

# BluePulse Series NEW

KAC20DP2 / KAC25DP2 / KAC29.9DP2 / KAC30DP2 / KAC40DP2 / KAC49.9DP2 / 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%                      |             |
| <b>General Parameters</b> |   |                          |             |
| Dimensions (W x H x D)    |   | 1062 x 2083 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 (>2000m Derating) |             |
| Communication Port        |   | Ethernet ; CAN ; RS485   |             |
| Communication Protocol    |   | CAN; MODBUS TCP / IP     |             |
| Cooling Method            |   | Air Conditioner          |             |
| Certification             | UL 9540A; 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    |
|--|--|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>PV Side</b>                             |  |             |             |             |             |             |             |
| 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   |             |             |             |             |             |             |
| <b>Battery Side</b>                        |  |             |             |             |             |             |             |
| 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  |             |             |             |             |             |             |
| <b>AC Side (On Grid)</b>                   |  |             |             |             |             |             |             |
| 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) |             |             |             |             |             |             |
| <b>Backup Output</b>                       |  |             |             |             |             |             |             |
| 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       |
| <b>Genset Input</b>                        |  |             |             |             |             |             |             |
| Max. Input Current                         | 87 A   | 87 A        | 87 A        | 87 A        | 110 A       | 110 A       | 110 A       |
| <b>Efficiency</b>                          |  |             |             |             |             |             |             |
| Max. Efficiency                            | 97%  | 97%         | 97%         | 97%         | 97.5%       | 97.5%       | 97.5%       |
| <b>Protection</b>                          |  |             |             |             |             |             |             |
| 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   |             |             |             |             |             |             |
| <b>General Parameters</b>                  |  |             |             |             |             |             |             |
| 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   |             |             |             |             |             |             |