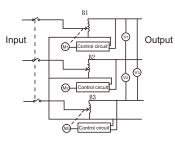
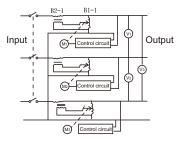
### Principle of work:

- 1. This product is composed with contact regulator, sampling circuit, output voltage, implement electrical-motor and move-arm and so on.
- 2.When the input voltage and overload has exchanged, every sampling circuit go on sampling of respective and comparatively, enlargely in accordance with the result of compared motor is move-distorion of needed and drive the move-arm of regulator adjust the voltage made the output voltage unchanged, there by achieve the goal of regulator voltage. (Please refers to picture 1).





- (a) three phase auto-transformer
- (b) Three phase compensate

Picture 1

3. More than 30 KVA large capacity voltage regulator power supplies, it adept compensated stricture, reduce the weight and improve the character of export.

## Technology index:

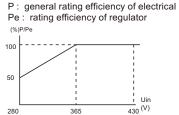
Model	TNS-3KVA~30KVA
Input voltage(three phase)	280V-430V
Output voltage(three phase)	380V± 3%
Frequency	50-60HZ
phase voltage protection( over voltage)	426±4V
Adjust time	≤0.5 sec.
Environment temperature	-10°C ~ 40°C
Relative distribution	< 90%
Waveform distribution	1.0-3.0%
Efficiency	> 90%
Resisting voltage	Accord with ministry issue standard
Delay time	3-7 min

## Operating instruction:

- 1.At first, in accordance with connection of the picture (please refer to picture 2). Connect the wire correctly. The extremity of input power supply must be connected with neutral, then turn the regulator on, use the line voltage slected switch observe the output voltage, if the indicate normal voltage is 380V+/-4%, then press a button of start, this machine can supply power in model of the auto-adjust voltage.
- 2. When the input voltage and the overload has exchanged, the servo-type is about to auto-move high voltage and it can send out voice. (This is normal).
- 3.Use of finished, please close the power of equipment at first, then close the power of voltage regulator, and please don take the switch of voltage regulator conduct the switch of electrical equipment for use.
- 4. The products has over/lack phase protect, sleeted switch. When the sleeted switch press a lock. The regulator is state on over voltage or lock phase, i.e. The phase voltage output is more than 248V or there have not output, this machine cut off the output voltage. When the switch un-prees, the regulator is still output under the over voltage or lack phase.
- 5. This products has adopt the auto-air switch as the protect of overload or short circuit, it has test the good conditions, when the products left the factory.
- 6. This product should not use for longtime under the overload, energy of overload. (Please refer to form 1`).

Form1

Overload%	not permitting exceed time
20	60
40	32
60	5



Picture3

- 7. When the products is used the place of low voltage, please notes relative to proportion the capacity of efficacy to reduce. (The curve of efficacious capacity, please refer to picture 3).
- 8.By-pass function provided

#### Points for attention:

- 1. The regulator should be avoiding vibration strenuous pernicious gas and liquid flow in.
- 2. The link-line of regulator, please refer to the specified efficiency allocate with enough circuit capacity lead. (Is less than or equal to 0.5 A/mm2)
- 3. There have earth installation inside, it cans connected earth with the line of outside, don not removes the line of earth or unconnected earth.

- 4.If the output voltage has exchanged more than 10V, adjust the micro-adjust seat in circuit-plate, obey the hour hand moved, so the output voltage raise; against the hour hand, the output voltage will be turn down (remarks: adjust the parts of phase, readjust to 200V per phase).
- 5. Kept clean inside the meter, because the dust can be block the gears move, and effect accuracy, should be clear up in time.
- 6. When the regulator lost auto-control, please stop supplying power, test the micro-switch, plate of control line and gear has hitch or not, after fix a breakdown and resume use. When you testing, please turn round the electrical brush lightly, so as not to damage the servo-type machine and the reduction of speed system.
- 7.Don t overload, use the remaining enough of capacity, especially used for the air-conditioner. The compound of regulation power rating efficacy is three times than the general efficacy.
- 8.Balance between input A, B, and C phase has not exchanged, when the input can t balance, the phase voltage kept 220V plus mins 3%.

## Before ask for repair. (No trouble of regulator)

- 1. The regulator has not export or the voltage has' nt export, it shows:
  - a). The regulator is state of delay, just a moment, there have output.
- b). The input voltage deviate voltage rating by a big margin. It made the output voltage or the lack-voltage protect the work of wire.
- 2. The output voltage is on the high side or low side by a small margin.
  - a). The input voltage deviate rating of stable voltage. (This is normal).
- b). The micro-adjust of the adjust control made the output voltage go back voltage accuracy.
- 3. output voltage vibration:
  - a). Voltage electrical network has a big fluctuation.
  - b). The voltage accuracy is too high, it should be rebuild.
- 4. Each of line voltage has a big deviation and a showing difference, because there have unbalance for input voltage with each of line, but all of voltage are kept in 220V plus or minus 2%.
- 5. If the phase input voltage is balance, but the output line voltage is unbalance, there has a big deviation, maybe, the wrong is the output voltage, should be adjust all of the phase.





## THREE PHASE COMPENSATION POWER VOLTAGE STABILIZER

# INSTRUCTIONS