





200kVA 200kVA

# Features

#### ■ Online double conversion

- $\cdot$  Online Double Conversion design helps to output a pure sine wave ,which is immune from the UPS input, so that the load can run steadily.
- $\cdot$  UPS transfers among different working mode without output interruption, thereby powering the load uninterruptedly.

#### ■ Full DSP control

· Full DSP Control avoids the risks caused by analog devices failure and makes the control system more stable and reliable.

### ■ High power factor

- The output power factor up to 0.9 better matches the load.
- · The input power factor 0.98 with filter helps to improve the efficiency, reduce the harmonic pollution to the Grid and lower the UPS running cost.

### ■ Wide input adaptability

- The range of AC input voltage is (380Va/400Vac/415Vac) (-25%/+20%), minimizing transfer to battery mode, thereby greatly prolonging the battery life.
- · Wide input frequency ranging from 45Hz to 65Hz, ensures stability of UPS while generator connected.

# ■ Optimized battery management

- Intelligent battery management system and advanced battery auto float/boost charge technology, reduces the frequency of battery maintenance, greatly improves the battery efficiency and extends battery life.
- Battery discharge time prediction: the system will display the backup time of battery calculated by discharge current and voltage.

- Battery self-test: battery is automatically tested at regular intervals
- · Flexible battery configuration ranging from 360~408Vdc / 480Vdc.

#### ■ N+X parallel redundancy

· N+X parallel redundant design, up to 6 units available, makes the configuration more flexible.

Any unit in parallel system fails, the faulty one will automatically cut off the output, and the load will be powered by the remained units.

- It is easy to configure the parallel system just by connecting the parallel cables and doing proper settings.
- · Non-fixed Master-Slave relationship: Among several UPS in parallel, the unit startup first is Master UPS, the others are Slave. The master and slave may be exchanged.

### ■ Strong overload capability

· 110% / 125% / 150% overload for 60min / 10min / 1min.

## ■ Power walk in

· Specially designed power walk in function, in which rectifier of each unit in parallel system will be turned on in sequence at intervals to avoid the sudden load on the generator, thereby reducing the cost of the generator required.

# ■ Generator mode

· Set the maximum output power of the generator when a smaller one than needed is employed to extend the battery duration time. In this case, the load is supplied by both the generator and battery.

# ■ LBS synchronization

· Synchronize the output of the two independent UPS systems (single unit or parallel) even when the two systems are operating on different modes (bypass/inverter) or on battery.

## ■ Multi-protection

- Self-diagnosis function will take place before start-up for safety.
- · Multi-protection: AC input under/over voltage, overload, short-circuit, over-current, over bus voltage, over-temperature, fan failure, auxiliary power failure, battery under voltage, battery over-charge and so on.

#### ■ FPO function

· A concave red EPO button with transparent cover is embodied in the LCD control panel for emergency power off.

### ■User-friendly network management

- · Chinese/English LCD and LED mimic diagram: real time operation parameters and status
- · RS232 & RS485 communication ports: for local monitor with corresponding software, and MODBUS protocol is optional.
- · SNMP adapter (optional): for remote monitor through network
- · Dry contacts for additional monitoring:
- a) UPS on Inverter
- b) Mains input failure
- c) remote EPO
- d) Battery low voltage alarm
- e) UPS fault
- f) UPS alarm
- g)UPS on battery
- h) UPS on bypass

