

Dear User:
Thank you for ordering our EC-SVC, please read the user's manual carefully before using. Please use it after you master it well, and keep well it.



EC-SVC SERIES

1 PHASE/3 PHASE

SERVO-MOTOR CONTROLLED TYPE

AC AUTOMATIC VOLTAGE REGULATOR

USER'S MANUAL



WARNING

PLEASE READ CAREFULLY AND FOLLOW THE INSTRUCTION TO AVOID ANY INJURY OR DEATH BY ELECTRIC SHOCK. MISUSE OF THIS DEVICE MAY CAUSE FATAL DAMAGE & ELECTRIC FAILURE. THIS DEVICE MUST BE INSTALLED BY SKILLED ELECTRICIAN.

Please do read the instruction manual carefully before using.

EC-SVC series High Accuracy And Fully Automatic Voltage Regulator is such constructed that they are composed of the contact type self-coupling voltage regulator, servo motor automatic control circuit etc. When the voltage of the network is not steady or the load varies, the automatic sampling control circuit makes a signal to drive the motor to adjust the position of the carbon brush of the self-coupling voltage regulator so as to have the output voltage regulated to the rated to obtain the steady state.

It is made use of electric network voltage wave high or electric not work voltage change enable seasonal area. It makes all kind of load, instrument, panel, household electrical appliance work normal and so on. As every knows. Over-voltage can burn utilization equipment of failure Air-conditioner, electric refrigerator shall be difficult to enable of over low voltage and so on. Could not work. It is electrified but unsnarled, or manage to enabled with an effort but over low voltage shall be make air-conditioner electric refrigerator,8s compressor electric current burning-out.As a result voltage unmoral occasion, it must be made use of AC voltage power. The product is inexpensive but of fine quality.

First-. Technical Feature

A.Single-phase high accuracy and fully A.C. Automatic Voltage Regulators

a. 0.5-3KVA high performance automatic A.C.voltage-stabilizing power,fundamental as per **Diagram(2)**;

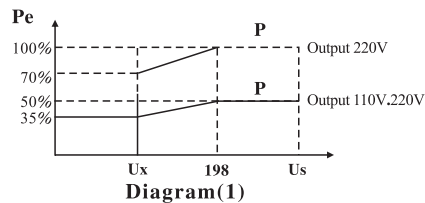
If select output voltage 110V, the output capacity can not over 50% of rated capacity, inorder to avoid oer-load.

b.The relation between output capacity and imput capacity as per **Diagram(1)**,and over-load capacity as per **Chart(1)**;

c.**5KVA-30KVA**-high performance automatic A.C.voltage-stabilizing power adopt Compensated construction, Principle as per **Diagram(3)**;

Compensated construction characteristics: In-specified input voltage range, Full-power output, it doesn' t tape-limit output capability curve of **Diagram(1)**, but at overload using as tape-limited **Diagram(1)**,Don'l enable long time overload.

d. High accuracy full-autolmatic Single-phase A.C. voltage stabilizer source technical property for characteristics as per **Chart(2)**



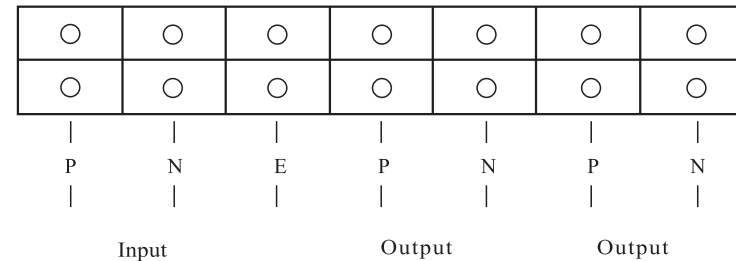
Over-load (%)	Maximum allowable Time(minute)
20	60
40	32
60	5

Chart(1)

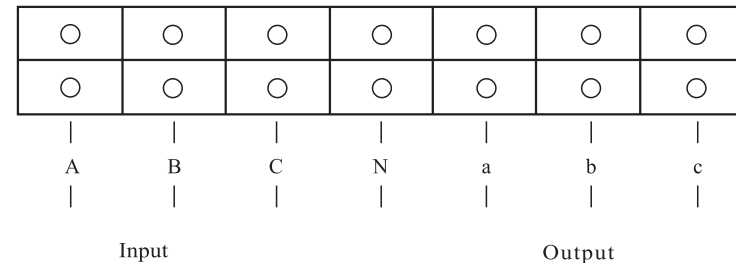
- b. According to equipments power, when choosing the voltage-stabilizing power, there are enough volume, It could not apply to the shocking load;
- c. Clean the dirty stuff to keep the brush tidy,After the long-term work, the brush is required to adjust the contact pressure the coils and brush to make the contact fine;
- d. The connecting earth is reliable and safe;
- e. **The electricians are required to work on the installation, wiring, and adjusting etc;**
- f. The plastic cover could not on the voltage-stabilizing power, Because it is not good for the cooling.

