



CONTACTLESS VOLTAGE STABILIZER BK-ZBW SERIES 20KVA-3000KVA

TO BE GLOBAL LEADER IN POWER SOLUTIONS

SHENZHEN BKPOWER CO., LTD

Product Overview

The BKPOWER three-phase Contactless voltage stabilizer is designed for precision and reliability. It uses an SCR module and DSP chip to achieve contactless control.

This design ensures high voltage stabilization accuracy, fast response speed, and no mechanical wear and tear.

It is suitable for various fields such as industrial, transportation, power, oilfields, railways, hospitals, and scientific research.

Applications

■ Industrial Manufacturing

CNC machine tools, automated production lines, industrial robots, welding equipment, etc.

■ Data Centers and Communication Base Stations

Server rooms, 5G base stations, network switches, etc.

■ Medical and Laboratory Equipment

MRI, CT scanners, high-precision analytical instruments, etc.

■ New Energy and Power Infrastructure

Solar/wind farm grid connection points, charging piles, substations, etc.

■ Commercial Buildings and Public Facilities

Large shopping malls, hospitals, airports, rail transit, etc.



Technical Advantages

Contactless design

Utilizes solid-state electronic components like silicon control instead of mechanical contacts for voltage regulation. This avoids issues such as mechanical contact wear and poor contact, enhancing reliability, reducing maintenance costs, and extending service life.

Intelligent Control and Display

The central control system uses microcontroller intelligent control with an LCD display. This provides real-time monitoring of parameters such as voltage, current, and power. The user-friendly interface allows for easy operation.

Wide Input Voltage Range

Can operate in a wide input voltage range and effectively regulates voltage even with significant grid fluctuations. This ensures stable output.

High Customization and Expandability

Customizable according to specific voltage requirements of various industrial and commercial applications. It can also be easily integrated into existing electrical systems.

Product Features

High Voltage Stabilization Accuracy

The three-phase non-contact voltage regulator uses thyristor silicon-controlled technology to enable fast and precise voltage adjustment. It typically achieves a voltage stabilization accuracy of $\pm 1\%$ or even higher.

Fast Response Speed

With a voltage response speed of $\leq 4\text{ms/step}$ or $< 10\text{ms}$, it can quickly respond to load changes and grid voltage fluctuations. This ensures timely output voltage stabilization and effective protection of power equipment.

Three-Phase Regulation and Balancing

Each phase voltage can be independently stabilized without mutual interference. It can automatically balance three-phase output voltage, even when the input voltage is unbalanced, with a balance degree of less than 1%.

High Efficiency and Energy Saving

Efficiency reaches 99% or higher, offering higher efficiency and lower energy consumption compared to traditional voltage regulators. This significantly reduces operating costs.

No Waveform Distortion

Using current over-zero switching technology, it ensures no current interruption or inrush current during switching. This provides pure sine wave voltage to the load and better protects power equipment.

Safe and Reliable

Equipped with protection functions such as overload, overvoltage, undervoltage, phase loss, short circuit, and overheating. It also features fault diagnosis and automatic bypass functions to ensure stable operation in abnormal situations.



Specifications

Capacity		20KVA	30KVA	50KVA	60KVA	80KVA	100KVA	120KVA	150KVA
Input	Rated voltage	Phase voltage AC220V, line voltage AC380V, (or customized)							
	Voltage regulation range	Normal ±15%, ($\pm 20\pm 30\pm 40\%$ optional)							
	Frequency	50Hz/60Hz							
Output	Rated Voltage	Phase voltage AC220V, line voltage AC380V (or customized)							
	Center Voltage	±5% Adjustable							
	Voltage Stabilization Accuracy	±1%							
	Response Time	≤0.03s							
	Stabilization Time	≤40ms/Step							
	Waveform Distortion	No additional waveform distortion							
	Efficiency	≥99%							
Protection	Three-phase Balance	Three-phase voltage automatic balance, increment ≤ 2%							
	Overpressure	When the output phase voltage is higher than 10%, it will switch to bypass continuously							
	Undervoltage	Output phase voltage is lower than 10%, and it will switch to bypass continuously							
	Phase Loss	Uninterrupted steering bypass							
	Overload	Electronic detection, overload for 1 minute, output cut-off							
	Overcurrent/Short Circuit	Electronic detection and circuit breaker dual protection							
Instruct	Bypass	Manual bypass and uninterrupted automatic bypass							
	Voltage	A, B, C, ΣABC three phases have true effective value digital display							
	Current	A, B, C, ΣABC three phases have true effective value digital display							
	Working Status	Voltage stabilization state/mains power state							
Control Method		DSP calculation metering chip intelligent control technology							
Working Mode		Automatic voltage regulation / Bypass							
Voltage adjustment method		Three-phase regulation							
Dimensions (L×W×H) MM		380×750×860				410x810x1110			



