

3/3 Phase 160-500KVA

WTHD Low frequency online UPS

Application area:

- ★ Industrial application protection
- ★ Power supply protection for important institutions such as transportation, electric power, medical treatment and venues
- ★ Small data room/Communication network management center

Product description:

The ultra high-power power frequency conversion online UPS power supply is a new generation of three in and three out products developed for the requirements of China's power grid environment and high-end electric fields. The system adopts online dual conversion topology design, advanced DSP control technology, and the latest high-power 1GB and SCR. Based on stable, reliable, and efficient all-digital technology, it is designed as a high capacity, high-power, pure sine wave intelligent UPS that integrates digitization, informatization, and networking.

Product characteristics:

⚡ Advanced design

Online dual conversion design completely isolates the impact of various grid pollution on the load from the mains or generators. Zero phase shift output isolation transformer reduces the impact of zero ground voltage and load harmonic current on the inverter. With three-phase 100% unbalanced load capacity, strong impact load capacity

⚡ Strong overload capacity

Super strong output overload and short circuit capability (5 seconds), ensuring system stability and system safety in limit states

⚡ Small dataN+X well connection redundant design

It can directly connect 6 machines, support different models of the same series, and conduct online upgrades and expansion based on business development to maximize investment protection

⚡ Strong environmental adaptability

Wide input voltage range to avoid frequent switching to battery powered mode. Wide input frequency range, stable access to various oil fired generators to adapt to harsh grid environments

⚡ LBS synchronization function

With LBS synchronization function. Realize synchronization of two independent UPS systems to improve system reliability

⚡ Intelligent fan speed regulation

Automatically adjust fan rotation speed based on internal temperature and load size through software sampling and calculation, effectively reducing noise, extending fan service life, and saving energy

⚡ Quasi modular design of power devices

The inverter adopts advanced SPWM technology based on IGBT. The power components of the entire machine, including rectifier, static switch, and inverter modules, are designed separately on independent radiators, combined with the structural design of pre maintenance, which is conducive to installation and on-site maintenance

⚡ Self start upon incoming call

It has the memory function to provide automatic startup. When the battery discharge is terminated, and when the mains power is restored, it will automatically start up

⚡ Comprehensive protection measures

Power-on self-diagnosis function. Short circuit, inverter overtemperature, battery undervoltage, battery overcharge, surge protection

⚡ Flexible networking monitoring management

Standard R232/R485 communication interface, optional SNMP/JBUS/MODBUS dry connection point card, flexible networking, real-time management of UPS operation



Product Specifications

Low Frequency Online UPS		WTHD-U-33160	WTHD-U-33200	WTHD-U-33250	WTHD-U-33300	WTHD-U-33400	WTHD-U-33500
Rated capacity (KVA/KW)		160/128	200/160	250/200	300/240	400/320	500/400
Main Input	Phase	Three-phase five-wire (3L+N+PE)					
	Input Voltage (Vac)	380/400/415					
	Voltage Range (Vac)	±25%					
	Frequency range (Hz)	45 ~ 65					
	Power factor	>0.95 (with filter)					
Bypass Input	Phase	Three-phase five-wire (3L+N+PE)					
	Input Voltage (Vac)	380/400/415					
	Voltage Range (Vac)	+10%, +15%, +20% (can be set); -10%, -20%, -30% (can be set)					
	Frequency range (Hz)	±2% (±0.5%, +1%, ±2%, ±3% can be set)					
Output	Voltage (Vac)	380/400/415 ±1%					
	Power factor	0.8					
	Frequency (Hz)	Automatically track bypass frequency					
	Waveform	Sine wave THDV less than 2% (pure linear load)					
	Switching time (ms)	0ms					
	Overall efficiency	≥91%		≥95%			
	Overload capacity	105%~110%: 60min to bypass; 110%~125%: 10 min to bypass; 125%~150%: 1 min to bypass; >150%: 10s to bypass					
	Battery	Battery voltage (Vac)	(Standard 384) / (396/408 can be customized)				
Environment	Operating temperature (°C)	-10 ~ 40					
	Storage temperature (°C)	-25^55 (without battery)					
	Relative humidity	0 ~ 95% (no frosting)					
	Working altitude	< 1500m, use derating according to GB/T3859.2					
	Noise (dB)	<65			<70		<75
Other features	Alarm function	Output overload, mains abnormality, UPS failure, battery undervoltage, etc.					
	Protective function	Output short circuit, overload, over temperature, battery under voltage, output over and under voltage, fan failure alarm					
	Communication function	Standard: RS232/RS485 optional, SNMP/JBUS/MODBUS/Dry Contact					
Mechanical features	Dimensions (W*D*H mm)	700*800*1700			840*1035*1800	1200*1000*1800	1400*1000*1900
	Net weight (kg)	702	800	980	1750	2000	3600
	Executive standard	YD/T1095-2017					