

BluePulse Series

NEW

KAC20DP2 / KAC25DP2 / KAC29.9DP2 / KAC30DP2 / KAC40DP2 / KAC49.9DP2 / KAC50DP2

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

- ▶ Carbon monoxide detection, Sound and light alarm, Exhaust fan, Explosion vent window, Inlet valve, Fire water injection port

Smart Energy

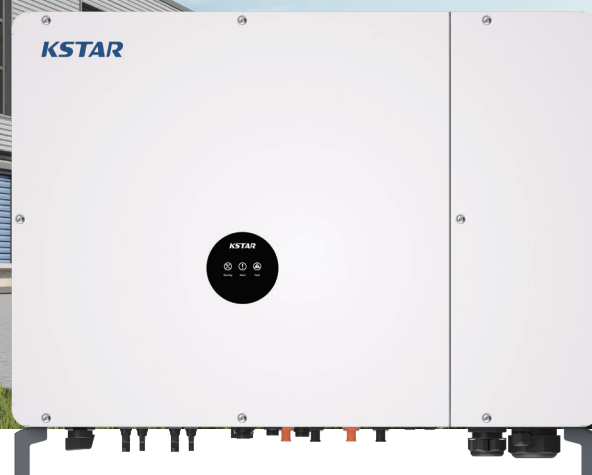
- ▶ Supports self-consumption, peak shifting, time-of-use, and battery backup
- ▶ Integrated self-developed BMS / EMS for flexibility

High Performance

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

Easy Operation

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



Hybrid Inverter Parameters

Product Specifications	KAC20DP2	KAC25DP2	KAC29.9DP2	KAC30DP2	KAC40DP2	KAC49.9DP2	KAC50DP2
PV Side							
MPPT Voltage Range	250 ~ 950 Vdc (Max. 1000 Vdc)						
Max./ Min. DC Voltage	1000 / 250 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	620 ~ 800 V	620 ~ 800 V
Max. PV Power	40 kWp	50 kWp	59.8 kWp	60 kWp	80 kWp	99.8 kWp	100 kWp
Startup Voltage	180 V						
Number of MPPT / Strings per MPPT	4 / 2						
Max. Continuous Input Current per MPPT	45 A						
Max. Short-Circuit Current per MPPT	60 A						
Battery Side							
Battery Type	LFP (LiFePO4)						
Battery Voltage Range	150 ~ 900 Vdc						
Battery Rated Voltage Range	180 ~ 800 Vdc						
Max. DC Current	55 Adc x 2	60 Adc x 2	65 Adc x 2	65 Adc x 2	72 Adc x 2	80 Adc x 2	80 Adc x 2
Max. DC Power	20 kW	25 kW	29.9 kW	30 kW	40 kW	49.9 kW	50 kW
Number of DC Inputs	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
Rated Apparent Power	20 kVA	25 kVA	29.9 kVA	30 kVA	40 kVA	49.9 kVA	50 kVA
Max. AC Output Power	22 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
Rate AC Output Current	29 A	36 A	43 A	43 A	58 A	72 A	72 A
Max. AC Input Current	64 A	80 A	87 A	96 A	128 A	144 A	160 A
Current (inrush)	62 A peak; 17 ms						
Max. Output Fault Current	310 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)						

Hybrid Inverter Parameters

Product Specifications	KAC20DP2	KAC25DP2	KAC29.9DP2	KAC30DP2	KAC40DP2	KAC49.9DP2	KAC50DP2
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
Rated Apparent Power	20 kVA	25 kVA	29.9 kVA	30 kVA	40 kVA	49.9 kVA	50 kVA
Max. AC Output Power (Single-phase)	20 kW	20 kW	20 kW	20 kW	25 kW	25 kW	25 kW
Rated Current	29 A	36 A	43 A	43 A	58 A	72 A	72 A
Max. Output Current	32 A	40 A	43 A	48 A	64 A	72 A	80 A
Current (inrush)	62 A peak; 17 ms						
Max. Output Fault Current	310 A						
PF Range	0.8 inductive(under-excited) to 0.8 capacitive(over-excited)						
Genset Input							
Nominal Voltage	230 / 400 Vac; 3L+PE+N;						
Max. Continuous Input Current	32 A	40 A	43 A	48 A	64 A	72 A	80 A
Rated Frequency	50 Hz						
PF Range	0.8 inductive(under-excited) to 0.8 capacitive(over-excited)						
Efficiency							
Max. Efficiency	97%				97.5%		
Protection							
Reverse DC Connection Protection	Yes						
Anti-Islanding Protection	Yes						
Over-Temperature Protection	Yes						
Grid Monitoring / Earthing Fault Detection	Yes						
Insulation Monitoring	Yes						
Enviromental Category	Outdoor						
Overvoltage Category	DC / Genset II; Grid / Backup III						
Protective Class	I						
Pollution Degree	PD2 (internal); PD3 (external)						
Active Anti-islanding Method	Power Variation						
DC / AC Surge Protection	DC Type II; AC Type III						
AFCI	Optional						
General Parameters							
Dimensions (W x H x D)	900 x 650 x 322 mm						
Weight	101 kg						
Topology	Non-isolated						
IP Protection	IP66						
Operation Temperature Range	-25 ~ 60°C (> 45°C Derating)						
Operation Humidity Range	0 ~ 100% (No Condensing)						
Cooling Method	Intelligent Air Cooling						
Max. Operation Altitude	3000 m (> 3000 m Derating)						
Communication Port	RS-485 / CAN						
Country of Manufacture	China						
Warranty	10 Years						
Certificate	EN IEC 61000-6/3; EN IEC 62920; IEC EN 62109-1/2; IEC EN 62477-1/62991; IEC 61683; EN50549-1/2/10; IEC 61727&62116; AS4777.2						