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Three Phase Static Voltage Stabilizer Specifications

1. Working Environments

Usage：indoor，vibration-free & jolt, stabilizer no serious affection from insulation gas, steam, chemical deposition, dust, dirt and other bombings and corrosive medium.

Working Voltage：220V±20% ， 50/60HZ

Working Environment Temperature：-15℃～+45℃

Altitude：≤1000m

Relative Humidity ：≤90%

2.Characteristics

❖ LCD Large-screen

Using large-screen LCD display, can shows dynamic display voltage, current, and all kinds of working c ondition.

❖ Product Characteristics

The speed of response time(regulating speed) can be fast to 40ms, non-contact, anti-interference, no mec hanical failure and wear of carbon brush, maintenance-free. Three-phase voltage regulating independently to ensure the balance of output voltage . Effectively protect the security of the precision equipment.

❖ Precision （output accuracy) Can Be Adjusted

All precision of the stabilizer is preset plus or minus 1%. According to different load demand can be ad justed plus or minus 1%, plus or minus 3%, plus or minus 5%.

❖ Manual Voltage Regulation

According to production requirement, within the scope of the 10% rated voltage value, the stabilizer ca n set voltage arbitrarily for different electrical equipment.

❖ Automatic Bypass Function

Equipped with automatic bypass function, when the stabilizer fails,it can turn into the mains automatically, no affection for the production.

❖ Output High and Low Voltage Protection Function

When monitoring circuit detect the output voltage beyond the upper or lower limit, voltage stabilizer can turn into the mainsautomatically, no affection for the production.

❖ Lack of Phase/Phase Fault Protection Function

When monitoring circuit detected phase failure, voltage regulator /stabilizer will cut off the output autom atically and voicealarm.

❖ Delay Stabilizing Output Voltage Function

Voltage Stabilizer boot or recover from a state of protection, would not be regulated immediately. But st ay on only after users determine that the mains voltage are normal to ensure that the load equipment w ould not be damaged.

❖ Automatic Output Function

System preset is automatic output. When stabilizer connect to the mains, system detect that the power gr id is normal, thenit would delay 30 seconds, stabilizing output voltage automatically.

❖ Modular Design, Easy to Replace and Repair

Adopting modular design, regulating circuit and monitoring circuits independent to each other, all compo nents are standardnormalization. Assembly, debugging, maintenance are more simple and quick.

❖ Strong Load/Carrying Capacity

When the short-time overload or short-circuit, the transformer would not be damaged to avoid coil burni ng fire. When overload 150%, stabilizer can withstand 90 seconds, 20 seconds for overload 200%.

3. Main Technical Index

INPUT	Rated Voltage	Phase Voltage AC 127V，Line Voltage AC 220V
	Sabilized Voltage Ran ge	3P4W+G 176V-264V
	Frequency	50HZ/60HZ
OUTPUT	Rated Voltage	Phase Voltage AC 127V，Line Voltage AC 220V
	Center Voltage	±7%(can be adjusted)
	Output Accuracy	±2%
	Response Time	≤40ms
	Stabilization Time	≤40ms/Step
	Waveform Distortion	Do not produce additional waveform distortion（Static）
	Efficiency	≥99%
	Three-phase Unbalance Factor	Three-phase voltage balance automatically, incrimination≤2%
PROTECTION	Over-voltage	The output phase voltage is higher than 10%（242V)，Uninterrupted to bypass
	Under-voltage	The output phase voltage is lower than 10%（140V），Uninterrupted to bypass
	Phase Loss	Yes，uninterrupted to bypass
	Overload	Electric detection, overload 1 minute, the output would be cut off.
	Over-current	Electronic detection and circuit breaker dual protection.
	Short Circuit	Electronic detection and circuit breaker dual protection.

	Bypass	Manual bypass and automatic bypass.
INSTRUCTION	Voltage	A、B、C、∑ABC Three-phase shows respectively true and effective values
	Current	A、B、C、∑ABC Three-phase shows respectively true and effective values
	Working State	AVR/Bypass
	Abnormal	Over-voltage, under-voltage, over-load, fuse blowing
CONTROL MODE		DSP operate metering chip intelligent control technology
WORKING MODE		With automatic voltage regulation and the bypass, two working mode.
VOLTAGE REGULATION MODE		Three-phase adjust voltage separately
OVERLOAD CAPACITY		3 times the rated current, 1 second, can be adapted to the resistive, inductive, capacitive and impact load; can withstand the instantaneous overload impact. Stabilizer continuously output the rated current. When temperature rise stably, overload 10% for 30 minutes is allowed. Short-term (5 minutes) overload current (1.6 times rated value) is also allowed.

