



# LF33 Series 120K - 400KVA

Low Frequency Online UPS LF33 Series

LF33 Series 120KVA - 400KVA (3ph in / 3ph out)

## Key Features:

- 0.9 output power factor.
- UP to 6 units in parallel.
- 6-inch extra large LCD that display 12 language  
( Chinese, English, German, Polish, French, Italian, Spanish, Swiss, Swedish, Japanese, Russian and Portuguese).
- The efficiency of the machine is more than 94%, and reach 98% in ECO mode.
- 6th generation DSP control.
- Intelligent battery management.
- Layered independently-sealed ventilation channel and redundant fan, embedded make it highly efficient to dissipate heat.
- Extra strong capability to withstand output overload and short circuit, ensuring the system stability and system safety under extreme conditions.
- Extra wide input voltage and frequency range make it adapt to severe power grid environment.
- Standard input/output filter improves the system EMC performance.
- Intelligent battery management maintains battery automatically to prolong the battery life.



**Shenzhen UPSen Electronic CO.,Ltd.**  
[www.upsen.net](http://www.upsen.net)

# Technical Specification:

Model	LF33 Series									
Rectifier Type	6p	12p	6p	12p	6p	12p	6p	12p	6p	12p
Rated Nominal	120KVA/108KW		160KVA/144KVA		200KVA/180KW		300KVA/270KW		400KVA/360KW	
Rated input voltage	380/400/415VAC 3-phase 4-wire									
Rated frequency	50/60HZ									
Input parameters										
Input voltage range	±25%									
Input frequency range	45Hz-65Hz									
Input soft start function	0-100% 5-300settable									
Input power factor	more than 0.98(If harmonic filter is added)									
Input harmonic current (THDi)	less than 4.5%(If harmonic filter is added)									
Bypass										
Bypass voltage range	-20%~+15%									
Bypass frequency range	50/60HZ±10%									
Output parameters										
Inverter output voltage	380/400/415VAC 3-phase 4-wire									
Voltage stability	±1%(Steady status),±3%(Transient status)									
Frequency	50/60Hz									
Mains power synchronization window	±5%									
Actually measured frequency accuracy (internal clock)	50/60Hz±0.01Hz									
Output power factor	0.9(Output 90kW per 100kVA)									
Transient response time	less than 5ms									
Inverter overload capability	At 0.9 power factor, 110% for 1 hour, 125% for 10 minutes and 150% for 60s									
Short circuit current from inverter	3ph 1.5In for 5seconds,1ph 2.9In for 5seconds									
Maximum Bypass capability	1000% for 100ms									
Phase shift	With 100% balanced load		less than1°							
Characteristic	With 100% imbalance load		less than1°							
Total harmonic distortion (THDv)	100% linear load		less than1%							
	100% non-linear load		less than3%							
System efficiency (full load)	Up to 94% (inverter efficiency is up to 98%)									
Rectifier output parameters										
Charger output voltage stability	1%									
DC ripple voltage	≤1%									
Operating environment										
Operating temperature range	0~40°C									
Storage temperature	-25~70°C(Without battery)									
Relative humidity	0~95% No condensation									
Maximum operating height	≤Elevation 1000m, for elevation above 1000m, derate by 1% for every increase of 100m									
Noise (1m)	58-68dB									
Protection level	IP20									
Standard	Safety: IEC60950-1 IEC62040-1-1 UL1778 EMC IEC62040-2 CLASS C2 EN50091-2 CLASS A Design and Test IEC62040-3									
Physical parameters										
Net Weight (kg)	980	1420	1200	1750	1350	2000	1600	2200	2100	2750
Machine Size - W*D*H(mm)	900*855*1900	1250*855*1900	1250*855*1900	1640*855*1900	1250*855*1900	1640*855*1900	1640*855*1900	2280*855*1900	2280*855*1900	2280*855*1900

\*Specifications change without prior notice