

EPOWER-H Series

10~600kVA

3:3 phase PF: 0.9



Operating Mode

- ◆ Adopt IGBT rectifier/inverter technology, output inverter isolation transformer, double-conversion online design, zero transfer time.

Full DSP Control

- ◆ Double DSP control makes the whole system more stable and reliable

Strong Environmental Adaptability

- ◆ Conformal coating, wide mains input range: 346~456vac, 45-65Hz, can work stably with various fuel generator.

Optimized Battery Management

- ◆ Intelligent battery management system, extend battery life; Auto float/boost charge technology, activates the battery maximally; Temperature compensation, discharging time prediction, timed self-testing function, etc.

N+X Parallel Redundancy

- ◆ N+X parallel redundancy design, up to 6 units available, two sets of UPS parallel current sharing less than 3%.

Smart and Friendly Human-machine Interface

- ◆ Standard 7-inch touch screen, displays the running status, working parameters and historical records of the machine; Chinese/English display; Intuitive LED flow chart.

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

Multi-protection

- ◆ Self-diagnosis when startup, AC input over/under voltage, overcurrent, bus overvoltage, overheat, output overload, short-circuit, auxiliary power failure, battery undervoltage early warning and battery overcharge etc., make sure the system's stable and reliable operation.

EPO Function

- ◆ EPO emergency power off function.

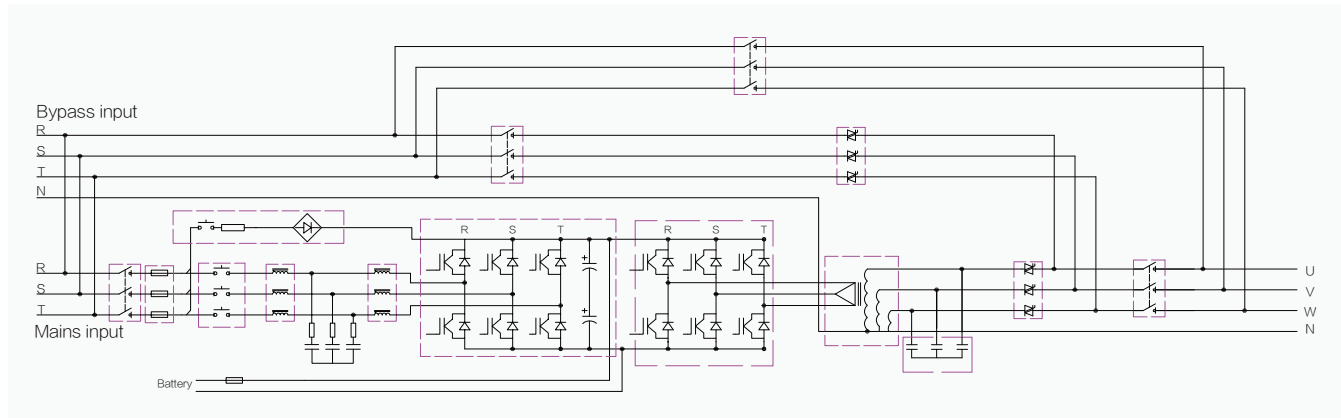
Manual Maintenance Bypass Design

- ◆ Maintenance bypass passage, holds the power supply when maintenance.

Communication Port

- ◆ USB, RS485 (MODBUS), SNMP adapter (Optional), 6 dry contacts (Optional)

