Generating Superior Solutions for Energy and More.

KSTAR
Powering the Future

BluePulse Series NEW

KAC(80~125)DP2-BC220DE2A / BC240DE2A / BC260DE2A



Versatile Application

- Ideal for factories, hotels, and farms with DC / AC-coupled solar-storage
- 10ms-level* on / off grid switching time with integrated STS

Safe & Reliable

- 314ah large capacity cell,higher energy density
- Carbon monoxide detection, Sound and light alarm, Exhaust fan, Explosion vent window, Inlet valve, Fire water injection port

Smart Energy

- Supports self-consumption, peak shifting, time-of-use, and battery backup
- Integrated self-developed BMS / EMS for flexibility

High Performance

- Max. 20 PCS parallel for on-grid, 10 PCS for on / off-grid situation
- Long-lasting battery cycle life

Easy Operation

- Compact design saves space
- Cloud control with 24 / 7 monitoring

Technical Parameters	BC220DE2A	BC240DE2A	BC260DE2A
Battery Type	LiFe (LiFePO4)		
Battery Module Capacity	20.09 kWh		
Number of Modules	11	12	13
Total Battery Capacity	221.05 kWh	241.15 kWh	261.24 kWh
Nominal Voltage	704 V	768 V	832 V
Operating Voltage Range	627 ~ 792 V	684 ~ 864 V	741 ~ 936 V
Max. Charge / Discharge Rate	0.5 C *		
Standard Charging / Discharging Current	157 A / 157 A		
DoD	95%		
General Parameters			
Dimensions (W x H x D)	1324 x 2415 x 1440 mm		
Weight	< 2.39 T	< 2.53 T	< 2.66 T
Installation Site	Outdoor		
IP Protection	IP54		
Anti Corrosion Level	C4		
Operation Humidity	0 ~ 95% (No Condensing)		
Operation Temperature	-30°C ~ +50°C		
Max. Operation Altitude	≤ 3000 (> 2000m Derating)		
Communication Port	Ethernet; CAN		
Communication Protocol	CAN; TCP		
Cooling Method	Intelligent Air Cooling		
Warranty	5 Year Product Waarranty; 10 Year Performance Warranty		
Certificates	UL 9540A; UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4		

* The 10ms on / off-grid switching time applies to single-PCS operation with a purely resistive load.
** Max charge / discharge rate is limited to the inverter, in case of use 2 batteries and one inverter, max power remain the same.

Hybrid Inverter Parameters

Product Specifications	KAC80DP2	KAC100DP2	KAC110DP2	KAC125DP2
PV Side				
MPPT Voltage Range	250 ~ 950 V (Max. 1000 V)			
MPPT Rated Voltage	720 V			
MPPT Rated Voltage (Full Load)	450 ~ 800 V	550 ~ 800 V	600 ~ 800 V	700 ~ 800 V
Max. PV Power	160 kWp	200 kWp	220 kWp	250 kWp
Number of MPPT / Strings per MPPT	8 / 2			
Max. Current per MPPT	45 A			
Battery Side				
Battery Voltage Range	200 ~ 950 V			
Battery Rated Voltage Range	250 ~ 800 V			
Max. DC Current	160 A (80 A x 2)			
Max. DC Power	88 kW	110 kW	121 kW	125 kW
Number of DC Inputs	2			
AC Side (On Grid)				
Nominal AC Output Power	80 kW	100 kW	110 kW	125 kW
Max. AC Output Power	88 kVA	110 kVA	121 kVA	137.5 kVA
Rated AC Output Current	116 A	144 A	159 A	181 A
Max.AC Input Current	227 A	227 A	227 A	227 A
AC Rated Voltage / Voltage Range	230 / 400 Vac; 220 / 380 Vac; 3L+PE+N; -15% ~ +10%			
Nominal Grid Frequency / Frequency Range	50 Hz / 60 Hz (±5 Hz)			
THDi	< 3% (100% Load)			
Adjustable PF Range	0.8 inductive(under-excited) to 0.8 capacitive(over-excited)			
Backup Output				
Nominal AC Voltage	230 / 400 V; 220 / 380 Vac; 3L+PE+N			
THDv	< 3% (Rated Power)			
Nominal Grid Frequency / Frequency Range	50 Hz / 60 Hz			
Nominal AC Output Power	80 kW	100 kW	110 kW	125 kW
Max. AC Output Power (Single-phase)	50 kW			
Max. Output Current	227 A			
Genset Input				
Max. Input Current	227 A			
Efficiency				
Max. Efficiency	98%			
Protection				
Reverse DC Connection Protection	Yes			
Anti-Islanding Protection	Yes			
Over-Temperature Protection	Yes			
Grid Monitoring / Earthing Fault Detection	Yes			
Insulation Monitoring	Yes			
DC / AC Surge Protection	DC Type II; AC Type II			
AFCI	Optional			
General Parameters				
Dimensions (W x H x D)	1120 x 760 x 365 mm			
Weight	135 kg			
Topology	Transformerless			
IP Protection	IP65			
Operation Temperature Range	-30 ~ 60℃ (> 45℃ Derating)			
Operation Humidity Range	0 ~ 100% (No Condensing)			
Cooling Method	Intelligent Air Cooling			
Max. Operation Altitude	4000 m (> 3000 m Derating)			
Communication Port	RS-485 / CAN			

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