

# KAC50DP

50KW modular power converter



## Flexible Configuration

- Modular Design, Expanding as Required
- Small&Light, Wall Mounted
- Installed in Parallel for Expansion



## Powerful Function

- Support PV+ESS
- Grid Support, Equipped with SVG Technology
- On-Grid and Off-Grid Operation



## Reliable Protection

- Outdoor IP65 Design
- Sufficient Protection Functions Equipped

| Product Specifications                    | KAC50DP                                                                                    |
|-------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>PV Side</b>                            |                                                                                            |
| Max. Input Voltage                        | 1000V                                                                                      |
| MPPT Voltage Range                        | 350V~800V                                                                                  |
| Max. Current per MPPT                     | 36A                                                                                        |
| Number of MPPT                            | 3                                                                                          |
| Number of Inputs Per MPPT                 | 2                                                                                          |
| <b>Battery Side</b>                       |                                                                                            |
| Max. Input Voltage                        | 750V                                                                                       |
| Min. Input Voltage                        | 350V                                                                                       |
| DC Voltage at Nominal Operation           | 500V~750V                                                                                  |
| Max. DC Current                           | 55A*2                                                                                      |
| Max. DC Input Power                       | 55kW                                                                                       |
| Number of DC Inputs                       | 2                                                                                          |
| <b>AC Side(On Grid)</b>                   |                                                                                            |
| Nominal AC Output Power                   | 50kW                                                                                       |
| Max. AC Output Power                      | 55kVA                                                                                      |
| Max. AC Current                           | 80A                                                                                        |
| Nominal AC Voltage                        | 400V                                                                                       |
| AC Voltage Range                          | 340V~440V                                                                                  |
| Nominal Grid Frequency/Frequency Range    | 50/60Hz±5Hz                                                                                |
| THDv                                      | <3%(100% Load )                                                                            |
| Adjustable PF Range                       | -1(Lagging)~1(Leading)                                                                     |
| <b>AC Side(Off Grid)</b>                  |                                                                                            |
| Nominal AC Voltage                        | 230/400V±3%; 3L+N+PE                                                                       |
| THDv                                      | <3%(Linear Load)                                                                           |
| Nominal Grid Frequency/Frequency Range    | 50/60Hz                                                                                    |
| Nominal AC Output Power                   | 50kW                                                                                       |
| Max. AC Output Power                      | 55kVA                                                                                      |
| <b>Efficiency</b>                         |                                                                                            |
| Max. Efficiency                           | 97.5%                                                                                      |
| <b>Protection</b>                         |                                                                                            |
| Reverse Connection Protection             | Yes                                                                                        |
| DC Switch                                 | Yes                                                                                        |
| Over-Temperature Protection               | Yes                                                                                        |
| Grid Monitoring/ Earthing Fault Detection | Yes                                                                                        |
| Insulation Monitoring                     | Yes                                                                                        |
| DC/AC Surge Protection                    | DC Type II; AC Type III                                                                    |
| <b>General Parameters</b>                 |                                                                                            |
| Dimensions(WxHxD)                         | 650*715*325mm                                                                              |
| Weight                                    | 75KG                                                                                       |
| 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                   | 3000m                                                                                      |
| Communication Port                        | RS485/CAN                                                                                  |
| Standards                                 | IEC62477;IEC61000;CE/GB/T;IEC62109;IEC61683;IEC60068;IEC61727;IEC62116;EN50549;VDE4105;G99 |