



Instruction Manual

MICRO-COMPUTER SERVO MOTOR CONTROL
AC.FULL AUTOMATIC POWER VOLTAGE REGULATOR

Designed and Qualified by OMEGA korea



Please read the Instruction Manual carefully before using.

AC.FULL AUTOMATIC POWER VOLTAGE REGULATOR

Forward

Please read this manual carefully when you operate this machine, thus, you can install and use it smoothly.

Luxurious household AC voltage regulator is a latest product of household AC automatic voltage regulation protector (Hereinafter referred to as voltage regulator), it has many functions, good performance and high reliability.

1. Optical alarm: When the voltage regulator works abnormally, some relative alarm lamps will light.
2. Overall protection function: Over-voltage protection, under-voltage protection, delay protection and overload protection.
3. Output digit display: LED displays range of input voltage.
4. Have delay count-down function for starting machine.
5. With double function of practical bypass and voltage regulation
6. Low power consumption, high efficiency.
7. For unique appearance design, noble and elegant streamline shape, it can make your room more beautiful.
8. 5KVA-10KVA input/output adopts connecting mode of connection terminal, it is easy, fast and convenient to install it, the voltage regulator performs Q/HB303-1999 standard.

Main technical performance

Input voltage	120V-260V	
Output voltage	220V + 3%	
Rated output capacity	LG-1P-5K-W	5000VA
	LG-1P-7K-W	7000VA
	LG-1P-8K-W	8000VA
	LG-1P-10K-W	10000VA

Over-voltage protection	When outputting voltage 250V
Under-voltage protection	When outputting voltage 180V
Delay protection	Long time: 300s Short time: 5s
Rated frequency	50Hz-60Hz
Electric strength in the cold state	1500V1min
Insulation resistance	>2MΩ

1.

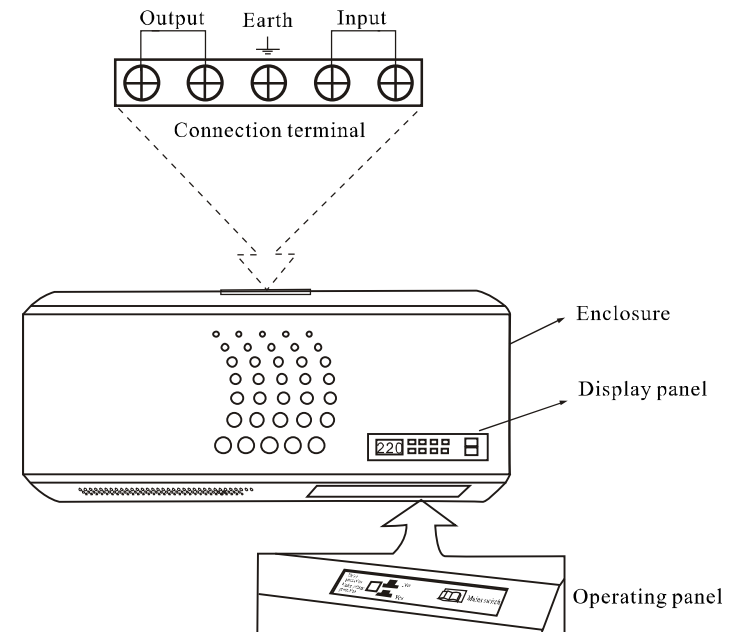
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Please calculate the sum of electrical appliance power first, then select model, thus, you can prevent over power using.

Calculation method:

- The power of fridge and air-condition is multiplied by 3~5 times.
- The power of inductive load like fan, daylight lamp is multiplied by 3~5 times.
- Local power network voltage is often lower than 140V, the total power of electrical appliance is multiplied by 2 times.

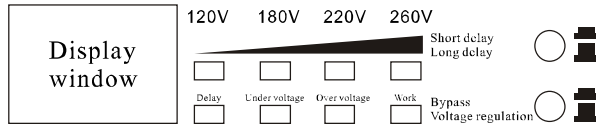
Description for appearance



2.

