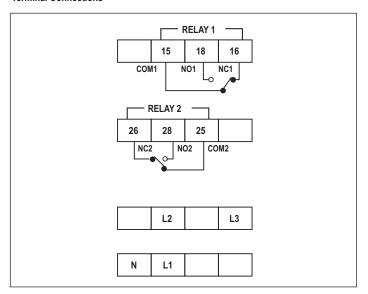
Conducted Emissions CISPR-11 & IEC 61000-6-3

Radiated Emissions CISPR-22 Electrical Fast Transient: IEC 61000-4-4 Level 3

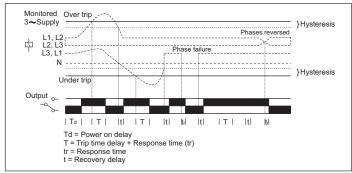
#### **Dimensions**



#### **Terminal Connections**



## **Timing Diagram**



# **Ordering Information**

Order Code	Supply Voltage	Certification
900VPR-2-280/520V	280-520V AC	-
900VPR-2-280/520V-CE	280-520V AC	C€ RoHS
900VPR-2-280/520V-CU	280-520V AC	C € RoHS ¢ UL us Listed E349567

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