4.Main Material List

Material Name		Manufacturer	Introductions
ENCLOSURE		**Own production**	Adopt 1.0~2.0 Thick Cold-Roll Steel Sheets.Surface treatment:G139→Phosphating+PZ660 powder+powder coating （RAL7032）plastic spraying；
DISPLAY		**Own production**	Adopt STH wide angle LCD display，reading clearly；steroscopical and direct.
MAIN BOARD	**CONTROL PCB**	**Own production**	Develop PCB independently，stable circuitry;The main components adopt imported brand, like ”Infineon”, “ST”,“Fairchild”, “Toshiba”,etc.
	DRIVER PCB	**Own production**	
SING PHASE COMPENSATING TRANSFORER		**Own production**	Through secondary vacuum dipping, and continuously bake for 10 hours under the high temperature of 130 ℃.Transformer insulation class F, heat resistance 155 ℃. All the withstanding voltage are 3500V/5mA/min；

THREE-PHASE REGULATING TRANSFORMER	**Own production**	
SCR	IXYS	“SEMIKRON”or“IXYS”import from Germany authenticity
DIODE	IXYS	“SEMIKRON”or“IXYS”import from Germany authenticity
FUSE	MIRO	Adopting domestic fuse, the first brand ”Ming Rong”company’s high quality products. Or equivalent brand.
INPUT SWITCH	CHINT 正泰集团 CHINT GROUP	The most famous brands in China with the top quantiy, or equivalent brand. Their Switches are doing much testing.
CONTACTOR	CHINT 正泰集团 CHINT GROUP	The most famous brands in China with the top quantiy.
SWITCHING POWER SUPPLY	MW MING WETT	“MING WETT” from Taiwan. Global switching power supply professional supplier
SHUNT RESISTENCE	VILVA Electronics Inc	Industrial-grade resistance stable and durable

5.Technology and Special Requirements

1.With output manual bypass switch;

2. Enclosure material:Baosteel（or Wuhan Iron and Steel Group Corp）2mm thick cold-roll steel sheets；

3.Surface Treatment:G139→Phosphating+PZ660 powder+powder coating（RAL7032);

4.Products manufacture in accordance with the law of the People's Republic of China industry standard " Non-contact Compensating AC Stabilizer"《YD/T1270-2003》,also accord with《SBW/IMT01-92 Automatic Compensating AC Stabilizer Standards》,《JB/T7620-94》Compensating AC Stabilizer Targets.

6.Technical Documents

Provide the complete technical file about the equipment :

A.1pcs The whole machine quality certification.

B.1pcs Product test report

C.1pcs User Manual

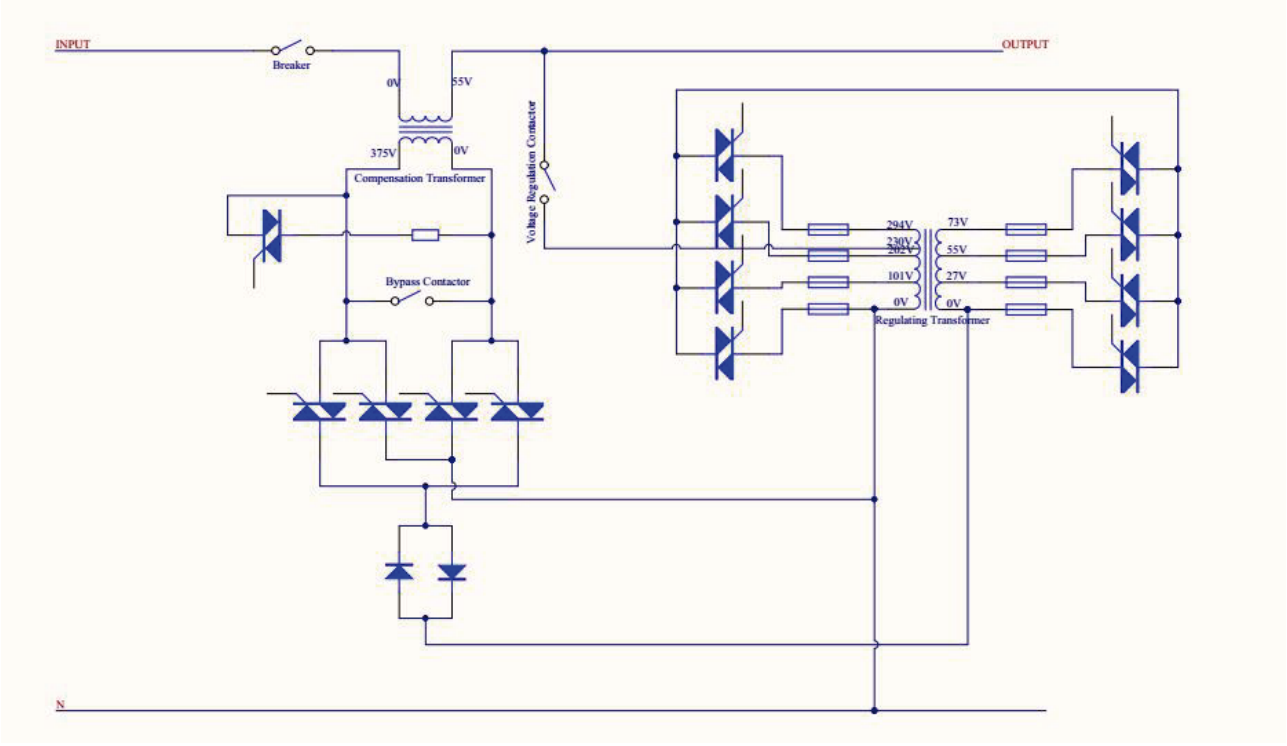
7.Quality Assurance and After-sales Service

