



W-OP4

3Ø Under, Over and Voltage unbalance with Selectable Voltage
Code : 6006

The W-OP4 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.

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) when the input voltage is reduced past the set-point minus the differential (hysteresis value)

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) when the input voltage is raised past the set-point plus the differential (hysteresis value)

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) when the input voltage is raised and reduced past the set-point plus the differential (hysteresis value)

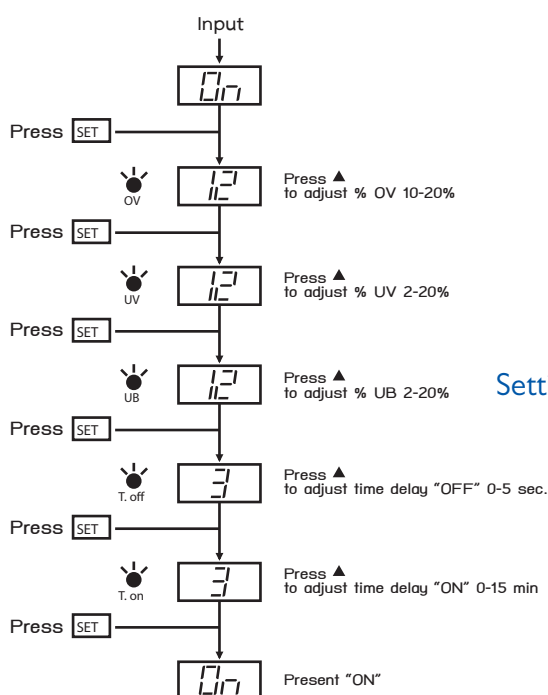
Setting time delay: “Time Delay Off” and “Time Delay On”.

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

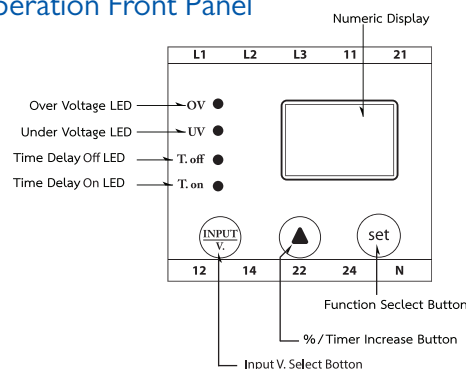
System input voltage setting: Press “Input V.” to choose input voltage (380VAC, 400VAC or 415 VAC)

W-OP4 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.

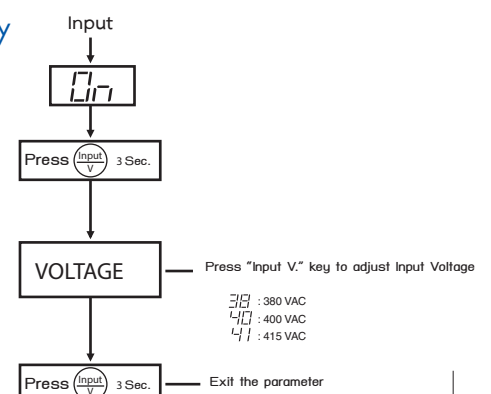
Setting Input Voltage



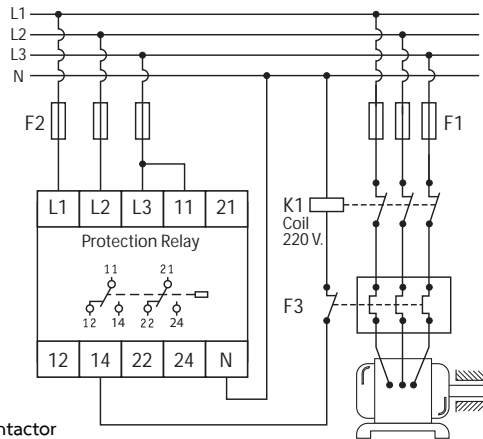
Operation Front Panel



Setting OV, UV, UB, Time Delay

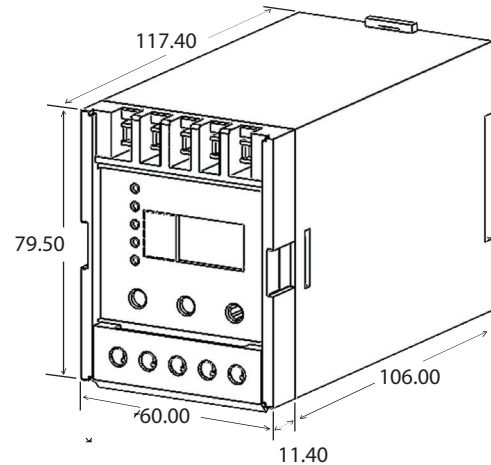


Wiring Diagram



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

Dimension in mm.



Specification :W-OP4

Feature

Power consumption	: 2 VA
Input voltage	: 110, 220, 440, 460 VAC (Fixed V.Requirement) 380, 400 or 415 VAC 3Ø (Selectable)
System frequency	: 50/60 Hz.
Accuracy	: $\pm 0.5\%$ of normal voltage
Display	: 7 segment Red LED Letter 0.39" (9.90mm)

Range

Over voltage (OV)	: Adjustable from 10% to 20% (Requirement 10-25%)
Under voltage (UV)	: Adjustable from 2% to 20% (Requirement 2-25%)
Unbalance voltage (UB)	: Adjustable from 2% to 20% (Requirement 2-25%)
Differential (Hysteresis)	: Preset at 1%

Time

Delay off	: UV and UB Adjustable 0-5 sec. OV preset at 2 sec.
Delay on	: Adjustable 0-15 min

Relay output

Output type	: 2-pole change over (DPDT)
Contact rating	: 5A at 250VAC
Operations	: Mechanical : 2×10^7 times Electrical : 1×10^5 times
Relay reset	: Automatic

Environmental

Operating temperature:	-10°C to +55°C
Storage temperature	: -10°C to +70°C
Ambient humidity	: Max 85%RH

Enclosure

Mounting	: DIN rail 35mm
Housing	: ABS UL94V-0
Protection class	: IP20
Wire fixing	: Screw terminal block (3.5mm ² self lifting)
Indicator	: LED 3mm
Dimension in mm	: 60 x 79.50 x 117.40
Weight	: 303 g



The product should not be disposed of as household refuse.