



M10-522 SERIES

VARIAC

USER'S MANUAL

Unpacking

After the packaging has been removed, set all accessories in order so that they are not lost and check the equipment integrity. In particular, check that the equipment is integral and shows no visible damage.

Warranty Information

Certification

We certify that this product met its published specifications at time of shipment from the factory.

Warranty

This hardware product is warranted against defect in material and workmanship for period of one year from date of delivery. During the warranty period our company will either repair or replace products which prove to be defective. Our company does not warranty that the operation for the software firmware or hardware shall be uninterrupted or error free.

For warranty service, with the exception of warranty options, this product must be returned to a service facility designated by our company. Customer shall prepay shipping charges by (and shall pay all duty and taxes) for products returned to our place for warranty service. Our company shall pay for return of products to Customer.

Assistance

The above statements apply only to the standard product warranty. Warranty options product maintenance agreements and customer assistance agreements are also available.

Safety

Safety Summary

The following general safety precautions must be observed during all phases of operation of this instrument. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the instrument. We assume no liability for the customer's failure to comply with these requirements.

Environmental Conditions

It is designed to operate at ambient temperature from -10 to 45°C, relative humidity from 20 to 85% and at altitudes of up to 1000 meters. Refer to the specifications tables for the ac mains voltage requirements.

DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE

Do not operate the instrument in the presence of fumes or flammable gases.

KEEP AWAY FROM LIVE CIRCUITS

On the equipment, there are some slots or opening for the ventilation; to ensure a reliable operation and to protect the equipment from overheating, they must not be blocked or covered. This equipment must be in such a position to enable a proper aeration.

Do never set the equipment on trolleys, supports, tripods, stirrups on unstable tables. The equipment could fall causing damages to the collided persons or it can damage itself. Any installation of the equipment must follow the instructions of the manufacturer and must be carried out using recommended accessories.

DO NOT SERVICE OR ADJUST ALONE

Do not try to do some internal service or adjustment unless another person capable of rendering first aid resuscitation is present.

CLEANING THE EQUIPMENT

Use a soft and dry cloth to clean the container and the silk screen panel. Do never use insecticide or chemical products or solvents for cleaning.

VIBRATIONS OR COLLISIONS

Be careful not to cause vibrations or collisions.

Caution:

New installation variac or not used for a long time should tested the insulated resistance of coil to earth by 500V ohm-meter before operation, the safe value is not lower than 0.5Ω , otherwise to deal with by dry (the method is by warm by electric power or sent them to dry room). After the dry, you are required to check all the parts loose or not, if there is any loose, please fix them firmly.

The variac should conform to the suitable input voltage which marks in the variac.

During the operation, you are required to check the output current is not over the rated maximum current.

During the operation, the hand wheel should be circumvolved equality and slowly so as not to damage electric brush or produce spark.

The variac should be checked regularly, if there is any damage in electric brush are founded, should be changed the same specification in time. And underlay sand paper under electric brush to turn over the hand wheel many times to rubdown the bottom of electric brush, in a good contact. The changed copper plumbaginous multiplex electric brush should be conform to stipulation strictly.

The surface between coil and electric brush should be kept clean regularly otherwise will enlarge the damage and burn coil. If any black fleck is founded in the coil, please wipe it by cotton yarn with alcohol (90%).

Don't move the variac by hand wheel, should move it by handle or by whole product.

1 Introductions

The M10-522 series has small size, light weight and reliable operation.

The M10-522 series is widely used into science experiment, public service, home appliances to realize regulation the voltage, control the temperature, adjusting speed and light, control power and etc. It is an ideal AC voltage regulator.

The M10-522 series has power cord for input and 4mm safety socket for output ((except M10-522-50), and also outlet for output (M10-522-10, M10-522-20 and M10-522-30) for convenience use.

There is a fuse to protect the over current.

2 Specifications

Model	Max. Power	Input Voltage	Output Voltage	Max. Current	Dimensions W×H×D	Weight
M10-522-02	200VA	220V/230V	0~250V	0.8A	115×130×125mm	2.5kg
M10-522-05	500VA			2A	125×145×160mm	4kg
M10-522-10	1000VA			4A	185×160×210mm	6kg
M10-522-20	2000VA			8A	185×190×210mm	8kg
M10-522-30	3000VA			12A	200×210×250mm	11kg
M10-522-50	5000VA			20A	235×250×290mm	17kg

3 Operations

Well connect the input, and then use the hand wheel to adjust the output voltage, use the scale for adjusting the voltage which you want. Turn on the power switch and use the installed voltmeter to make sure the output voltage. For more exactly, use a multimeter or an external voltmeter to measure the output voltage. Turn off the power switch and connect the output to the electric appliances. After it, you can use the variac normally.



- 1 AC input: power cord for AC input or binding post for AC input (M10-522-50)
- 2 AC output: 4mm safety socket and outlet and or binding post for AC output (M10-522-50)
- 3 Fuse: to protect the over current
- 4 Power supply switch: to turn on or turn off the device
- 5 Hand wheel (AC adjustor): to adjust the output voltage
- 6 AC voltmeter: to display the output voltage
- 7 Scale: to indicate the output voltage

* The M10-522-50's input and output current is over 16 amps, so use the binding post to instead of the power cord and 4mm safety socket for input and output.