Specifications

Capacity		200KVA	250KVA	300KVA	400KVA	500KVA	600KVA
Input	Rated voltage	Phase voltage AC220V, line voltage AC380V, (or customized)					
	Voltage regulation range	Normal ±15%, ($\pm 20\pm 30\pm 40\%$ optional)					
	Frequency	50Hz/60Hz					
Output	Rated Voltage	Phase voltage AC220V, line voltage AC380V (or customized)					
	Center Voltage	±5% Adjustable					
	Voltage Stabilization Accuracy	±1%					
	Response Time	≤0.03s					
	Stabilization Time	≤40ms/Step					
	Waveform Distortion	No additional waveform distortion					
	Efficiency	≥99%					
Protection	Three-phase Balance	Three-phase voltage automatic balance, increment ≤ 2%					
	Overpressure	When the output phase voltage is higher than 10%, it will switch to bypass continuously					
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	Voltage	A, B, C, ΣABC three phases have true effective value digital display					
	Current	A, B, C, ΣABC three phases have true effective value digital display					
	Working Status	Voltage stabilization state/mains power state					
Control Method		DSP calculation metering chip intelligent control technology					
Working Mode		Automatic voltage regulation / Bypass					
Voltage adjustment method		Three-phase regulation					
Dimensions (L×W×H) MM		1000×600×1600			1100x685x1600		



Specifications

Capacity		800KVA	1000KVA	1200KVA	1600KVA	2000KVA	2500KVA	3000KVA					
Input	Rated voltage	Phase voltage AC220V, line voltage AC380V, (or customized)											
	Voltage regulation range	Normal ±15%, ($\pm 20\pm 30\pm 40\%$ optional)											
	Frequency	50Hz/60Hz											
Output	Rated Voltage	Phase voltage AC220V, line voltage AC380V (or customized)											
	Center Voltage	±5% Adjustable											
	Voltage Stabilization Accuracy	±1%											
	Response Time	≤0.03s											
	Stabilization Time	≤40ms/Step											
	Waveform Distortion	No additional waveform distortion											
	Efficiency	≥99%											
Protection	Three-phase Balance	Three-phase voltage automatic balance, increment ≤ 2%											
	Overpressure	When the output phase voltage is higher than 10%, it will switch to bypass continuously											
	Undervoltage	Output phase voltage is lower than 10%, and it will switch to bypass continuously											
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	Voltage	A, B, C, ΣABC three phases have true effective value digital display											
	Current	A, B, C, ΣABC three phases have true effective value digital display											
	Working Status	Voltage stabilization state/mains power state											
Control Method		DSP calculation metering chip intelligent control technology											
Working Mode		Automatic voltage regulation / Bypass											
Voltage adjustment method		Three-phase regulation											
Dimensions (L×W×H) MM		1200×800×2000	1500×800×2000	1500×800×2000 Single Cabinet Size × 3									

PRODUCT CATALOG

UPS System

Voltage Stabilizer

Transformer

VFD Inverter

Soft Starter

Solar Inverter

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BKPOWER TECHNOLOGY CO., LTD.

Web: www.bkpower.cn

Mob: +86-15815513204

Email: sales@bkpower.cn

Add:217, Bld B, Duocai Innovation Park, 5 Guanle
Rd, Longhua, Shenzhen, China



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