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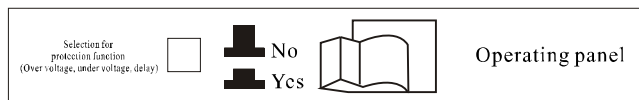
Description for panel



Display panel functions:

- Display window
Display output voltage or time of delay
- Delay indicator lamp
When the lamp lights, the voltage regulator will have 300s delay protection.
- Over voltage protection indicator lamp
When the lamp lights, the voltage will be in the state of over voltage protection.
- Selection button for delay
When keys is in the state of "■", the display will keep delay for 5s, then the machine will output normally; when the key is in the state of "■", the display will keep delay for 300s, then the machine will output normally.
- Under voltage protection indicator lamp
When the lamp lights, this machine keeps the state of under voltage protection
- 150V-250V indicator lamp
When the lamp lights, it means the range of input voltage at this moment.
- Working indicator lamp
When the lamp lights, this machine keeps the state of normal working.
- Section key for bypass and voltage regulation
Press this key, if the machine shows the state of "■", it will keep bypass state;
Press this key, if the machine shows the state of "■", it will keep voltage regulation state;

Operating panel



3.

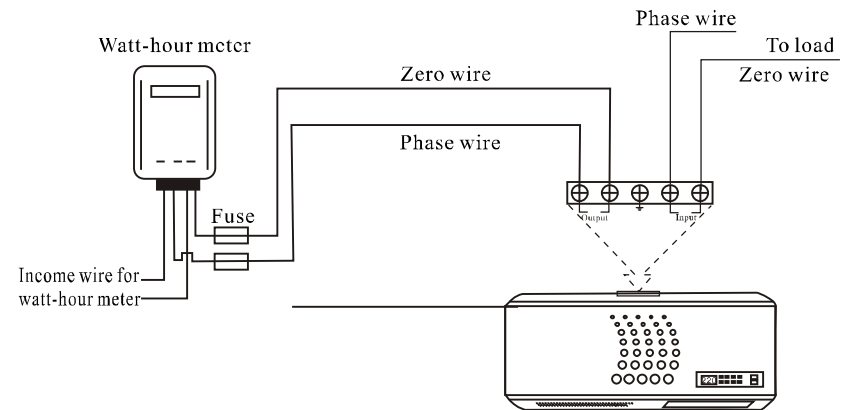
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Function of operating panel

- Selection button of delay, over voltage and under voltage
Press this key, if it is the "■" state, the machine will keep protection function, and if it is the "■" state, the machine will keep non-protection function.
- Air switch
Turn on air switch, this machine will keep the state of switching on.

Installation method

- Fetch the voltage regulator from the box carefully
 - Check whether it is damaged or not during being transported.
 - Check all parts are missed or not, if yes, please contact with store where you purchase this machine.
 - Fixed this machine with hook and expansive screw in the ventilated place for convenient operating.
 - Open the enclosure of connecting base, select proper conductor as per specification, to connect the output terminal with room electrical appliance, and to connect input terminal with watt-hour meter, each connecting terminal is fastened by screw driver, make sure the contact is reliable, then cover the enclosure.
- Note: Above operation can't preformed until the mains switch has been turned off.**



Connect wire at 5000VA~10000VA

4.

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Notice

- Must install this machine on the wall with enough structure strength, and make sure it is installed reliably.
- Please keep far away the electrical appliances with heating source such as electric heater, warm oven, etc.
- Mustn't install this machine in the place which can touch the sunshine directly.
- Don't use it in the place that shows much dust, dampness, high temperature and vibration, besides, don't clean this machine with the corrosive solvent and chemical products. Please use the soft ware to clean.
- When the machine is operating, you shall not cover any thing on the radiating hole
- Before you operate this machine, please think that whether you have abundant electric engineering knowledge or not, if no, please invite professional electric worker, in order to prevent electric shock or the fault caused by improper operating.
- The safety parts for maintaining or changing are not supplied by us, if the machine has any safety quality problems, we are not responsible for it.
- When using 5K~7K machine, please connect the conductor, the input wire shall be 4mm² copper conductor, and output wire shall be 4mm² copper conductor. When using 8K~10K machine, please connect the conductor, the input wire shall be 8mm² copper conductor, and output wire shall be 6mm² copper conductor.
- When installing this machine, please make sure that the connecting point shall be fasten, otherwise, the failing contact would cause unnecessary damage.

