

Durable Series

For data centers and mission critical systems



DS-E33 LF 10K-400K

- **Programmable automatic regularly discharge activation feature:**

Program can be set through LCD panel of UPS and the period could be at least one month, at most four months.

Battery will be active to discharge through UPS automatically.

- **Accurate display for power supply time:**

Modify the parameters such as the capacity of the battery, load, service life and battery voltage so it makes the display time close to the actual value.

- **High reliable power component:**

The inverter is made of imported IGBT big power module, use special thick film integrate circuit for IGBT driving. Key parts such as breaker which is worldwide brand (ABB, Fuji, schneider, etc), all these promote the high reliability of DS-E33 LF series.

- **Storage battery multi-level protection:**

Equipped with multilevel protection of software and hardware about charge voltage, avoid battery damage led by large charge voltage.

- **Large charge current protection:**

When charge current found bigger than normal value, the rectifier would be locked to avoid battery damage led by large charge current.

- **Battery low voltage alarm, auto shut down protection**

- **Cold start function:**

DS-E33 LF series UPS equipped with battery cold start device, which make sure the equipment start automatically through battery under no utility.



DS10KE33 LF - DS30KE33 LF DS200KE33 LF - DS400KE33 LF



DS40KE33 LF - DS80KE33 LF DS100KE33 LF - DS160KE33 LF

Perfect UPS system protection functionality:

- Inverter output short circuit protection
- High voltage utility protection
- UPS input high and low voltage protection
- Battery polarity inverse connection protection
- Over temperature protection (rectifier, inverter, static bypass)
- Overload protection
- Battery over charge protection
- Over current protection (rectifier, inverter)
- Parallel wiring fault protection
- Wrong phase sequence, phase lost protection
- Mishandle manual maintenance switch protection

Store capacity for 1000 items of historical record:

Records status information, parameter abnormalities, fault alarms, so as to analyze equipment failure.

ECO function (bypass preference, project mode):

When the utility is comparatively stable (input voltage $\pm 10\%$, frequency $\pm 3\%$), ECO function could be started under project mode, followed by the UPS running efficiency reaching over 98%.

Double DSP digital control:

- Higher speed running, more precise
- Adopts double DSP chip dealing with rectifier and inverter
- Avoid the inherent parameter drift
- Strong systematic function, perfect protection.

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DS-E33 LF 10K-400K

Specifications

Model Name	DS10KE33 LF	DS20KE33 LF	DS30KE33 LF	DS40KE33 LF	DS50KE33 LF	DS60KE33 LF	DS80KE33 LF
Topology	True On-line, Double Conversion, Low Frequency						
On-battery output Waveform	Pure Sine Wave						
Maximum Capacity	10KVA / 9KW	20KVA / 18KW	30KVA / 27KW	40KVA / 36KW	50KVA / 45KW	60KVA / 54KW	80KVA / 72KW
INPUT							
Rectifier constitution	three-phase-control rectify						
Voltage	380/400/415 Vac \pm 25%						
Rectifier Frequency range	40~70 Hz						
SYNC Frequency Tracking range	50/60 Hz \pm 10%						
Phase	3 Φ W+GND						
Battery voltage	348Vdc						
Charging Current	10-40A settable						
OUTPUT							
Phase	3 Φ W+GND						
Voltage	L-N: 220/230/240Vac L-L: 380/400/415Vac \pm 1%						
Frequency	normal Main power: synchronous tracking automatically; abnormal Main power: 50/60Hz (battery mode)						
Unbalance three-phase voltage stabilization with full load	\leq 2%, compatible 100% unbalance						
Wave form	Sine wave, THD<3% at linear load						
Switch time	0ms						
Efficiency	\geq 90%						
Overload capacity	125% of rated load last for 10 mins, 150% of rated load last for 1min						
PROTECTIONS							
Maintenance switch	Maintenance switch with no switch time						
Start-up	provided with DC start up function						
Protect function	Output short circuit, Overload, Over-temperature, battery low voltage, Output over/low voltage						
ADVANCED WARNINGS / DIAGNOSTICS							
LCD display	Input voltage/ Frequency, Output voltage, Battery voltage, Load, DC current etc.						
LED display	Work status of UPS and fault indication						
Alarm function	AC input abnormal, Low battery, Overload, Failure						
Battery test function	Present (for details see battery test control in LCD display operation)						
COMMUNMENTAL							
Communication function	Modbus RS485, dry connection communication signal						
SNMP	SNMP slot (standard) / SNMP card (optional)						
ENVIRONMENTAL							
Noise	<65dB						
Cooling	Fans						
Operating Temperature	0~40°C						
Relative Humidity	0~95%, No condensation						
PHYSICAL							
Dimension Physical (WxDxH)	500x800x1180 mm		800x800x1600 mm			1000x800x1800 mm	
Weight (Net)	200kg	240kg	290kg	450kg	470kg	490kg	690kg

Specifications are subject to change without notice.

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DS-E33 LF 10K-400K

Specifications

Model Name	DS100KE33 LF	DS120KE33 LF	DS160KE33 LF	DS200KE33 LF	DS250KE33 LF	DS300KE33 LF	DS400KE33 LF
Topology	True On-line, Double Conversion, Low Frequency						
On-battery output Waveform	Pure Sine Wave						
Maximum Capacity	100KVA / 90KW	120KVA / 108KW	160KVA / 144KW	200KVA / 180KW	250KVA / 225KW	300KVA / 270KW	400KVA / 360KW
INPUT							
Rectifier constitution	three-phase-control rectify						
Voltage	380/400/415 Vac ±25%						
Rectifier Frequency range	40~70 Hz						
SYNC Frequency Tracking range	50/60 Hz ±10%						
Phase	3Φ4W+GND						
Battery voltage	348Vdc						
Charging Current	10-40A settable						
OUTPUT							
Phase	3Φ4W+GND						
Voltage	L-N: 220/230/240Vac L-L: 380/400/415Vac ±1%						
Frequency	normal Main power: synchronous tracking automatically; abnormal Main power: 50/60Hz (battery mode)						
Unbalance three-phase voltage stabilization with full load	≤2%, compatible 100% unbalance						
Wave form	Sine wave, THD<3% at linear load						
Switch time	0ms						
Efficiency	≥90%						
Overload capacity	125% of rated load last for 10 mins, 150% of rated load last for 1min						
PROTECTIONS							
Maintenance switch	Maintenance switch with no switch time						
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COMMUNMENTAL							
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SNMP	SNMP slot (standard) / SNMP card (optional)						
ENVIRONMENTAL							
Noise	<65dB						
Cooling	Fans						
Operating Temperature	0~40°C						
Relative Humidity	0~95%, No condensation						
PHYSICAL							
Dimension Physical (W×D×H)	1000×800×1800 mm	1000×800×1800 mm	1850×1400×1000 mm	1850×1600×1000 mm			
Weight (Net)	725kg	775kg	905kg	1280kg	1568kg	1830kg	2050kg

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