

REVO residential energy storage inverters

Three-phase hybrid inverter

Supports high power components



KEY STRENGTHS

- Support BMS (RS485) remote upgrade.
- Support full power discharge, automatic battery charge and discharge management.
- Compatible with single-phase and three-phase loads.
- Support 100% unbalanced load output.
- Support high power components.

| Model | R6KH3-P | R8KH3-P | R10KH3-P | R12KH3-P | R15KH3-P |
|---|---------|---------|----------|----------|----------|
| PV input data | | | | | |
| Max. PV input power (kW) | 9 | 12 | 15 | 18 | 22.5 |
| Max. PV input voltage (V) | 1000 | | | | |
| Min. PV input voltage (V) | 125 | | | | |
| Start-up voltage (V) | 125 | | | | |
| MPPT voltage range (V) | 180~850 | | | | |
| MPPT voltage range@full-load (V) | 250~850 | | | | |
| Rated PV input voltage (V) | 600 | | | | |
| No. of MPPT trackers | 2 | | | | |
| No. of strings per MPPT tracker | 1/1 | | | | 2/2 |
| Max. input current per MPPT (A) | 18/18 | | | | 20/20 |
| Max. short-circuit current per MPPT (A) | 25/25 | | | | 30/30 |

Battery input data

| | | | | | |
|---|-------------------------|---------|---------|---------|---------|
| Battery type | Lithium-ion / Lead-acid | | | | |
| Max. charge / discharge power (kW) | 6.6 | 8.8 | 11 | 13.2 | 16.5 |
| Battery voltage range (V) | 150~550 | | | | |
| Battery voltage range@full-load (V) | 180-550 | 230-550 | 285-550 | 340-550 | 425-550 |
| Max. charging / discharging current (A) | 50/50 | | | | |
| Rated charge / discharge current (A) | 40/40 | | | | |
| Battery charging strategy | Self-adaption to BMS | | | | |
| BMS communication | CAN | | | | |

AC output data (grid side)

| | | | | | |
|----------------------------------|-----------------------------------|------|------|------|------|
| Rated output power (kW) | 6 | 8 | 10 | 12 | 15 |
| Max. apparent output power (kVA) | 6.6 | 8.8 | 11 | 13.2 | 16.5 |
| Max. apparent input power(kVA) | 13.2 | 17.6 | 22 | 26.4 | 33.3 |
| Rated grid voltage (V) | 220 / 380; 230 / 400 | | | | |
| Grid voltage range (V) | 187~264.5 | | | | |
| Grid input voltage (V) | 380; 400 | | | | |
| Rated grid frequency (Hz) | 50/60 | | | | |
| Grid frequency range(Hz) | 45-55 / 55-65 | | | | |
| Rated output current (A) | 8.7 | 11.5 | 14.4 | 17.3 | 21.7 |
| Max. AC output current (A) | 9.5 | 12.7 | 15.9 | 19.1 | 23.8 |
| Power factor | >0.99 (0.8 leading ~ 0.8 lagging) | | | | |
| THDi | < 3% | | | | |
| Grid type | 3L+N+PE | | | | |

AC output data (back-up)

| | | | | | |
|----------------------------------|--|------|------|------|------|
| Rated output power (kW) | 6 | 8 | 10 | 12 | 15 |
| Max. apparent output power (kVA) | 6.6 | 8.8 | 11.1 | 13.2 | 16.5 |
| Rated output voltage (V) | 220 / 380; 230 / 400 | | | | |
| Rated output frequency (Hz) | 50/60 | | | | |
| Rated output current (A) | 8.7 | 11.5 | 14.4 | 17.3 | 21.7 |
| Max. AC output current (A) | 9.5 | 12.7 | 15.9 | 19.1 | 23.8 |
| Peak output power | ≥110%, 10mins; ≥120%, 1.25min; ≥150%, 20ms | | | | |
| Back-up switch time (ms) | <10 | | | | |
| THDu | <2% | | | | |

Protection

| | |
|-----------------------|---|
| Supported protection | PV reverse polarity protection, Anti-islanding protection, Ground fault protection, Battery reverse protection, Leakage current protection, Insulation resistance detection, Backup output short circuit protection, AC under-voltage protection, AC output over-current protection, AC over-voltage protection |
| Over voltage category | DC Type II / AC Type III |

Certifications and standards

| | |
|--------------|---|
| Certificates | IEC 61000-6-1/-2/-3/-4, IEC 61000-3-11, IEC61000-3-12; EN 62109-1, EN 62109-2; EN50549-1; EN50549-10; EN50438; G98/G99:2022; VDE-AR-N 4105:2018; CEI 0-21:2022; C10/11; Rfg:2016/NC Rfg:2018/PTPIREE:2021; NRS 097-2-1:2017; Hungary; NTS V2.1:2021-07&UNE217002:2020&UNE217001:2020; NA/EEA-NE7 – CH 2020; OVE Directive R 25:2020, TOR Erzeuger Type A V1.2; TR3.3.1:2019;ANRE228; ANRE228; NA/EEA-NE7; PPDS:2022 for A1&A2; RS 097-2-1 :2017; OVE Directive R 25:2020, TOR Erzeuger Type A V1.2; EIFS 2018:2 |
|--------------|---|

General data

| | |
|----------------------------------|-----------------------------------|
| Ingress protection | IP65 |
| Operating temperature range (°C) | -25~+60 |
| Cooling | Natural cooling |
| Relative humidity | 0-95% |
| Operating altitude (m) | 4000(>2000 power derating) |
| Dimensions W*D*H (mm) | 566 x 593.5 x 219.5 |
| Weight (kg) | 32 |
| Topology (solar / battery) | Transformerless / Transformerless |
| Noise emission (dB) | <45 |

Display and communication

| | |
|---------------|-------------------|
| Display | Monochrome screen |
| Communication | RS485,CAN,WiFi |