

USER'S MANUAL

THREE PHASE AC AUTOMATIC VOLTAGE REGULATOR SBW SERIES

WELCOME

Please read this manual thoroughly before installing and operating your automatic voltage regulator. This manual contains important information and safety instructions you need to obtain the performance required for your application. Keep this manual for future reference. This SBW series three phase automatic voltage regulator featured with servo motor regulation, compensation technology, and advanced microprocessor controlling, high efficiency, mature technology and reliable design.

WARNINGS, CAUTIONS AND NOTES

It's very important that any operator and installer of this voltage regulator read and follow all

WARNINGS, CAUTIONS AND NOTES and all installation and operation instructions.

1. This product can only be installed and serviced by professional electricians who had previous training and knowledge about voltage regulators.
2. It is a must to switch off the voltage regulator and disconnect it from the AC mains when install and maintain it. prohibit operate when there is live electricity.
3. When the voltage regulator is working, to avoid electric shock, do no open the cabinet or move any connection cables.
4. The input and output cables must be well deployed, prohibit stepping on it to prevent damage to the cable and electrical leakage risk. Do not allow anything foreign object enter into the cabinet.
5. The voltage regulator must be grounded as instructions illustrated, no grounding may cause electrical shock to the human. The grounding line must not be connected to any gas pipeline, water

supply pipe or heating facilities, Electric leakage may cause public disaster.

6. Do not put anything into the cabinet through the ventilation slot; direct contact may result in electric shock.

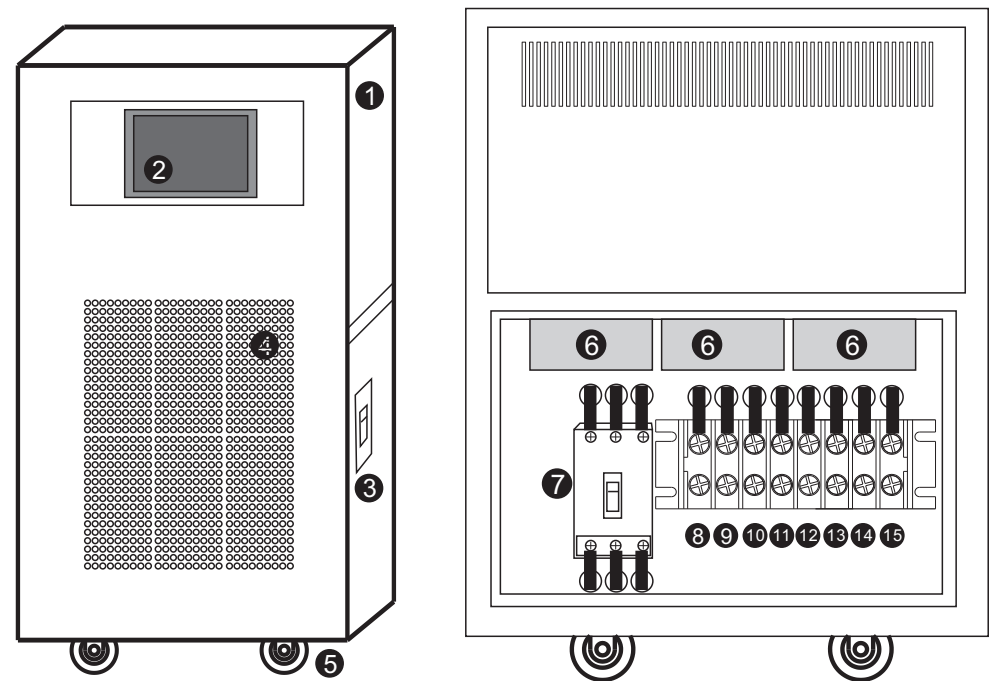
7. Place the voltage regulator at least 1 Meter away from the wall; keep the surroundings clear and well ventilated.

8. Prohibit washing the voltage regulator by using any corrosive cleaner or liquid. Prohibit operating the voltage regulator with wet hands.

9. In case the voltage regulator not to be used for a long time period, switch off it, disconnect it from the AC mains and dismantle the connection cables.

