Three Phase Inverter For Short PV Strings

SE3K-RWB / SE4K-RWB / SE5K-RWB



NVERTERS

The ideal battery-ready solution for small-scale residential PV systems

- Greater design flexibility by enabling significantly shorter strings for low power three phase PV systems
- Battery ready one inverter for both PV and battery storage
- Optimized for installations with complex roofs (multi-facets and different orientations)
- Supports optional smart energy devices and expansion of system capabilities
- Single vendor solution for seamless operation of all system components, and one address for warranty and service issues
- Built-in module-level monitoring for greater visibility into system performance

- Excellent reliability with standard 12-year warranty (extendable to 20 or 25 years)
- Advanced safety features, including touch-safe DC voltage when the inverter is off or disconnected
- Quick inverter commissioning directly from the SetApp smartphone app
- Suitable for outdoor or indoor installations



/ Three Phase Inverter

SE3K-RWB / SE4K-RWB / SE5K-RWB

| APPLICABLE TO INVERTERS WITH PART NUMBER | SE3K-RWBTEBEN4 | SE4K-RWBTEBEN4 | SE5K-RWBTEBEN4 | UNI |
|---|---|-------------------------------|----------------|-----|
| OUTPUT | T | | | |
| Rated AC Power Output | 3000 | 4000 | 5000 | VA |
| Maximum AC Power Output | 3000 | 4000 | 5000 | VA |
| AC Output Line Connections | 3-phase, 4-wire / PE (L1-L2-L3-N), TN, TT | | | |
| AC Output Voltage - Line to Line / Line to Neutral (Nominal) | 380/220 ; 400/230 | | Va | |
| AC Output Voltage - Line to Neutral Range | 264.5 | | Va | |
| AC Frequency | 50/60 ± 5 % | | Hz | |
| Maximum Continuous Output Current (per phase) | 5 | 6.5 | 8 | А |
| Grid Supported - Three Phase | | 3 / N / PE (WYE with Neutral) | | |
| Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds | | Yes | | |
| INPUT | | | | |
| Maximum DC Power (Module STC) | 4050 | 5400 | 6750 | W |
| Transformer-less, Ungrounded | | Yes | | |
| Maximum Input Voltage | 450 | | Vd | |
| Nominal DC Input Voltage | 375 | | Vd | |
| Maximum Voltage to Earth | | 450 | | Vd |
| Maximum Input Current | 8.5 | 11.5 | 14 | Ad |
| Reverse-Polarity Protection | Yes | | | |
| Ground-Fault Isolation Detection | 350 kΩ sensitivity | | | |
| Maximum Inverter Efficiency | 97.8 | | % | |
| European Weighted Efficiency | 94.6 | 95.7 | 96.3 | % |
| Night-time Power Consumption | | <4 | | W |
| ADDITIONAL FEATURES | | | | |
| Supported Communication Interfaces ⁽¹⁾ | 2 x RS485, Ethernet, Wi-Fi ⁽²⁾ , ZigBee for Smart Energy (optional), Cellular (optional) | | | |
| Inverter Commissioning | With the SetApp mobile application using built-in Wi-Fi station for local connection | | | |
| Smart Energy Management | Export Limitation, Home Energy Management (Device Control) | | | |
| STANDARD COMPLIANCE | | | | |
| Safety | | IEC-62109-1/2 | | |
| Grid Connection Standards | EN 50549-1 | | | |
| Emissions | IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12 | | | |
| RoHS | | Yes | | |
| INSTALLATION SPECIFICATIONS | 1 | | | |
| AC Output | Cable gland diameter 15-21 | | mr | |
| DC Input | 2 x MC4 pair | | | |
| Dimensions (H x W x D) | 540 x 315 x 260 | | | mr |
| Weight | 24.5 | | | kg |
| Operating Temperature Range | -40 to +60 ⁽³⁾ | | | °(|
| Cooling | Fan (user replaceable) | | | |
| Noise | < 50 | | | dB |
| Protection Rating | IP65 - outdoor and indoor | | | |
| Mounting | Brackets provided | | | |
| Number of Power Optimizers per String | 8 ⁽⁴⁾ /9 to 25 | | | |
| Number of Fower Optimizers per string | | | | |

⁽¹⁾ Refer to Datasheets -> Communications category in Resources Library for specifications of optional communication options: https://www.solaredge.com/downloads#/
(2) Wi-Fi connectivity requires an external antenna. For more information refer to: https://www.solaredge.com/sites/default/files/se-wifi-zigbee-antenna-datasheet.pdf
(3) For power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf
(4) When using P404/P485/P505 power optimizers only, minimum required per string is eight