



W-PR3

3Ø Under, Over and Voltage unbalance with adjustable time delay & selectable voltage

Code : 6007



Operation

The W-PR3 Phase Protection Relay is a digital electronic instrument designed for AC voltage monitoring and protection in 3 phase 4 wire and 3 phase 3 wire system. Used in application such as main failure, phase sequence, phase unbalance, under and over voltage. The W-PR3 is a designed to monitor the correct phase sequence of 3 phase system (L1, L2, L3). With correct phase sequence applied the output relay will energizes (N/O) and remains de-energized (N/C) if an incorrect sequence is applied, the display will show "Pr".

Operating System with "Over voltage": When the measured voltage moves outside the set-point limit, the relay will count the time for "Delay off", then the relay will de-energize (N/C) after the time delay. The relay will automatically reset to energize (N/O) after it's reached the time set-point (Delay On).

Operating System with "Under voltage": When the measured voltage moves outside the set-point limit, the relay will count the time for "Delay off", then the relay will de-energize (N/C) after the time delay. The relay will automatically reset to energize (N/O) after it's reached the time set-point (Delay On).

Operating System with "Unbalance voltage": When the measured voltage moves raised and reduced the set-point limit, the relay will count the time for "Delay off", then the relay will de-energize (N/C) after the time delay. The relay will automatically reset to energize (N/O) after it's reached the time set-point (Delay On).

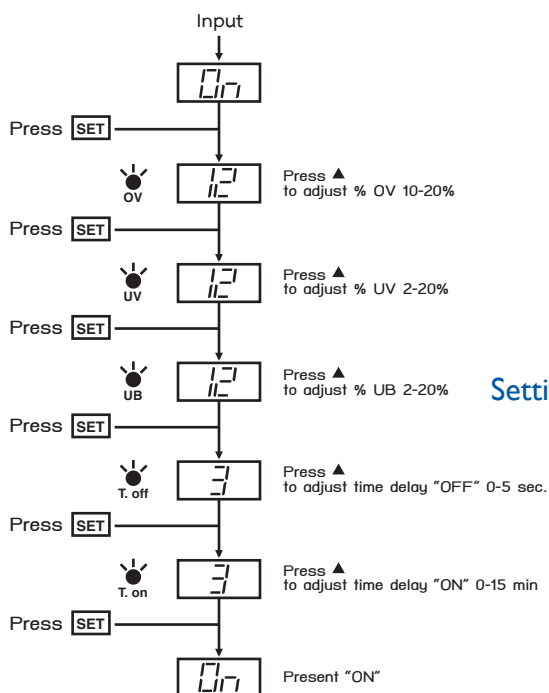
Setting time delay: "Time Delay Off" and "Time Delay On".

Last fault checked: The last fault can be checked by pressing "▲" and the LED will show the last fault condition.

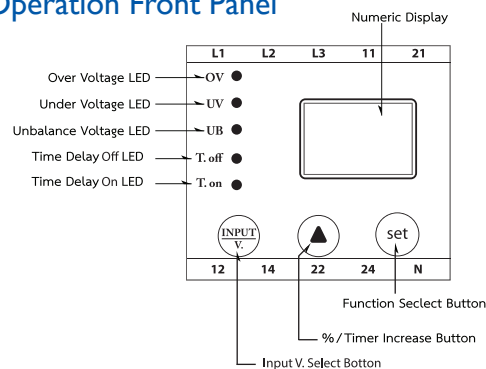
System input voltage setting: Press "Input V." to choose input voltage (380VAC, 400VAC or 415 VAC)

W-PR3 will de-energize (N/C) after the time delay, LED gives indication of actual fault that caused the trip. The case can be mounted on a DIN rail 35 mm.

