




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

Certifications: 

Display Specifications

| | |
|-------------------|---------------------------------------|
| Type | Digital |
| Display | Liquid Crystal Display with backlight |
| No of LED | 2 |
| No of Push Button | 3 |

LED Indication

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

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 - 500V AC (L-L) 50 - 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) | 1C/O (SPDT) |
| Type of output (Relay2) | 1C/O (SPDT) |
| Relay Rating | NO : 5A @ 250V AC NC : 3A @ 250V AC |

Auxiliary Supply Specifications

| | |
|-----------------|--|
| Supply Voltage | 85 - 270V AC/DC |
| 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 | 50-60Hz |

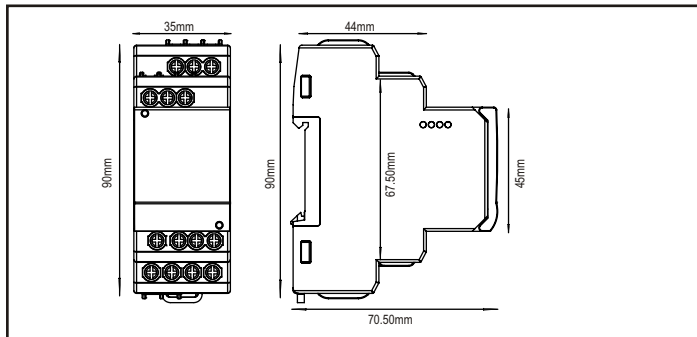
Environmental Specifications

| | |
|--------------------------------|---|
| Temperature | Operating Temperature : -25°C to 55°C Storage Temperature : -25°C to +70°C |
| Humidity (non-condensing) | Upto 95% RH |
| Pollution Degree | |
| For PCB | 2 |
| For Product | 3 |
| Degree of Protection Of Device | IP20 |

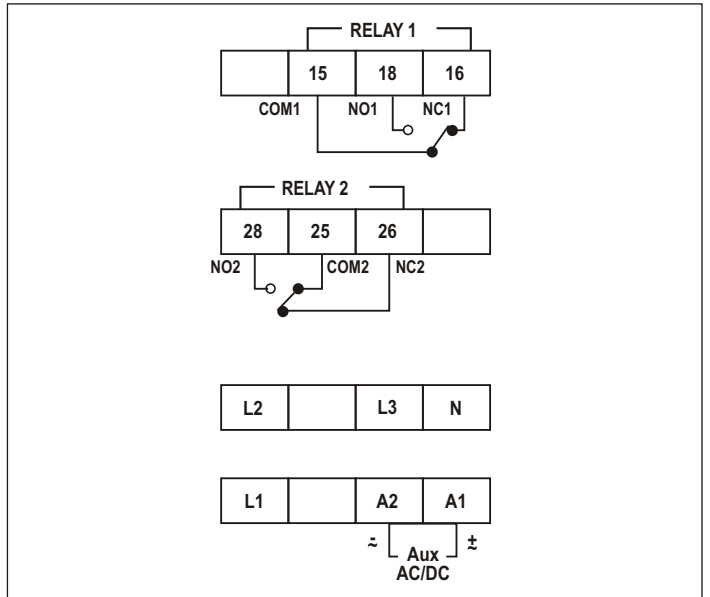
Mechanical Specifications

| | |
|--|--|
| Mounting | Din Rail |
| Weight | 150gms |
| 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 |

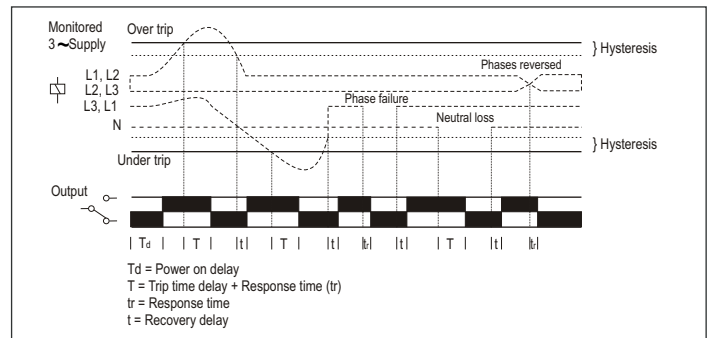
Dimensions



Terminal Connections



Timing Diagram



Compliance

| Applicable EMI / EMC Standards | | |
|-----------------------------------|---------------------|---------------|
| Product Standard | | |
| 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 | 85-270V AC/DC | CE |