10. Transportation Method: Forklifts, Cranes, Prohibition of inverted, Waterproof

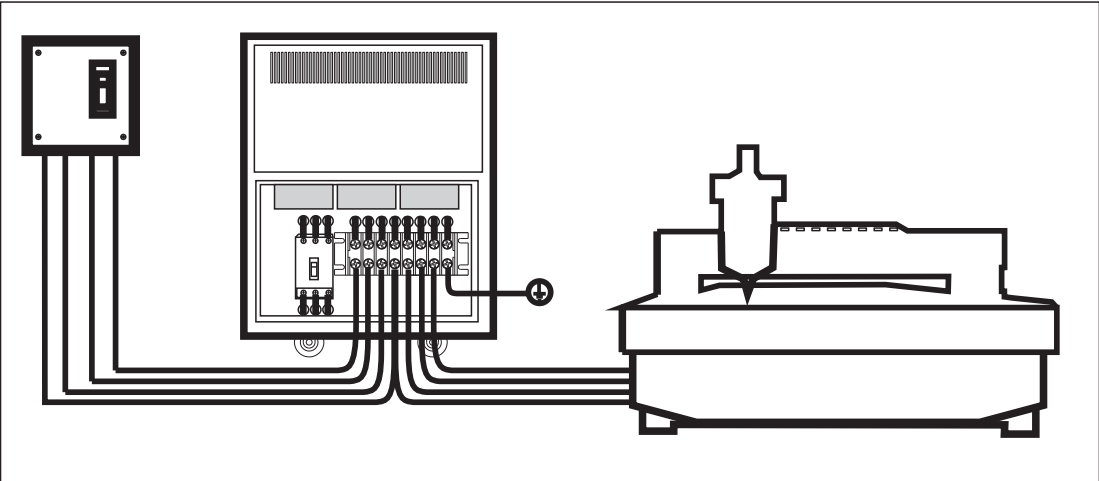
PRODUCT PRESENTATION



1. metal cabinet
2. Comprehensive display, show input and output voltage, current.
3. Protection door, access for input and output wiring and main circuit breaker.
4. Ventilation holes
5. Wheels.

- Control power boards.
- Main circuit breaker, switch ON/OFF the voltage regulator.
- Input Phase A. Connect to the phase A live wire of the AC mains.
- Input phase B. Connect to the phase B live wire of the AC mains.
- Input Phase C. Connect to the phase C live wire of the AC mains.
- Neutral for both input and output. Connect to the neutral phase wire of the AC mains.
- Output phase a, Connect to the phase a live wire of the load.
- Output phase b, Connect to the phase b live wire of the load.
- Output phase c. Connect to the phase c live wire of the load
- Grounding.connect to the grounding wire of the AC mains, make sure the grounding is effective.

INSTALLING AND CONNECT THE VOLTAGE REGULATOR

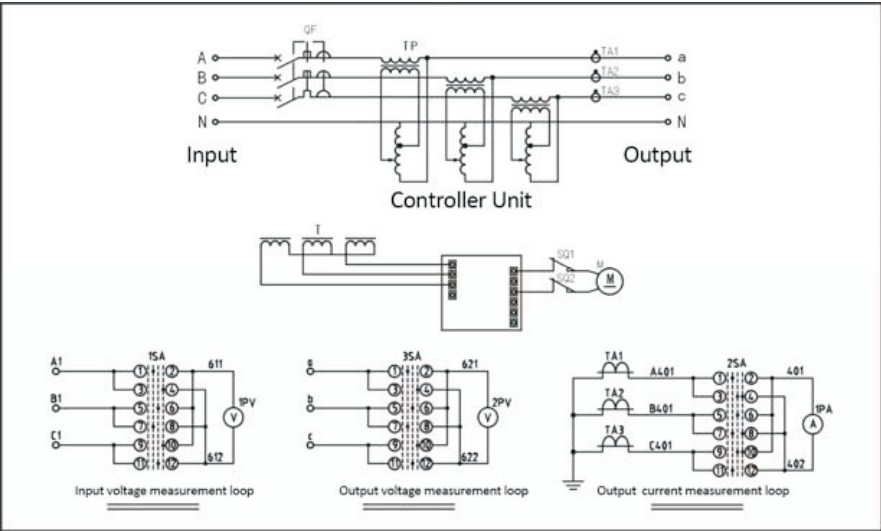


- Inspect the voltage regulator before installation, make sure there isn't any sign of damage in the packaging and on the product.
- Check the specifications if it meet your actual requirement.
- Place the voltage regulator in a well-ventilated,dry,and safe place. Keep it away from direct sunshine, rain, inflammable materials, gas, explosive materials, and children.
- Use proper cables to make the wiring, for your reference, we recommend pure copper wires, for the cable gauge, we recommend to choose the cable gauge according to 2.5A/ mm2. for example, giving

the total maximum load current is 25A, you are recommended to use 10mm2 cables for wiring.