1)Equipment warranty period is **1** year from the date of delivery;

2）During the warrantly period,supplier offer technical support for free; When get the notice of the failure by the Party A, Party B should implement the warranty obligations; Reponse within 8 hours and the solution should be given without 24 hours to reduce the losses of Party A. If maintenance need other spare parts, Party B assist purchasing, installation and debugging, within 48 hours solve the problem.

3）After the warrantly period, the supplier provide user with timely, high-quality, favorable technical service and supply spare parts.

8. Static Voltage Stabilizer General Circuit Diagram



9. Photos For Your Reference



ZW-S Three Phase Static Intelligent AC Automatic Voltage Stabilizer					
Model	EPL15K3FVR	EPL30K3FVR	EPL45K3FVR	EPL60K3FVR	EPL100K3FVR
Power Rating（KVA）	15KVA/12KW	30KVA/24KW	45KVA/36KW	60KVA/48KW	100KVA/80KW
Control Method	SCR/Non-Contact（Microprocessor CPU）				
Input					
Rated Voltage	3 x 220VAC (3Phase + N) L-L 220V				
Voltage Range	±20% (±15%~±60% customized)				
Frequency	50/60 Hz				
Output					
Rated Voltage	3 x 220VAC (3Phase + N) L-L 220V				
Stabilizing Accuracy	±2% (±1%~ ±5% Adjustable)				
Power Factor	PF≥0.8				
Efficiency	≥98%				
Response time	≤0.04S				
Delay time(When it is on)	≤5s（Optional）				
Waveform Distortion	≤1%				
System Protection					
Over Voltage	The output voltage is higher than 10%，turn to the bypass automatically in 3~5s				
Under Voltage	The output voltage is lower than 10%，turn to the bypass automatically in 3~5s				
Overload	If over current，the input switch will be tripped in 3~5s				
Phase Loss	When there is phase loss, alarm and cut off the input power.(Option)				
Short Circuit	When there exists short circuit, the input switch will be tripped in 3~5s				

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Bypass	When the AVR fails or is repaired, the power transfer to bypass automatically				
LCD Screen					
Input Voltage	Real-time display of the input voltage				
Output Voltage	Real-time display of output voltage				
Output Current	Real-time display of working current				
Working Status	AVR, Bypass, Fuse Blown, Over-voltage, Under-voltage,Over-load etc.				
Others					
Cooling System	Air				
Insulation Resistance	≥2MΩ				
Voltage-endurance	The whole machine has no breakdown and no arcing phenomena for 2000VAC/ min.				
Noise	＜65dB/m				
Working Environment					
Ambient Temperature	0℃-45℃ (No condensation)				
Working Humidity	20％-90％				
Dimension					
Size WxDxH(mm)	380×780×830			430×780×1170	
Net Weight (KG)	85	104	144	153	213
Gross Weight (KG)	100	126	167	181	254
Product specifications are subject to change without further notice.					