

SVC Series

Instruction Manual

Three-Phase and Fully-Automatic AC Voltage Stabilizer

380V 50/60Hz

SVC Series Three-phase and Fully-Automatic AC Voltage Stabilizer is designed and produced on the basis of single-phase servo AC regulated power supply, and can be used for three-phase electrical equipment. It features reliable structure, excellent performance, precise regulation, minimal wave distortion, long and continuous working time, etc. It is really your ideal power supply equipment.

For output and input of the unit both adopt 'Y' shaped connection way, this series of product can provide you electric source under 380V and 220V at the same time and meet the demand of single or three-phase electrical appliance. Therefore it is widely applied in the production of industry and agriculture, especially in those families who have imported air-conditioning, high-class acoustics and computers, etc.

I .Product Standard and Main Performance Indexes

Index \ Parameter	Model	SVC-1.5K~4.5K	SVC-6K~9K	SVC-15K~30K~100K
Input line voltage range		260V~445V	260V~445V	280V~430V
Output voltage		Phase voltage 220V or voltage 380V		
Electric network frequency		50Hz~60Hz		
Voltage accuracy		+2%	+3%	+3%
Voltage regulating speed		>15V/S	>15V/S	>10V/S
Ambient Temperature		-5°C+40°C		
Insulation		>5MΩ		
Withstand voltage		1500V/min, non-breakdown		
Output distortion		<1.0%		
Voltage indication		A voltmeter matched with a phase-change switch respectively indicating voltage of each line		
Current indication		Three ammeters respectively indicating current of each line		
Protective feature		When input voltage is above 430V, protective relay should activate to cut off output, (Without protective function for SVC-1.5K, 3K and 4.5K)		

II .Output capacity curve

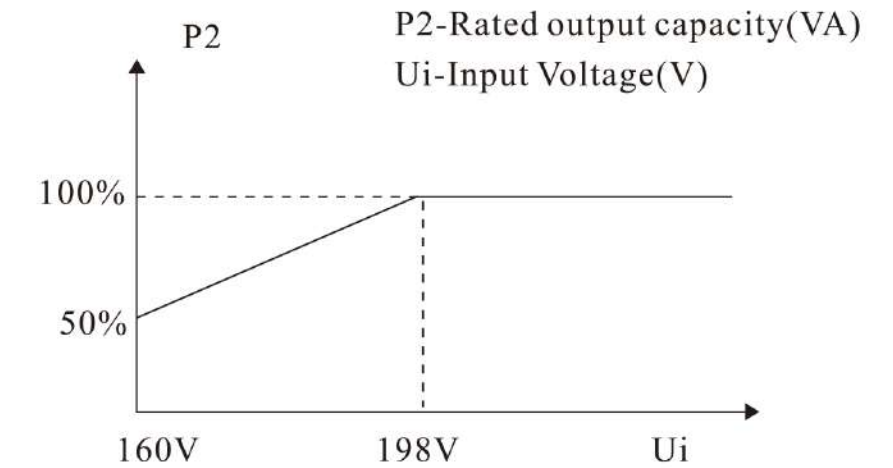
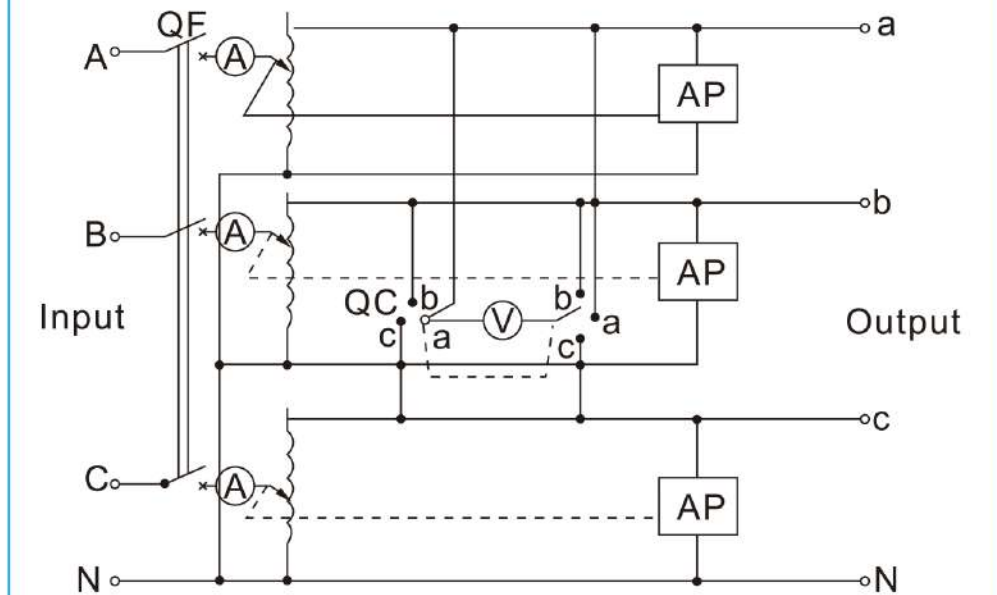
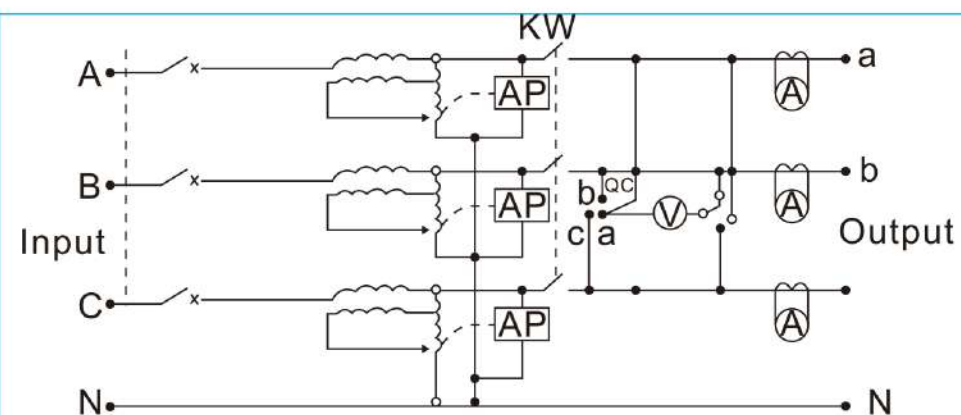