Note: d)--h) optional

# **Technical Specifications:**

MODEL	HEXA 33-10KL	HEXA 33-20KL	HEXA 33-30KL	HEXA 33-40KL	HEXA 33-60KL	HEXA 33-80KI		
Capacity (VA/Watts)	10kVA / 9kW	20kVA / 18kW	30kVA / 27kW	40kVA / 36kW	60kVA / 54kW	80kVA/ 72kW		
INPUT		I		1		1		
Operating voltage range	380/400/415Vac (-25% / +20% ), (3Ph+N+PE)							
Operating frequency range			50/60Hz	z ( ± 5Hz)				
Power factor	>0.97(with filter)							
OUTPUT								
Output voltage	380/400/415Vac (±1%)							
Output frequency	50/60Hz (±0.05%)							
Harmonic distortion (THD)	<3% ( linear load)							
Crest factor	3:1 (Max.)							
Efficiency	≥88%			90%	≥90.5%			
BYPASS		1		'		•		
Rated voltage	380/400/415Vac							
Rated frequency	50/60Hz							
\/altaga protection range	Upper limit: +20% (+10%,+15%,+20% adjustable)							
Voltage protection range	Lower limit: -40% (-10%, -20%, -30%, -40% adjustable)							
Frequency protection range	±10% (±2.5%, ±5%, ±10%, ±20% adjustable)							
BATTERY								
Battery voltage	384Vdc ( 360~384Vdc )							
SYSTEM FEATURES								
Transfer time	0ms (Line mode ←→Battery mode)							
Overload	110%/60min ,125%/10min ,150%/1min							
LED display		<b>I</b> n	out, <b>I</b> nverter, Bypass	Battery, Output, Sta	atus			
LCD display	I/O voltage, frequency, power, power factor, battery voltage, current, battery status, load percentage, UPS status, history record							
Communication interface	Dry contact, RS232, RS485, SNMP card (Optional)							
Optional	Harmonic filter, SNMP adapter, LBS cables, battery temperature sensor,  Bypass current-sharing inductor							
ENVIRONMENTAL			Dypass current	Sharing inductor				
Operating temperature	0~40℃							
Storage temperature	−25°C ~55°C							
Humidity range	0~95% (non-condensing)							
Altitude	<1500m							
Noise level	<60dB <65dB							
PHYSICAL		100aB			TOOGE			
Dimension W×D×H (mm)	570×800×1195 880×760×1600							
Net weight (kg)	217	273	316	330	483	525		
Shipping weight (kg)	272	328	371	385	553	595		
STANDARDS	212	1 020	J	1 300	1 330	1 300		
Safety	IEC/EN62040-1;IEC/EN60950-1							
*	IEC/EN62040-2;IEC61000-4-2;IEC61000-4-4;							
EMC		IEC61000-4-5;IEC61000-4-6;IEC61000-4-8						

Specifications are subject to change without prior notice.

# **Technical Specifications:**

MODEL	HEXA 33-100KL	HEXA 33-120KL	HEXA 33-160KL	HEXA 33-200KL				
Capacity (VA/Watts)	100kVA / 90kW	120kVA / 108kW	160kVA / 144kW	200kVA / 180kW				
INPUT								
Operating voltage range		380/400/415Vac (-25% /	+20%), (3Ph+N+PE)					
Operating frequency range	50/60Hz (±5Hz)							
Power factor	>0.97(with filter)							
OUTPUT								
Output voltage	380/400/415Vac(±1%)							
Output frequency	50/60Hz (±0.05%)							
Harmonic distortion (THD)	<2% ( linear load)							
Crest factor	3:1 (max)							
Efficiency	≥92%	≥92.5%	≥93%	≥93.5% ≥94%				
BYPASS								
Rated voltage	380/400/415Vac							
Rated frequency	50/60Hz (auto-sensing)							
	Upper limit: +20% (+10%,+15%,+20% adjustable)							
Voltage protection range	Lower limit: -40% (-10%, -20%, -30%, -40% adjustable)							
Frequency protection range	±10% (±2.5%, ±5%, ±10%, ±20% adjustable)							
BATTERY								
Battery voltage	384Vdc (360~408Vdc) 480Vdc							
SYSTEM FEATURES		,						
Transfer time	0ms (Line mode ←→ Battery mode)							
Overload	110%/60min ,125%/10min ,150%/1min							
_ED display	Input, Inverter, Bypass, Battery, Output, Status							
	I/O voltage, frequency, power, power factor, battery voltage, current, battery status, load percentage,							
LCD display	UPS status, history record, settings							
Communication interface	Dry contact, RS232, RS485, SNMP card (Optional)							
Ontional	Harmonic filter, SNMP adapter, LBS cables, battery temperature sensor,							
Optional	Bypass current-sharing inductor							
ENVIRONMENTAL								
Operating temperature	0~40℃							
Storage temperature	-25°C ~55°C							
Humidity range	0~95% (non-condensing)							
Altitude	<1500m							
Noise level	<65dB <70dB							
PHYSICAL								
Dimension W × D × H (mm)		5×1600(6P) )×1600(12P)	1400 × 945 × 1900(6P) 1640 × 1040 × 1900(12P)					
Net weight (kg)	800/1100	903/1250	1219/1774	1425/1893				
Shipping weight (kg)	890/1190	993/1293	1349/1954	1555/2073				
STANDARDS								
Safety	IEC/EN62040-1;IEC/EN60950-1							
EMC	IEC/EN62040-2;IEC61000-4-2;IEC61000-4-3;IEC61000-4-4; IEC61000-4-5;IEC61000-4-6;IEC61000-4-8							

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