

BluePulse Series **NEW**

KAC20DP2 / KAC25DP2 / KAC29.9DP2 / KAC30DP2 / KAC40DP2 / KAC49.9DP2 / KAC50DP2
BC208DLE

Extreme Safety & Reliability

- ▶ Tier 1 battery cell brand ensure high quality
- ▶ 4+3 fire safety design avoids fire risks
- ▶ Integrated intelligence temperature control

Versatile Adaptability

- ▶ Multi-scenario adaptation & Flexible solution configuration
- ▶ Scalable up to 8.32 MWh
- ▶ Floor space reduced by 25%

Intelligent & User-friendly

- ▶ 3S (PCS, BMS, EMS) full-stack self-developed
- ▶ Integrated monitoring and O&M through KSTAR Sync
- ▶ VPP ready with KSTAR Sync Cloud



Liquid-cooling Battery Cabinet Parameters

| Technical Parameters | BC208DLE |
|---|---|
| Battery Type | LiFe (LiFePO4) |
| Battery Module Capacity | 52.24 kWh |
| Number of Modules | 4 |
| Total Battery Capacity | 208.99 kWh |
| Nominal Voltage | 665.5 V |
| Operating Voltage Range | 592.8 ~ 748.8 V |
| Charge / Discharge Rate | 0.5 C |
| Standard Charging / Discharging Current | 157 A / 157 A |
| DoD | 90% |
| General Parameters | |
| Dimensions (W x H x D) | 1040 x 1370 x 2234 mm |
| Weight | < 2.5 T |
| Installation Site | Outdoor |
| IP Protection | IP54 |
| Anti Corrosion Level | C4 |
| Operation Humidity | 5% ~ 95% (No Condensing) |
| Operation Temperature | -20°C ~ +50°C |
| Max. Operation Altitude | ≤ 3000 m (>2000m Derating) |
| Communication Port | Ethernet; CAN |
| Communication Protocol | CAN; TCP |
| Cooling Method | Liquid Cooling |
| Warranty | 5 Year Product Warrantant,10 Year Performance Warranty |
| Certification | UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4 |

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) | | | | | | |
| 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 | 600 ~ 800 V | 620 ~ 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 | 150 ~ 900 Vdc | | | | | | |
| Battery Rated Voltage Range | 180 ~ 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 | 29.9 kW | 33 kW | 44 kW | 49.9 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 | 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 |
| Rated AC Output | 29 A | 36 A | 43 A | 43 A | 58.0 A | 72 A | 72 A |
| Max. AC Continuous Input | 64 A | 80 A | 87 A | 96 A | 128 A | 144 A | 160 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 | 20 kW | 25 kW | 29.9 kW | 30 kW | 40 kW | 49.9 kW | 50 kW |
| Max. AC Output Power (Single-phase) | 20 kW | 20 kW | 20 kW | 20 kW | 25 kW | 25 kW | 25 kW |
| Max. Output Current | 87 A | 87 A | 87 A | 87 A | 110 A | 110 A | 110 A |
| Genset Input | | | | | | | |
| Max. Input Current | 87 A | 87 A | 87 A | 87 A | 110 A | 110 A | 110 A |
| Efficiency | | | | | | | |
| Max. Efficiency | 97% | 97% | 97% | 97% | 97.5% | 97.5% | 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 | | | | | | |
| DC / AC Surge Protection | DC Type II; AC Type II | | | | | | |
| AFCI | Optional | | | | | | |
| General Parameters | | | | | | | |
| Dimensions (W x H x D) | 900 x 730 x 355 mm | | | | | | |
| Weight | 101 kg | | | | | | |
| Topology | Transformerless | | | | | | |
| 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 | 4000 m (> 3000 m Derating) | | | | | | |
| Communication Port | RS-485 / CAN | | | | | | |