Fig.1 Output Capacity Curve

III.Electric Schematic Diagram





Note:Align into a line at this position
Fig.3 SVC-15k 30kVA Electric Schematic Diagram
(For reference only)

IV. Installation and Use

1. Dismantle package box of voltage stabilizer and take out the instruction and spare parts. Please read the Using Instructions carefully and keep it well.
2. Take out the voltage stabilizer and put it in a dry and well-ventilated place. Press the button of door lock manually and the door will open automatically.
3. Connect the line according to the indication mark on the terminal board: facing the terminals, three upper terminals marked "A", "B" and "C" are three-phase input phase lines; three lower terminals marked "a", "b" and "c" are three-phase output phase lines; the terminals marked "N", "N" in the middle are respectively input and output public neutral lines.

4. Option of input and output lines

- 1.5kVA~4.5kVA: 1mm²
- 6kVA~9kVA: 2mm²
- 15kVA: 4mm²
- 20kVA~30kVA: 8mm²

5. After checking up the wire, push C45 circuit breaker handle on the panel to "ON" position. The voltage stabilizer will enter into work adjustment state and working indicator light will be on. Turn universal change switch on the panel and observe if the voltage of each line indicated by voltmeter is in order. After that, switch on electrical appliance to be used.
6. Overvoltage protection value is 430V. When output voltage exceeds 430V, voltage stabilizer will cut off output automatically.

