WIP®

W-PF5
Protection Relay and Voltmeter

The **W-PF5** is a digital electronic instrument designed for AC voltage measuring, monitoring and protection in your appliances such as refrigerators, freezers, televisions, computers, fax machines and home use appliances all need **W-PF5** protection to avoid damage and increase their life. The numerical display will show the input AC voltage.
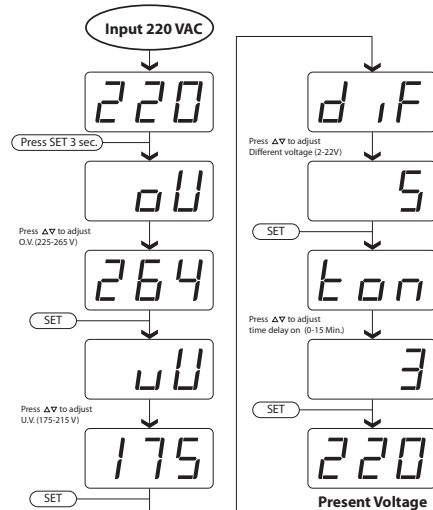
It is all you need whenever over, under voltage, surge and fluctuations occurs. The **W-PF5** operates automatically and shut down your appliances before any damage is done. The supply parameters have returned to safe and acceptable limits, the adjustable delay period starts. At the end of timed period the relay will automatically energize again. The time setting adjustment range is 0 to 15 min and it can use to let the compressor enough time to re-start and to equalize its internal pressure. AC voltage protectors offer user adjustable set-point. The set-point can be adjustment between 10% (225) and 20% (265) for over voltage unit and between 2% (215) and 20% (176) for the under voltage unit. An illuminated LED indicates of actual fault that cause the trip and display "ON" indicates when the relay is energized.
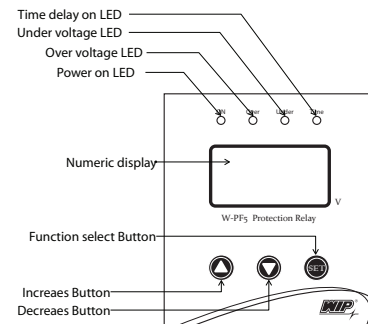
Specification

Model	:	W-PF5	
Code	:	6051	6052
Feature			
Power consumption	:	2 VA	
Input voltage	:	220 VAC	
Operating voltage	:	100 - 265 VAC	
System frequency	:	50/60 Hz.	
Accuracy	:	± 0.5% of normal voltage	
Display	:	7-segment Red LED letter 0.56" (14.2 mm.)	
Range			
Measuring range	:	50-300 VAC	
Input signal	:	AC voltage	
Over voltage (OV)	:	Adjustable 225 to 265 VAC	
Under voltage (UV)	:	Adjustable 215 to 175 VAC	
Differential (Hysteresis)	:	Adjustable 2 to 22 VAC	
Time			
Delay off	:	3 sec. (Fixed)	
Delay on	:	Adjustable 0 to15 min.	
Relay output			
Output Type	:	2-pole change over (SPST)	
Contact rating	:	16A at 250 VAC	10A at 250 VAC
Operations	:	Mechanical: 2×10^7 times	
		Electrical: 1×10^5 times	
Relay reset	:	Automatic	
Environmental			
Temperature range	:	-10° to +55°c	
Storage temperature	:	-10° to +70°c	
Humidity operation	:	Max 85% RH	
Enclosure			
Output type	:	Terminal	Female plug
Indicator	:	LED 3 mm.	
Dimension (mm)	:	69 x 120 x 43	
Weight	:	213 g.	281 g.

System parameter setting

1. Press "Set" key the LED will indicate the first system parameter (ie. "OV"), this means the controller goes to modify phase. After that, each time press the "Set" key, the controller goes to modify the next parameter.

2. After entering the modifying phase, use "▲" key to increase and "▼"key to decrease the value by one unit, respectively.

3. Use "Set" key to end current parameter setting, and move to the next parameter. After four system parameters, the procedure of the system parameter setting is ended. At this time the display shows actual voltage.
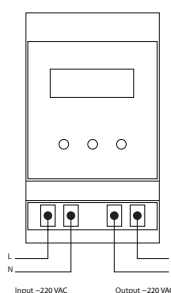

Operation Front Panel

System parameter table

No	Symbol	Description	Range	Default
1	oU	Set Over voltage	225 to 265	246
2	uU	Set Uder voltage	215 to 175	193
3	diF	Set Different	2 to 22 V	5V
4	ton	Set Time delay on	0-15 min.	3 min.

Wiring Diagram

Input ~220 VAC   Output ~220 VAC

Dimension in mm.