IC Controlled High/Low Voltage Protector

SG series

User's Manual

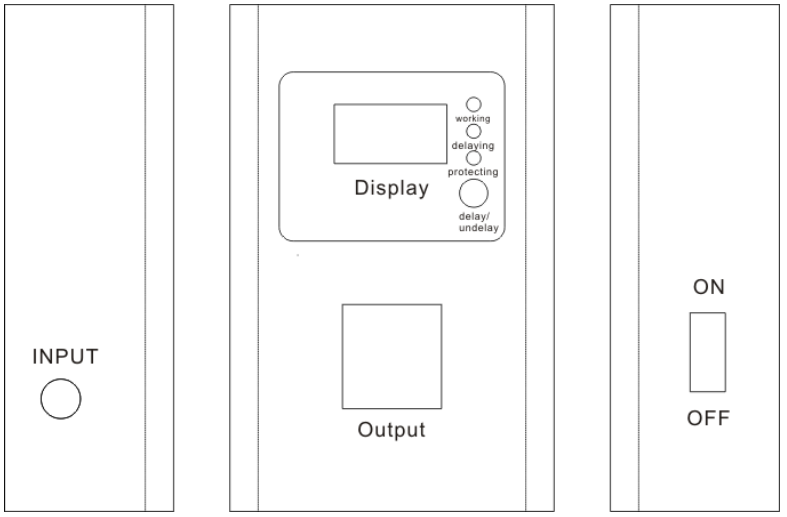
1. Specifications

AC Input Voltage	175V~245V
Input Frequency	50Hz/60Hz
Max Current	15A/25A
Distortion	<3% (compare to input wave form)
Operating Temperature	-10˚C~40˚C
Operating Humidity	0~90%(Non-condensing)
Noise	≤65dB (full load, distance at 1 meter)
Default Delay Time	300 seconds
Protection	Output Low Voltage, Output High Voltage

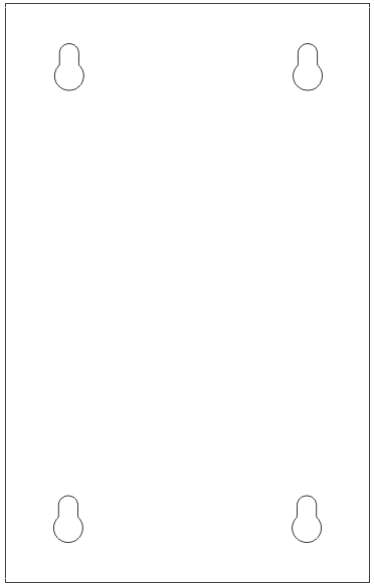
2. Introduction to the Protector

Familiarize yourself with the various features and facilities by studying the two diagrams below to obtain maximum benefit from the protector.

a. Front of the Protector



b. Rear of the Protector



3. Operation of the protector

a. Display of Input Voltage and Output Voltage

•The output voltage will show in the display after switch it on.

•By pressing the “I/O Button”, the input voltage will be indicated in the display and flash.

•Press the “I/O Button” again to show the output voltage.

b. LED Operation

• When the Green LED is "ON", it indicates Power ON and also that the input voltage and output voltage is normal, the protector is working.

• When the Yellow LED is “ON” and flash, it indicates that the protector is in a delay status, the output will be delayed.

• When the Red LED is "ON" and flash, it indicates the protector is in a protection status.

c. Delay Operation

• This model is designed with a delay feature to protect appliances with compressors which should not be switched on immediately after being switched off.

• The delay time is generally set at 300 seconds.

• When delay time has elapsed, the Yellow LED will switch "OFF" , the Green LED is "ON" and display will indicate the AC output voltage.

• Press and hold the “I/O Button” more than 3 seconds , the delay time will be cancelled , then the Yellow LED will switch "OFF" , the Green LED is "ON" and display will indicate the AC output voltage.

g. High Output Voltage Protection

• This PROTECTOR is built in with a very specialized feature HIGH OUTPUT VOLTAGE PROTECTION CIRCUIT.

• This special and unique circuitry is designed to protect connected appliances whenever the output voltage is higher than the normal range.

• If the output voltage is over the normal range, the output power supply will cut "OFF" automatically and the display will show "H". At the same time, the Red LED blinks.

• Once the input city power returns to normal range, the PROTECTOR will restore the output

h. Low Output Voltage Protection

• When the output voltage is below the normal range, the output will be cut “OFF” automatically and the display will show “L”. At the same time, the Red LED blinks

• Once the input city power returns to normal range, the PROTECTOR will restore the output to the loads.