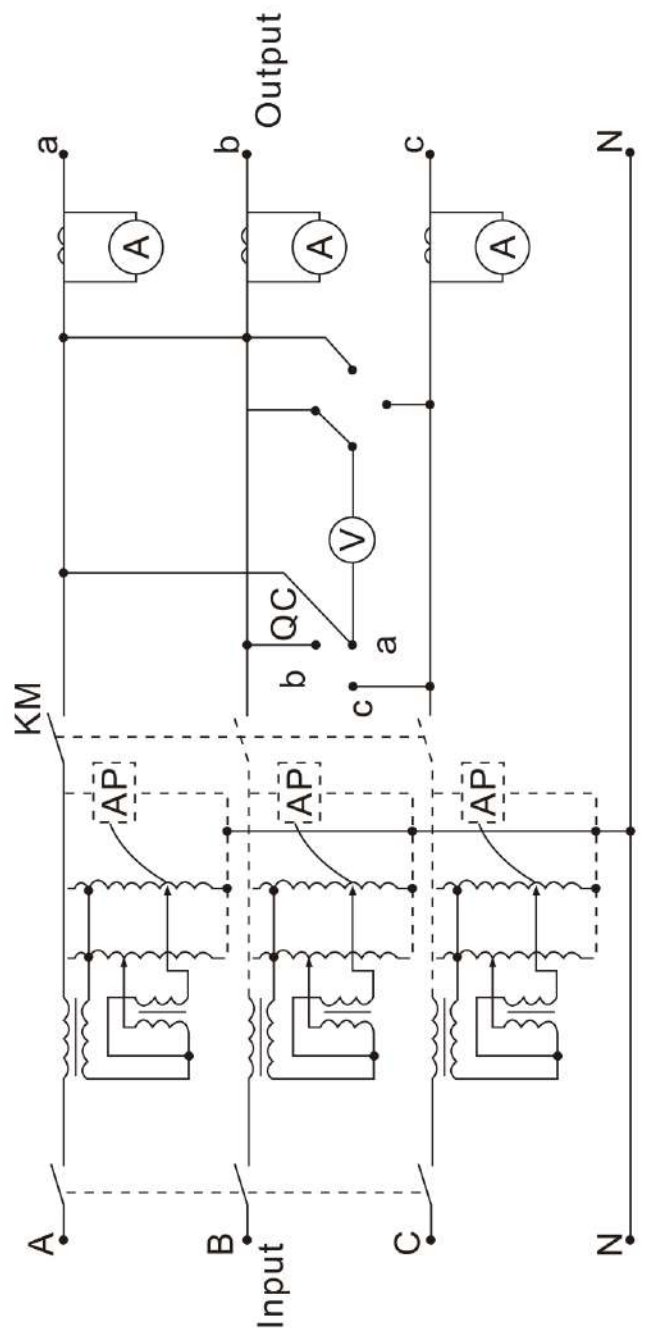
V. Debugging guide

1. Three-phase voltage stabilizer actually consists of three single-phase ones and their zero lines (N) are connected together serving for public zero line (N).
2. When debugging, you can set single-phase one by one: Input the single-phase voltage between AO. At this moment, the voltage stabilizer of top phase starts working and carbon brush activates. Press KM AC contactor to close it. Exam the corresponding voltage between aN, and adjust 1R12(1RP1) potentiometer on A phase control board to make Van 220V; And then adjust BN and CN phases respectively(in the same way).

3. Upon respectively adjusting three phases, it is obvious that the whole adjustment has been completed. Input the three-phase power supply from A, B, C and N and automatically output 380V line voltage.
4. According to the way above-mentioned, over or under voltage protection value of each single-phase has to be debugged (usually at 250V/190V) by adjusting 2RP1/2RP2 potentiometers. Thus, when three-phase input is performed, protection value will reach 430V/330V automatically.

VI. Precaution

1. Keep the unit away from the sun or rain.
2. Don't use the unit in corrosive air (eg. oil fume, steam, etc.).
3. Make sure that the outer case is grounded.
4. If voltage stabilizer is found off-flavor or fuming, push C45 circuit breaker handle to "OFF" position to cut off power supply at once and remove connected wire. Send it to our service section for repairing.
5. When purchasing, Please take the load of unit into consideration as well as total actual capacity of electric appliances you use. The load margin capacity should be sufficient.
6. In order to work in order, the voltage stabilizer should adopt three-phase four-wire system; while output end can adopt three-phase three-wire system or three-phase four-wire system as requested.
7. The voltage stabilizer can't be used in parallel.



Note: Align into a line at this position

Fig.3 SVC-40K~60KVA Electric schematic Diagram
(For reference only)