Fourth-.Installation wiring Diagram

a.Single-phase 2-30KVA wiring diagram(connection panel)



b.Three-phase 6-100KVA wiring diagram(connection panel)



Remark:

- a.It must connect the neutral wire, otherwise could not work;
- b.Three phase input and output neutral wire is on the same terminal;
- c.Single-phase choose the diameter according the copper wire per **KVA** no less than 1mm²,and Three-phase choose the diameter according the copper wire per **KVA** no less than 0.5mm².

Input Voltage	AC140-260V
Output Voltage	AC220V
Voltage-stabilizing Accuracy	±2.5%
Frequency	50/60Hz
Adjustable Time	< 1 sec.against 10% input voltage deviation
Ambient Temperature	-10°C~+40°C
Temperature Rise	< 60°C against full-load
Relative Humidity	< 90%
Wave Distortion	No additional distortion
Efficiency	> 90%

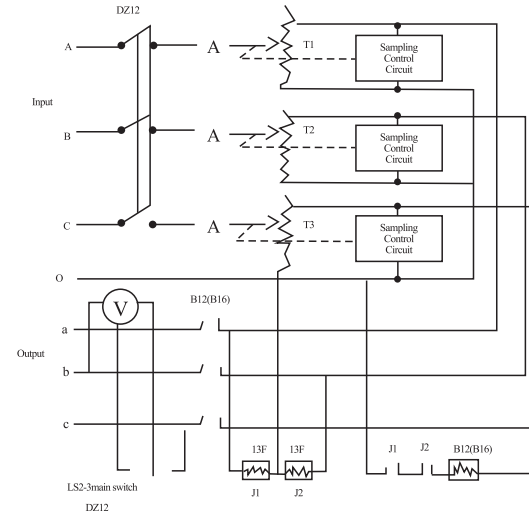
chart(2)

B. Three-phase high accuracy AC Automatic Voltage-Stabilizing Power

- a. Three-phase high accuracy AC automatic voltage-stabilizing power is composed of three pieces of Single-phase high accuracy and fully automatic voltage-stabilizing source, electric network input of Three-phase Four-wire System. The Star Polygon Connecting be distinguished by three ammeters directing each phase output current respectively from one Converting Switch and one Voltmeter monitoring each phase voltage;
- b. Over **1.5KVA** three-phase high accuracy AC automatic voltage-stabilizing power principles as per **Diagram(4)&(5)**;
- c. Over **30KVA** three-phase high accuracy AC automatic voltage-stabilizing power is composed of the three pieces of single-phase, it's single-phase automatic voltage-stabilizing power is compensating structure, so it is not limited by the **chart(1)**,but in the regulated angle of input voltage is all the power output, when over-loading, it is limited by **chart(1)**;
- d. The technical data of three-phase high accuracy A.C. Automatic voltage-stabilizing over Characteristics as per **chart(3)**

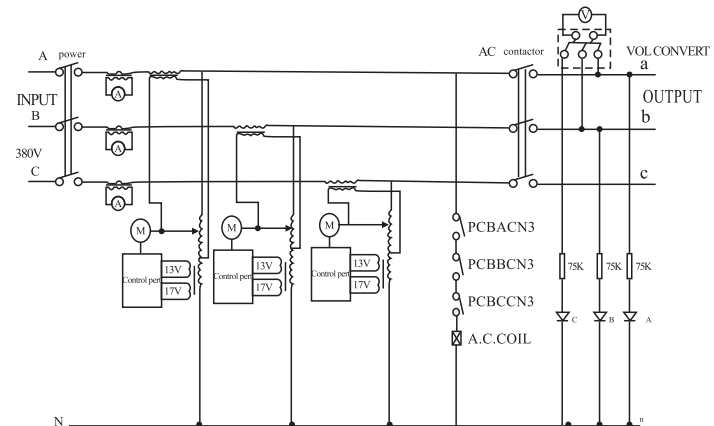
Input Voltage	AC250-450V
Output Voltage	AC380V
Voltage-stabilizing Accuracy	±2.5%
Frequency	50/60Hz
Adjustable Time	< 1 sec. against 10% input voltage deviation
Ambient Temperature	-10°C~+40°C
Temperature Rise	< 60°C against full-load
Relative Humidity	< 90%
Wave Distortion	No additional distortion
Efficiency	> 90%

chart(3)



Diagram(4)

Three-phase 1.5-10KVA Principle Diagram(Only For Reference)



Diagram(5)

Three-phase Over 15KVA Principle Diagram(Only For Reference)