



W-OP2

Ø Under and Over voltage with adjustable time delay
 & Selectable voltage
 Code : 6009



Operation

W-OP2 is a digital electronic instrument designed for AC voltage monitoring and protection in single phase system. Used in application such as under and over voltage. The relay can be used to protect motors, compressors or water pumps with a delay circuit to prevent sudden operation after the measured voltage returns to normal.

When the measured voltage moves outside the set-point limit, the relay will de-energize (N/C) and count the selected time delay(0-5 Sec.). When the input voltage is raised and reduced past the set-point plus the differential (hysteresis Value), the relay will remain "Delay on". After the selected time delay (0-15 Min.), the relay will automatically reset to energize (N/O), the display showed "On".

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).

W-OP2 will de-energize (N/C) after the time delay, LED gives indication of actual fault that caused the trip.

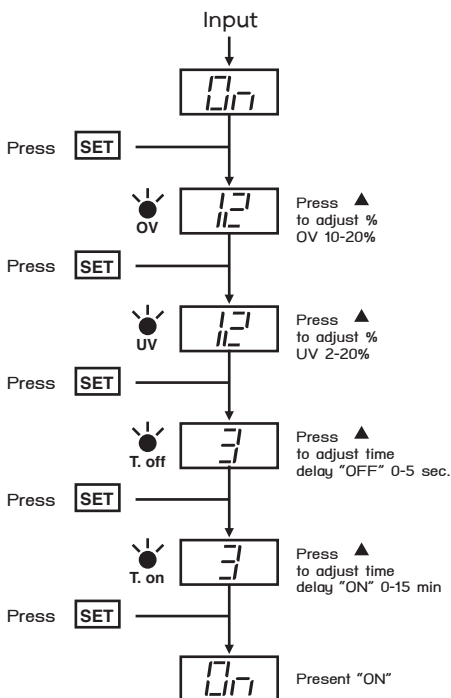
Setting time delay: "Time Delay Off" and "Time Delay On".

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

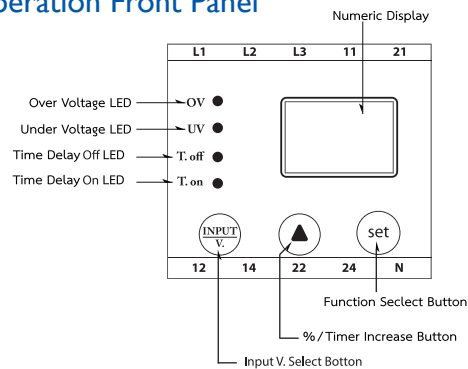
System input voltage setting: Press "Input V." to choose input voltage (220VAC, 230VAC or 240 VAC)

W-OP2 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.

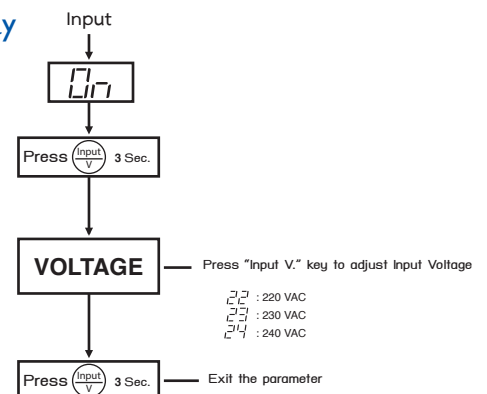
Setting Input Voltage



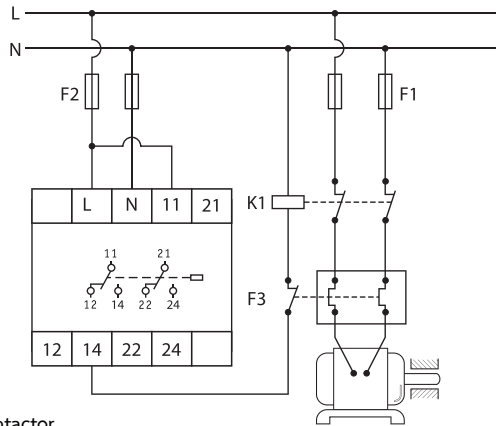
Operation Front Panel



Setting OV, UV, UB, Time Delay

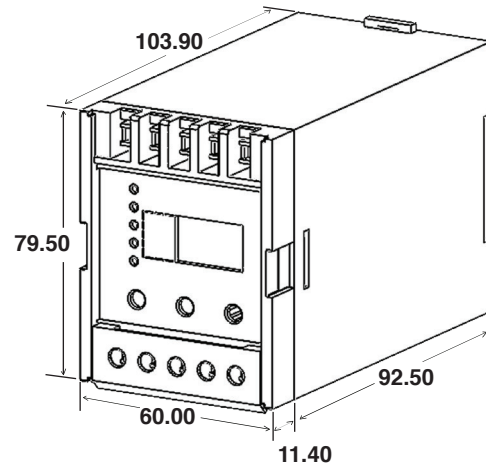


Wiring Diagram



K1 = Contactor
F1 = Main fuse
F3 = Overload relay

Dimension in mm.



Specification :W-OP2

Feature	Environmental
Power consumption : 2 VA	Operating temperature : -10 ° to +55 °C
Input voltage : 220, 230 or 240 VAC 1Ø (Selectable)	Storage temperature : -10 ° to +70 °C
System frequency : 50/60 Hz.	Ambient humidity : Max 85%RH
Accuracy : ± 0.5% of normal voltage	Enclosure
Display : 7-segment Red LED Letter 0.39" (9.90mm)	Mounting : DIN rail 35mm
Range	Housing : ABS UL94V-0
Over voltage (OV) : Adjustable from 10% to 20% (Requirement 10-25%)	Protection class : IP20
Under voltage (UV) : Adjustable from 20% to 20% (Requirement 2-25%)	Wire fixing : Screw terminal block (3.5 mm ² self lifting)
Differential (Hysteresis) : Preset at 1%	Indicator : LED 3 mm
Time	Dimension (mm) : 60 x 79.50 x 103.90
delay off : UV Adjustable 0-5 sec.	Weight : 298 g.
: OV preset at 2 sec.	
delay on : Adjustable 0-15 min	
Relay output	
Output relay : 2-pole change over (DPDT)	
Contact rating : 5A at 250VAC	
Operations : Mechanical : 2x10 ⁷ times	
: Electrical : 1x10 ⁵ times	
Relay reset : Automatic	



The product should not be disposed of a household refuse.

Product Code	Description	Voltage (L-L)
6009 - 6	Over 10% - 20%, Under 2% - 20%, Time Off 0 - 5 Sec., Time On 0 - 15 min.	220 - 240 Vac