Topological Schematic



Technical Specifications

MODEL	EP10-H	EP20-H	EP30-H	EP40-H	EP60-H	EP80-H	EP100-H	EP120-H	EP160-H
Capacity (kVA/kW)	10/9	20/18	30/27	40/36	60/54	80/72	100/90	120/108	160/144
INPUT									
Nominal Voltage & Range (Vac)	380/400/415 (346~456), (3Ph+PE, without N)								
Frequency & Range (Hz)	50/60 (45~65)								
Power Factor	≥0.99								
Harmonic Distortion (THDi)	≤3%								
Power Walk-in	0-200s (Settable)								
BYPASS INPUT									
Voltage (Vac)	380/400/415, (3Ph+N+PE)								
Frequency Tollerance (Hz)	±2 (0.5, 1, 2, 3 settable)								
ECO Mode	Support								
OUTPUT									
Voltage (Vac)	380/400/415 (±1%), (3Ph+N+PE)								
Frequency (Hz)	50/60 (±0.05%)								
Voltage Regulation	≤1%								
Waveform	Pure Sinewave								
Harmonic Distortion (THDv)	≤2% (100% Linear load)						≤1% (100% Linear load)		
Frequency Tracking Speed (Hz/s)	0.5-2 settable; 2 when paralleling								
Bypass Transfer Time (ms)	0 (Inverter and bypass in synchronization) ≤15 (Inverter and bypass out of synchronization)								
Battery Transfer Time (ms)	0								
Efficiency (Max.)	Up to 88%	Up to 89%		Up to 90%		Up to 90.5%	Up to 92%		Up to 92.5%
Overload	105%~110%, last 60min; 110%~125%, last 10min; 125%~150%, last 1min								
BATTERY									
Battery Voltage (Vdc)	600								
ENVIRONMENTAL									
Operating Temperature (°C)	0~40								
Storage Temperature (°C)	-25~55 (No battery)								
Humidity Range	0~95% (Non-condensing)								
Altitude (m)	≤1500								
Noise level (dB)	≤58				≤68				
OTHERS									
Alarm Function	Output overload, utility abnormal, DC (Battery)low, UPS fault alarm & history, etc								
Protection Function	Short circuit, overload, over temperatue, DC (Battery) low, output low voltage, fan fault alarm (Optional)								
Communication Function	USB, RS485, EPO, dry contact (Optional), SNMP card (Optional)								
Optional Accessory	SNMP adapter, battery temperature sensor, bypass current-sharing inductor								
PHYSICAL									
Dimension W×D×H (mm)	720×690×1400				890×775×1600			1200×800×1600	
Net Weight (kg)	270	300	340	365	555	625	710	925	1065
Shipping Weight (kg)	300	335	375	400	600	670	755	995	1135
STANDARDS									
Safety	IEC/EN 62040-1; IEC/EN 62477-1								
EMC	IEC/EN 62040-2 (IEC 61000-2-2, 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)								

- Specifications are subject to change without prior notice
- Data above are typical values for reference only, not as a basis for engineering design

Technical Specifications

MODEL	EP200-H	EP300-H	EP400-H	EP500-H	EP600-H
Capacity (kVA/kW)	200/180	300/270	400/360	500/450	600/540
INPUT					
Nominal Voltage & Range (Vac)	380/400/415 (346~456), (3Ph+PE, without N)				
Frequency & Range (Hz)	50/60 (45~65)				
Power Factor	≥0.99				
Harmonic Distortion (THDi)	≤3%				
Power Walk-in	0-200s (Settable)				
BYPASS INPUT					
Voltage (Vac)	380/400/415, (3Ph+N+PE)				
Frequency Tollerance (Hz)	±2 (0.5, 1, 2, 3 settable)				
ECO Mode	Support				
OUTPUT					
Voltage (Vac)	380/400/415 (±1%), (3Ph+N+PE)				
Frequency (Hz)	50/60 (0.05%)				
Voltage Regulation	≤1%				
Waveform	Pure Sinewave				
Harmonic Distortion (THDv)	≤2% (100% Linear load)				
Frequency Tracking Speed (Hz/s)	0.5-2Hz/s settable; 2Hz/s when paralleling				
Bypass Transfer Time (ms)	0 (Inverter and bypass in synchronization) <15 (Inverter and bypass out of synchronization)				
Battery Transfer Time (ms)	0				
Efficiency (Max.)	Up to 92.5%	Up to 93%		Up to 93.5%	
Overload	105%~110%, last 60min; 110%~125%, last 10min; 125%~150%, last 1min				
BATTERY					
Battery Voltage (Vdc)	600				
ENVIRONMENTAL					
Operating Temperature (°C)	0~40				
Storage Temperature (°C)	-20~55 (No battery)				
Humidity Range	20~95% (Non-condensing)				
Altitude (m)	<1500				
Noise Level (dB)	<70			<75	
OTHERS					
Alarm Function	Output overload, utility abnormal, DC (Battery)low, UPS fault alarm & history, etc				
Protection Function	Short circuit, overload, over temperatue, DC (Battery) low, output low voltage, fan fault alarm (Optional)				
Communication Function	USB, RS485, EPO, dry contact (Optional), SNMP card (Optional)				
Optional Accessory	SNMP adapter, battery temperature sensor, bypass current-sharing inductor				
PHYSICAL					
Dimension W×D×H (mm)	1200×800×1600	1400×1000×1900		2580×1000×1900	
Net weight (kg)	1260	1650	2150	2800	2960
Shipping weight (kg)	1330	1750	2250	3040	3190
STANDARDS					
Safety	IEC/EN 62040-1; IEC/EN 62477-1				
EMC	IEC/EN 62040-2 (IEC 61000-2-2, 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)				

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