

3:3 Phase PF 0.8, 10~160KVA E POWER L Series UPS



Transformer based design UPS are Low frequency UPS systems, which provides better compatibility with various types of loads and ensures higher levels of reliability and efficiency. They are often used in applications where reliability and performance are critical, such as data centres, medical facilities, and industrial environments.

Low frequency UPS has salient features like Higher Power Capacity compared to High Frequency UPS, better compatibility with wide range of loads, greater surge capacity to handle sudden spike in power demand, Improved Voltage Regulation to regulate voltage more effectively, providing a stable and clean power supply to connected equipment, enhanced reliability less prone to failure and can withstand harsh operating conditions. Overall, low frequency UPS systems are preferred in applications where reliability, capacity and compatibility with various loads are paramount.

FEATURES

Online double conversion

Online Double Conversion design helps to output a pure sine wave, which is immune from the UPS input, so thatthe load can run steadily.

UPS transfers among different working mode without output interruption, thereby powering the load uninterruptedly.

Wide input adaptability

The range of AC input voltage is (380/400/415Vac) (-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 self-test: Battery is automatically tested at regular intervals. Flexible battery configuration ranging from 360-384Vdc.

N+X parallel redundancy

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

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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.

Full DSP control

Double DSP control makes the whole system more stable and reliable.

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-upfor safety. Multi-protection: AC input under/over voltage, overload, short-circuit, over-current, over bus voltage, overtemperature, fan failure, auxiliary power failure, battery under voltage, battery over-charge and so on.

User-friendly network management

Chinese/English LCD and LED mimic diagram: real time operation parameters and status (7 inch touch screen optional).

RS232 & RS485 communication ports: For local monitor with corresponding software, both can support MODBUS protocol.

SNMP adapter (Optional): For remote monitor through network.

Dry contacts (Optional): For additional monitoring.

SPECIFICATIONS

MODEL	V10ELF	V20ELF	V30ELF	V40ELF	V60ELF	V80ELF	V100ELF	V120ELF	V160ELF	
Capacity	10kVA/8kW	20kVA/16kW	30kVA/24kW	40kVA/32kW	60kVA/48kW	80kVA/64kW	100kVA/80kW	120kVA/96kW	160kVA/128kW	
Input		1	1	1	1	1				
Operating voltage range		380/400/415Vac (-25%/+20%), (3Ph+PE)								
Operating frequency range		50/60Hz (±5%)								
Power factor		≥0.97 *								
Output										
Output voltage		380/400/415Vac (±1%), (3Ph+N+PE)								
Output frequency	50/60Hz (±0.05%)									
Harmonic distortion (THDv)	≤2% (Linear load)									
Crest factor		3:1 (Max)								
Efficiency	88%	89%		90%		90.5%	92%	92.5%	%	
Bypass										
Rated voltage	380/400/415Vac, (3Ph + N + PE)									
Rated frequency		50/60Hz								
Voltage protection range	Upper limit: +20% (+10%, +15%, +20% adjustable) 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	0 ms (Line mode \rightarrow Battery mode)									
Overload	Load≤110%/60min; ≤125%/10mins; ≤150%/1 min, to Bypass									
LED display	Input, Inverter, Bypass, Battery, Output, Status									
LCD display	I / O voltage, frequency, power, power factor, battery voltage, current, battery status, load percentage, UPS status, history record, settings									
Communication interface	RS232, RS485, EPO, Dry contact (Optional), SNMP card (Optional)									
Optional	Harmonic filter, SNMP adapter, LBS cables, battery temperature sensor, Bypass current-sharing inductor									
Environmental										
Operating temperature	0~40°C									
Storage temperature	-25~55°C									
Humidity range	0~95% (Non-condensing)									
Altitude					<1500m					
Noise level	<58dB <68dB									





SPECIFICATIONS (contd..)

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Physical									
Dimension W × D × H (mm)	350 × 650 × 1050			430×830×1100		720×690×1400		890×790×1600	
Net weight (kg)	145	155	190	242	315	365	420	635	740
Shipping weight (kg)	160	170	215	267	340	400	455	680	785
Standards									
Safety	IEC/EN 62040-1; IEC 62477-1								
EMC	IEC/EN 62040-2 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2)								
Performance	IEC/EN 62040-3								

* With optional filter

1. Specifications are subject to change without prior notice

2. Data above are typical values for reference only, not as a basis for engineering design

ORDERING INFORMATION

Part No	Description
V10ELF	10KVA, 3:3 Ph, PF0.8 transformer UPS, with energy backfilling protection function, Touch screen
V20ELF	20KVA, 3:3 Ph, PF0.8 transformer UPS, with energy backfilling protection function, Touch screen
V30ELF	30KVA, 3:3 Ph, PF0.8 transformer UPS, with energy backfilling protection function, Touch screen
V40ELF	40KVA, 3: 3 Ph, PF0.8transformer UPS, with energy backfilling protection function, Touch screen
V60ELF	60KVA, 3:3 Ph, PF0.8 transformer UPS, with energy backfilling protection function, Touch screen
V80ELF	80KVA, 3:3 Ph, PF0.8 transformer UPS, with energy backfilling protection function, Touch screen
V100ELF	100KVA, 3:3 Ph, PF0.8 transformer UPS, with energy backfilling protection function, Touch screen
V120ELF	120KVA, 3:3 Ph, PF0.8 transformer UPS, with energy backfilling protection function, Touch screen
V160ELF	160KVA, 3:3 Ph, PF0.8 transformer UPS, with energy backfilling protection function, Touch screen

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