- Please make the grounding according to the rules and regulations of the local authorities.
- Please don't reverse connection of any phase wire to the neutral wire, do not reverse connection of the input to the output, GROUNDING MUST BE EFFECTIVELY CONNECTED.

ELECTRICAL DIAGRAM



TROUBLESHOOTING

Phenomenon	Cause	Handle Method
The power switch trips	·Overload · High or low input voltage	·Reduce the load capacity. ·Check the input voltage if within the normal input range of the voltage regulator.
High Output voltage	·High input range ·The transmission system stuck. ·The controller fails to function	·Check the input voltage if it exceeds the rated input voltage range. ·check the controller by automatic method.

Low Output Voltage	·Low input voltage ·The transmission system stuck. ·The controller fails to function	·Check the input voltage if it drops below the rated input voltage range. ·check the controller by automatic method.
The Voltage meter displays nothing	-Bad connection of the the AC mains. -Failure to turn ON the voltage regulator	· Check the input and output connection, secure them again. -Switch on the cirbuit breaker properly.
The Cooling Fan doesn't work	·The internal temperature below 55℃ ·The fan isn't well connected. ·The fan burned	·No problem ·Re-connect the fan cable firmly ·replace a fan.
There is sparks inside the regulator	·The carbon brush doesn't contact the transformer surface well.	·Use #00polishing paper slightly polish the contact surface of the transformer. ·Check the components of the carbon brush, make sure the spring has enough stretch pressure.
Smoke from inside	·Components burned	·Stop operation, contact service for help.

SPECIFICATIONS

MODEL	SBW SERIES
RATED CAPACITY	10KVA~1000KVA
PHASE	THREE PHASE
INPUT VOLTAGE RANGE	380V/400V/415V±20%
OUTPUT VOLTAGE	380V/400V/415V
OUTPUT PRECISION	±2%
EFFICIENCY	≥96%

FREQUENCY	50Hz/60Hz
RESPONSE TIME	0.1s
ISOLATION GRADE	GRADE A
ISOLATION RESISTANCE	>5MΩ
HI-POT TESTING	2000V/min
THD	≤0.1%
DISPLAY	ANALOGUE VOLTMETER/DIGITAL LED VOLT METER
PROTECTION	OVER VOLTAGE, UNDER VOLTAGE, OVERLOAD, SHORT CIRCUIT
COOLING	INTELLIGENT COOLING FAN
WIRING	THREE PHASE FOUR WIRE(A,B,C,NEUTRAL, GROUNDING)

SIZE AND WEIGHT				
Model	Machine size	Weight	Package Size	Gross weight
10KVA	350*500*470(mm)	120kg	390*540*570(mm)	42kg
15KVA	330*460*600(mm)	120kg	370*500*700(mm)	71kg
20KVA	380*500*710(mm)	120kg	420*540*810(mm)	93kg
30KVA	350*620*680(mm)	120kg	380*650*730(mm)	140kg
40KVA	400*700*720(mm)	160kg	430*730*770(mm)	180kg
50KVA	450*750*780(mm)	180kg	480*730*830(mm)	200kg
60KVA	500*1100*800(mm)	220kg	530*1130*850(mm)	245kg
70KVA	500*1100*800(mm)	230kg	530*1130*850(mm)	255kg
80KVA	500*1100*850(mm)	250kg	530*1130*900(mm)	280kg
90KVA	550*1150*900(mm)	300kg	530*1180*950(mm)	330kg
100KVA	600*1200*1100(mm)	350kg	630*1230*1150(mm)	380kg
120KVA	750*1400*1150(mm)	380kg	780*1430*1180(mm)	410kg
150KVA	750*1400*1150(mm)	410kg	780*1430*1200(mm)	440kg
200KVA	800*1500*1200(mm)	450kg	830*1530*1250(mm)	480kg
250KVA	800*1600*1200(mm)	480kg	830*1630*1250(mm)	510kg

300KVA	900*1800*1300(mm)	550 kg	930*1830*1350(mm)	580kg
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Specifications are subject to change without prior notice.

WARRANTY

This product is warranted to the original purchaser for a period of one (1) Year from the original purchase date, to be free of defects in material and workmanship. We disclaims any liability for consequential damages. In no event will we be responsible for any amount of damages beyond the amount paid for the product at retail.