Basic operating

Open fore cover, please turn on the power switch, the delay lamp lights, the display is in the state of delay count - down , after it delays for 300s , the voltage regulator outputs automatically. At this moment, the display window indicates the stable output voltage of voltage regulator.

- Please break the switch of household electrical appliance, then start the machine, and when the machine works normally , please connect with the loads , till now , you can use the electrical appliances.
- If you find any abnormal situation when starting the machine, please turn off mains switch, check relative circuit, then restart machine till you make sure the installation is correct.

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Button of short delay and voltage regulation

If you needn't delay protection, please press this button, this machine can output through short delaying for 5s.

Bypass button

If you needn't voltage regulation, please press this button, the machine can output through bypass.

- Inductance and capacitance loads such as fridge, air-condition need delay protection , but resistance load like warmer , light needn't delay protection.

Selection button of delay, over oltage and under voltage

When the key is in the state of "■", the machine has protection function of delay, over voltage, under voltage . When the power network voltage exceeds the range of over voltage, this machine cuts off output (Over voltage or under voltage protection indicator lamp lights) so as to protect loads. If user demands the power supply urgently, such as illuminating electrical appliances, please press this key, the key will show the state of "■", the machine still can supply power, however, the output precision can't be guaranteed. (Note: if the over voltage protection indicator lamp lights , you can't press this key, otherwise, the illumination electrical appliance would be burned).

If using this function, you can't connect it with valuable electrical appliances like fridge, and air-condition or lots of loads any more.

Properly use electric bypass function

Electric bypass that takes effect when the voltage regulator has no voltage regulation (The output voltage of this machine is the same as power network voltage), and each function doesn't exist.

In the season showing stable power network voltage, this machine is in the state of electric bypass, it is helpful for saving electricity and prolonging service life of this machine.

- When the power network voltage is in the range from 200V to 240V, this function is applicable.
- If you want to resume regulation voltage output, please make the button of bypass and voltage regulation in the state of voltage regulation.

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Advanced function

- Over voltage and under voltage protection
When this machines occurs fault or the input voltage exceeds normal range (Namely , input voltage is more than 250V or lower than 180V), the over voltage or under voltage indicator lamp lights , at this moment , the machine cuts off output power supply automatically to enter a protection state. When the machine or input voltage recovers, this machine can output normal voltage automatically.
- Controlled by Microcomputer, it has delay count-down function at starting machine.

Handling for general problems

All indicator lamps and display window can't light.

- Check whether the power circuit is connected well or not.
- Check whether the mains switch of this machine is turned on or not.
- Check whether the fuse is broken, if the watt-hour meter has connected with air switch, please check this air switch and make sure it switches on . If the air switch trips frequently , please check the circuit or change into another switch with higher quality and larger specification.

Preserve

About neatness of this machine

- Break the loads of this machine
- Turn off mains switch
- Carefully clear away the dust and dirt on the surface with soft brush.
- Clean this machine with neat and soft close dipped with neutral detergent.
- Mustn't clean this machine with corrosive liquid medicine, otherwise, the enclosure would be damaged.
- Pay attention not to spray water on this machine or parts.
- Don't use hard brush.

Maintain

- If there are many loads or a high power electrical appliance with motor, please turn on it one by one not at the same time.
- Because people go on business or travel for a long time, nobody is at home, please turn off mains switch of this machine.
- Please use the bypass function in the season showing normal power network voltage.

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Warn

1. Laymen are forbidden to disassemble, maintain or connect wire under the live condition.
2. The safety parts for maintaining or changing are not supplied by us, if the machine any safety quality problems, we are not responsible for it.