

BluePulse Series NEW

KAC20DP2 / KAC25DP2 / KAC29DP2 / KAC30DP2 / KAC40DP2 / KAC49DP2 / KAC50DP2
BC70DE2 / BC89DE2 / BC107DE2

Versatile Application

- ▶ Ideal for factories, hotels, and farms with DC / AC-coupled solar-storage
- ▶ No external switching device is required, on/off-grid switching time about 10ms, support direct output backup load

Safe & Reliable

- ▶ 280ah 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

- ▶ Small size, small footprint
- ▶ Long-lasting battery cycle life

Easy Operation

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



Technical Parameters	BC70DE2		BC89DE2	BC107DE2
Battery Type	LFP			
Battery Module Capacity	17.92 kWh			
Cell Type	280 Ah			
Number of Modules	4	5	6	
Total Battery Capacity	71.68 kWh	89.6 kWh	107.52 kWh	
Nominal Voltage	256 V	320 V	384 V	
Operating Voltage Range	228 ~ 288 V	285 ~ 360 V	342 ~ 432 V	
Charge / Discharge Rate	Max. 0.5 C			
DoD	90%			
General Parameters				
Dimensions (W x H x D)	1050 x 2085 x 1371 mm			
Weight	< 1.2 T	< 1.35 T	< 1.5 T	
Installation Site	Outdoor			
IP Protection	IP54			
Anti Corrosion Level	C4			
Operation Humidity	5% ~ 95% (No Condensing)			
Operation Temperature	-30°C ~ +50°C			
Max. Operation Altitude	≤ 3000 m			
Communication Port	Ethernet; CAN			
Communication Protocol	CAN; MODBUS TCP / IP			
Cooling Method	Air Conditioner			
Certification	UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4			

Hybrid Inverter Parameters

Product Specifications	KAC20DP2	KAC25DP2	KAC29DP2	KAC30DP2	KAC40DP2	KAC49DP2	KAC50DP2
PV Side							
MPPT Voltage Range	250 ~ 950 Vdc (Max. 1000 Vdc)						
MPPT Rated Voltage	720 Vdc						
MPPT Rated Voltage (Full Load)	300 ~ 800 V	350 ~ 800 V	400 ~ 800 V	400 ~ 800 V	500 ~ 800 V	550 ~ 800 V	550 ~ 800 V
Max. PV Power	40 kWp	50 kWp	60 kWp	60 kWp	80 kWp	100 kWp	100 kWp
Number of MPPT / Strings per MPPT	4 / 2						
Max. Current per MPPT	45 A						
Battery Side							
Battery Voltage Range	200 ~ 950 Vdc						
Battery Rated Voltage Range	250 ~ 800 Vdc						
Max. DC Current	40 Adc x 2	50 Adc x 2	60 Adc x 2	60 Adc x 2	80 Adc x 2	80 Adc x 2	80 Adc x 2
Max. DC Power	22 kW	27.5 kW	33 kW	33 kW	44 kW	55 kW	55 kW
Number of DC Input	2						
AC Side (On Grid)							
Nominal AC Output Power	20 kW	25 kW	29.9 kW	30 kW	40 kW	49.9 kW	50 kW
Max. AC Output Power	27.5 kVA	27.5 kVA	29.9 kVA	33 kVA	44 kVA	49.9 kVA	55 kVA
Max. AC Input Power (Single-phase)	20 kW	25 kW	25 kW	25 kW	27.5 kW	37.5 kW	37.5 kW
Rated AC Current	29.0 A	36.3 A	43.4 A	43.5 A	58.0 A	72.4 A	72.5 A
Max. AC Current	87 A	110 A	110 A	110 A	120 A	163 A	163 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 (Lagging) ~ 0.8 (Leading)						
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	20 kW	25 kW	29.9 kW	30 kW	40 kW	49.9 kW	50 kW
Max. AC Output Power (Single-phase)	20 kW	25 kW	25 kW	25 kW	25 kW	25 kW	25 kW
Max. Output Current	87 A	110 A	110 A	110 A	110 A	110 A	110 A
Genset Input							
Max. Input Current	87 A	110 A	110 A	110 A	110 A	110 A	110 A
Efficiency							
Max. Efficiency	97.5%						
Protection							
Reverse DC Connection Protection	Yes						
Anti-Islanding Protection	Yes						
Over-Temperature Protection	Yes						
Grid Monitoring / Earthing Fault Detection	Yes						
Insulation Monitorin	Yes						
DC / AC Surge Protection	DC Type II; AC Type II						
AFCI	Optional						
General Parameters							
Dimensions (W x H x D)	635 x 950 x 315 mm						
Weight	> 80 kg						
Topology	Transformerless						
IP Protection	IP65						
Operation Temperature Range	-25 ~ 60°C (> 45°C 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						