

# On Line High Frequency UPS

## KHD 33 10-40K(L)



### Technical Features:

- True double-conversion
- DSP technology guarantees high performance
- Output power factor 1.0
- Active power factor correction in all phases
- 50Hz/60Hz frequency converter mode
- ECO mode operation for energy saving (ECO)
- Emergency power off function (EPO)
- Generator compatible
- SNMP+USB+RS-232 multiple communications
- 3-stage extendable charging design for optimized battery performance
- Adjustable battery numbers for long-run model
- Maintenance bypass available
- Parallel operation with common battery
- Optional parallel operation
- Optional isolation transformer offers full isolation and complete common mode noise rejection



### Technical Specifications:

MODEL		KHD33-10K(L)	KHD33-15K(L)*	KHD33-20K(L)	KHD33-30KL	KHD33-40KL
PHASE		3-phase in/3-phase out				
CAPACITY		10KVA /10KW	15KVA / 15KW	20KVA / 20KW	30KVA / 30KW	40KVA / 40KW
INPUT						
Nominal Voltage		3 x 208/220 VAC (3Ph+N)				
Voltage Range		121~270 VAC (3-phase) @ 50% load , 152~270 VAC (3-phase) @ 100% load				
Frequency Range		46~54 Hz or 56~64Hz				
Power Factor		≧ 0.99 @ 100% load				
OUTPUT						
Output Voltage		3 x 208/220 VAC (3Ph+N)				
AC Voltage Regulation (Batt. Mode)		± 1%				
Frequency Range (Synchronized Range)		46~54Hz or 56~64Hz				
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz				
Current Crest Ratio		3:1 (max.)				
Harmonic Distortion		≦ 2 % THD (Linear Load) , ≦ 4 % THD (Non-linear Load PF>0.8)				
Transfer Time	AC mode to Battery mode	zero				
	Inverter to Bypass	zero				
Waveform (Batt. Mode)		Pure Sine Wave				
Overload	AC Mode	100-110% for 10 min, 110-130% for 1 min, >130% for 1 second				
	Battery Mode	100-110% for 30 seconds, 110-130% for 10 seconds, >130% for 1 second				
PARALLEL CAPACITY		up to 3 units in parallel				
EFFICIENCY						
AC Mode		94%				
ECO Mode		97%				
Battery Mode		93.5%				
BATTERY						
Standard Model	Battery Type	12V/9Ah	12V/9Ah	12V/9Ah	N/A	
	Numbers	8+8	[8+8]pcs x 2 strings	[8+8]pcs x 2 strings		
	Typical Recharge Time	9 hours recover to 90% capacity				
	Charging Current (max.)	1A/2A/3A/4A (Adjustable)				
	Charging Voltage	+/-109 VDC	+/-109 VDC	+/-109 VDC		
Long-run Model	Battery Type	Depending on the capacity of external batteries				
	Numbers	16~20 pcs (Adjustable)				
	Charging Current (max.)	12A			24A	
	Charging Voltage	+/-13.65V*N [N = 8~10]				
INDICATORS						
Touch color LCD Panel		UPS status, Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions				
ALARM						
Battery Mode		Sounding every 4 seconds				
Low Battery		Sounding every second				
Overload		Sounding twice every second				
Fault		Continuously sounding				
PHYSICAL						
Standard Model	Dimension, D X W X H (mm)	627 X 250 X 826	815 x 300 x 1000		N/A	
	Net Weight (kgs)	100	152	117		
Long-run Model	Dimension, D X W X H (mm)	627 X 250 X 826	815 x 300 x 1000		790 x 360 x 1010	
	Net Weight (kgs)	50	60	61	108	113
ENVIRONMENT						
Operation Temperature		0-40°C				
Operation Humidity		<95% and non-condensing				
Noise Level		Less than 60dB @ 1 Meter		Less than 70dB @ 1 Meter		Less than 75dB @ 1 Meter
MANAGEMENT						
Smart RS-232/USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8, Linux and MAC				
Optional SNMP		Power management from SNMP manager and web browser				

\*When output voltage is set as 3 x 360VAC or 3 x 380VAC, the output power of the unit will be de-rated to 90%.

\*\*If the UPS is installed or used in a place where the altitude is higher than maximum height, the output power will be derated 1% per 100m. Product specifications are subject to change without further notice.

