



# VOLTAGE PROTECTION RELAY

VPR-33

## APPLICATIONS

DG Set Panels

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Motor Control Center Panels

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Control Panels

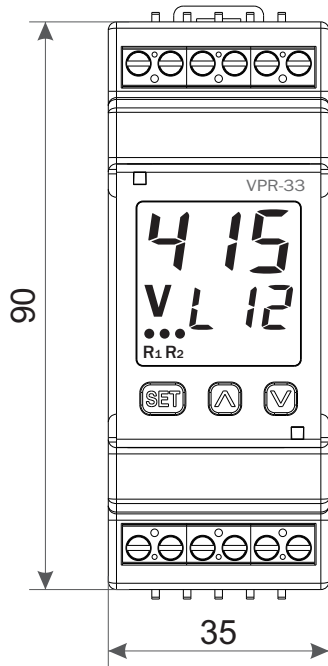
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Distribution Panels

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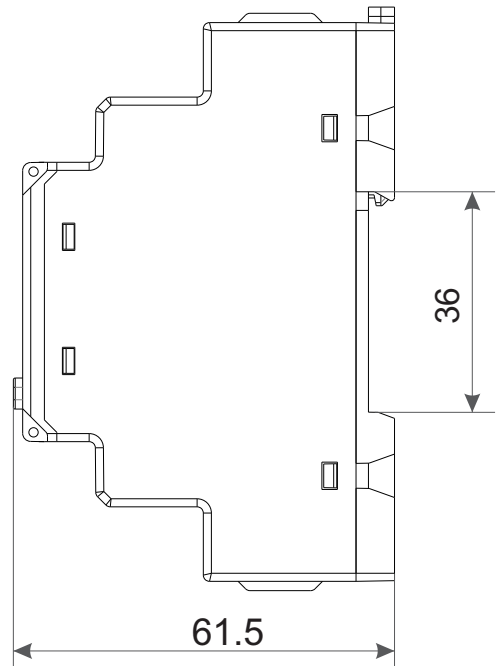
# Mechanical Dimensions

## Body Dimensions



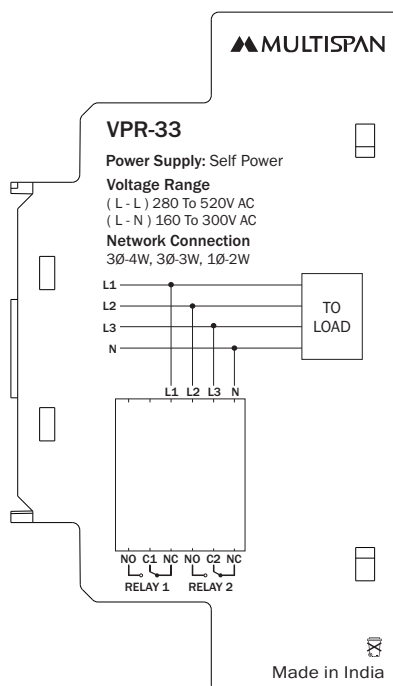
**FRONT VIEW**

All dimensions are in mm



**RIGHT SIDE VIEW**

# Connection Diagram



# TECHNICAL DATA

|                      |  |
|----------------------|--|
| <b>Input Voltage</b> | 260 to 520 V AC (L-L) 3Ø-3W<br>160 to 300 V AC (L-N) 3Ø-4W   |
| <b>Output</b>        | 1 <sup>ST</sup> Relay 1 C/O, 5A, 230 V AC (Resistive load)<br>2 <sup>ND</sup> Relay 1 C/O, 5A, 230V AC, 24V DC |
| <b>Accuracy</b>      | Class 1.0  |
| <b>Certificate</b>   | CE   |

## Features

- Auto/Manual (Reset Option)
- Power Fail Fault Memory  
Time parameter : Power on delay  
Trip delay  
Recovery time (Auto reset)

## Protection Available

- Over Voltage
- Under Voltage
- Over Frequency
- Under Frequency
- Asymmetry
- Phase Loss
- Phase Sequence
- Neutral Loss

## Input

|                       |  |
|-----------------------|--|
| <b>Direct Voltage</b> | 260 To 520V (L-L)<br>160 TO 300V (L-N) |
| <b>Resolution</b>     | 1 Volt                                 |
| <b>Frequency</b>      | 45.0 TO 65.0 Hz                        |

## Display LED & Keys

|                       |   |
|-----------------------|---|
| <b>Display</b>        | 0.4" Red LED, 3 digit UPPER<br>0.28" Red LED, 3 digit LOWER |
| <b>Key</b>            | SET, RESET, INC, DEC  |
| <b>LED Indication</b> | LINE-1 , LINE-2 , LINE-3,<br>RELAY 1, RELAY 2               |

## Meter type

3Ø-3W/3Ø-4W

## Output

### Relay

1<sup>ST</sup> Relay with 1 C/O,5A  
230 V AC On Resistive Load  
2<sup>nd</sup> Relay 1 C/O, 5A, 230V AC

## Trip Setting

|   |   |
|---|---|
| <b>Under Voltage</b>                        | 260-520 V AC (3Ø-3W),<br>160-300 V AC (3Ø-4W) |
| <b>Over Voltage</b>                         | 260-520 V AC (3Ø-3W),<br>160-300 V AC (3Ø-4W) |
| <b>Under Frequency &amp; Over Frequency</b> | 45.0 TO 65.0 Hz                               |
| <b>Phase Asymmetry</b>                      | 10-100V                                       |
| <b>Hysteresis</b>                           | 0-99V   |

## Time Parameter

|                            |                     |
|----------------------------|---------------------|
| <b>Power ON Delay Time</b> | 0.0 to 99.9 Seconds |
| <b>Trip Delay Time</b>     | 0.0 to 999 Seconds  |
| <b>Recovery Time</b>       | 0.0 to 99.9 Seconds |

## Accuracy

Class 1.0 ( Standard )

## Auxiliary Power Supply

|                     |            |
|---------------------|------------|
| <b>Power Supply</b> | Self Power |
|---------------------|------------|

### Environmental Characteristics

|                       |                       |
|-----------------------|-----------------------|
| Operating Temperature | 0 to 55 °C            |
| Storage Temperature   | 0 to 70 °C            |
| Relative Humidity     | 95% RH Non-condensing |

### Mechanical Characteristics

|                      |                                |
|----------------------|--------------------------------|
| Mounting Type        | Din Rail Mount                 |
| Dimension (HxWxD) mm | 90 x 35 x 61.5                 |
| Material Body        | Polycarbonate (PC)             |
| Terminal Screw Size  | M3                             |
| Screw Torque (N.m)   | 0.5                            |
| Wire Gauge (AWG)     | 28-12                          |
| Weight (Approx) gms  | Unpacked : 200<br>Packed : 255 |