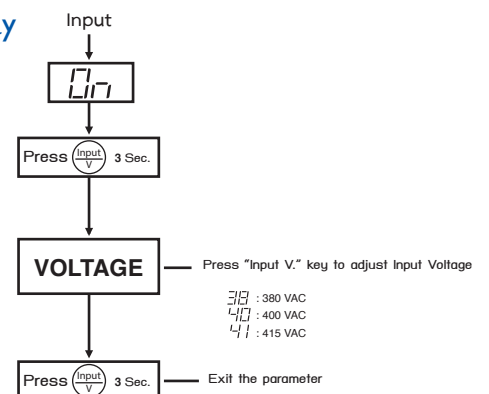
Setting Input Voltage



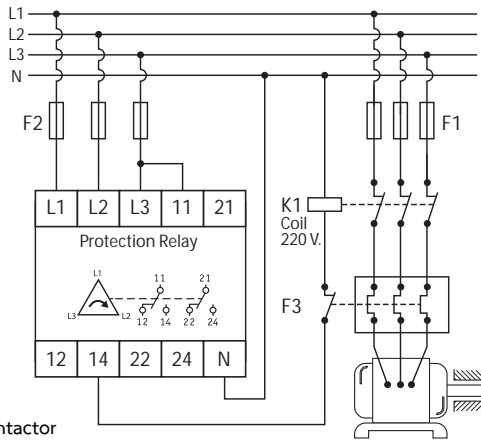
Operation Front Panel



Setting OV, UV, UB, Time Delay

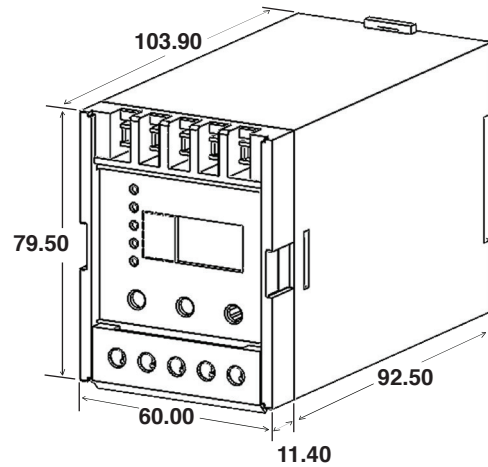


Wiring Diagram



K1 = Contactor
 F1 = Main fuse
 F2 = 2 Amp fast acting fuses recommended for safety (Not required)
 F3 = Overload relay

Dimension in mm.



Specification : W-PR3

Feature	Environmental
Power consumption : 2 VA	Operating temperature : -10 °C to +55 °C
Input voltage : 110, 220, 440, 460 VAC (Fixed V. Requirement) 380, 400 or 415 VAC 3Ø (Selectable)	Storage temperature : -10 °C to +70 °C Ambient humidity : Max 85%RH
System frequency : 50/60 Hz.	Enclosure
Accuracy : ±0.5% of normal voltage	Mounting : DIN rail 35mm
Display : 7 segment Red LED Letter 0.39" (9.90mm)	Housing : ABS UL94V-0
Phase sequence : L1, L2, L3	Protection class : IP20
Range	Wire fixing : Screw terminal block (3.5mm ² self lifting)
Over voltage (OV) : Adjustable from 10% - 20%(Requirement 10-25%)	Indicator : LED 3mm
Under voltage (UV) : Adjustable from 2% - 20%(Requirement 2-25%)	Dimension in mm : 60 x 79.50 x 103.90
Unbalance Voltage (UB) : Adjustable from 2% - 20%(Requirement 2-25%)	Weight : 303 g
Differential (Hysteresis) : Preset at 1%	
Time	
Time delay off : UV and UB Adjustable 0-5 sec. OV preset at 2 sec.	
Time delay on : Adjustable from 0-15 min	
Relay output	
Output type : 2-pole change over (DPDT)	
Contact rating : 5A at 250VAC	
Operations : Mechanical : 2 x 10 ⁷ times Electrical : 1 x 10 ⁵ times	
Relay reset : Automatic	



The product should not be disposed of a household refuse.

Product Code	Description	Wires	Voltage (L-L)
6007 - 7	Over 10% - 20%, Under 2% - 20%, Unbalance 2% - 20%, Phase Sequence, Time Off 0 - 5 Sec., Time On 0 - 15 min.	3P4W	380 - 415 Vac
6007 - 9	Over 10% - 20%, Under 2% - 20%, Unbalance 2% - 20%, Phase Sequence, Time Off 0 - 5 Sec., Time On 0 - 15 min.	3P4W	440 Vac
6037 - 5	Over 10% - 20%, Under 2% - 20%, Unbalance 2% - 20%, Phase Sequence, Time Off 0 - 5 Sec., Time On 0 - 15 min.	3P3W	110 Vac
6037 - 6	Over 10% - 20%, Under 2% - 20%, Unbalance 2% - 20%, Phase Sequence, Time Off 0 - 5 Sec., Time On 0 - 15 min.	3P3W	220 Vac
6037 - 7	Over 10% - 20%, Under 2% - 20%, Unbalance 2% - 20%, Phase Sequence, Time Off 0 - 5 Sec., Time On 0 - 15 min.	3P3W	380 - 415 Vac
6037 - 9	Over 10% - 20%, Under 2% - 20%, Unbalance 2% - 20%, Phase Sequence, Time Off 0 - 5 Sec., Time On 0 - 15 min.	3P3W	440 Vac
6037 - 8	Over 10% - 20%, Under 2% - 20%, Unbalance 2% - 20%, Phase Sequence, Time Off 0 - 5 Sec., Time On 0 - 15 min.	3P3W	460 Vac