



Three phase ESS hybrid inverter - IP65 -8.8KW & 11KW & 13.2KW

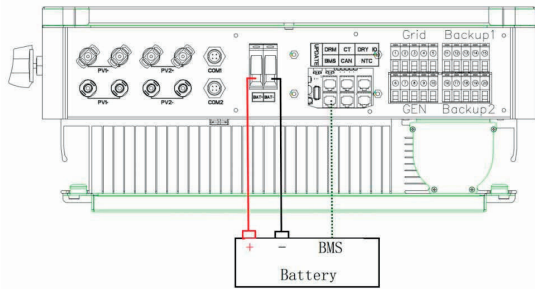
KH3 High Voltage Series(Max.Voc: 1000V; Rated input voltage: 360~440V)



Performance characteristics

- Compatible with lead-acid and lithium-ion batteries;
- Support diesel generator input source;
- IP65 protection, low noise < 35dB;
- Battery reverse connection protection, anti-power control function
- Input power source priority can be set by users;
- Support full power discharge, automatic management of battery charge and discharge;

Product characteristics



| Function | Label | Description |
|-------------------------|--------|-------------------------------------|
| PV string 1 Input port | PV1+ | PV string 1 positive input |
| | PV1- | PV string 1 negative input |
| PV string 2 Input port | PV2+ | PV string 2 positive input |
| | PV2- | PV string 2 negative input |
| Communication interface | COM1 | GPRS port(optional) |
| | COM2 | WiFi port(optional) |
| BAT Port | BAT+ | Battery Positive input |
| | BAT- | Battery negative input |
| Signal line interface | UPDATE | Upgrading software Ports |
| | DRM | Function temporarily retained |
| | CT | Connect to CT (current transformer) |
| | DRY IO | Dry contact |
| | BMS | BMS communication to Battery |
| | CAN | CAN Communication |
| | NTC | NTC detection |

| | | |
|------|-----------------------|----------------------------|
| Grid | <input type="radio"/> | Grid line A phase |
| | <input type="radio"/> | Grid line B phase |
| | <input type="radio"/> | Grid line C phase |
| | <input type="radio"/> | Grid line null line |
| | <input type="radio"/> | Grid line ground electrode |
| GEN | <input type="radio"/> | A phase |
| | <input type="radio"/> | B phase |
| | <input type="radio"/> | C phase |
| | <input type="radio"/> | Null line |
| | <input type="radio"/> | Ground electrode |

| | | |
|---------|-----------------------|-------------------------------|
| Backup1 | <input type="radio"/> | Backup1 line A phase |
| | <input type="radio"/> | Backup1 line B phase |
| | <input type="radio"/> | Backup1 line C phase |
| | <input type="radio"/> | Backup1 line null line |
| | <input type="radio"/> | Backup1 line ground electrode |
| Backup2 | <input type="radio"/> | Backup2 line A phase |
| | <input type="radio"/> | Backup2 line B phase |
| | <input type="radio"/> | Backup2 line C phase |
| | <input type="radio"/> | Backup2 line Null line |
| | <input type="radio"/> | Backup2 line Ground electrode |

Parameters

| Technical specification | ZECO-R8KH3 | ZECO-R10KH3 | ZECO-R12KH3 |
|--------------------------------------|---|---------------------------------|-------------|
| Input (PV) | | | |
| Max.power(kW) | 10.4 | 13 | 15.6 |
| Max. DC voltage(V) | 1,000 | | |
| MPPT voltage range(V) | 180~850 | | |
| Max.input current of single MPPT(A) | 12.5 | | |
| MPPT tracker/strings | 2/1 | 2/1 | 2/1 |
| AC output | | | |
| Rated output power(kVA) | 8.8 | 11 | 13. |
| Max. output current(A) | 12. | 15.9 | 2 |
| Grid voltage/range(V) | 7 | 400/360~440 | 19. |
| Frequency (Hz) | 50 /60 | | 1 |
| Power factor | 0.8lagging-0.8leading | | |
| THDi | <3% | | |
| AC output topology | | | |
| 3W+N+PE | | | |
| Battery | | | |
| Battery voltage range(V) | | | |
| Max. charging voltage(V) | 125~600 | | |
| Full battery voltage(V) | | | |
| Max. charge/discharge current(A) | 21 | 270 | 25 |
| Battery type | 0 | 40 | 0 |
| Communication Interface | 40 | lithium /Lead-acid | 50 |
| EPS output | | | |
| Rated power(kVA) | | | |
| Rated output voltage(V) | 8.8 | 11 | 13.2 |
| Max. output current(A) | 400 | | |
| Rated frequency(Hz) | 12.7 | 15.9 | 19.1 |
| Automatic switching time(ms) | 50 /60 | | |
| THDu | <20 | | |
| Overload capacity | <2% | | |
| General data | | | |
| Battery charge /discharge efficiency | | 110%, 30S/120%, 10S/150%, 0.02S | |
| DC Max. efficiency | 96.6 | 96.7% | 96.8 |
| Europe efficiency | % | 98.2% | % |
| MPPTefficiency | 97.9 | 97.5% | 98.2 |
| Ingress protection | % | 99.5% | % |
| Noise emission(dB) | 97.2 | IP65 | 97.5 |
| Operation temperature | % | <35 | % |
| Cooling | 99.5 | -25°C~60°C | 99.5 |
| Relative Humidity | % | Natural | % |
| Altitude | 0~95% (non-condensing 2000m (>2000 Derating)) | | |
| Dimensions W*D*H(mm) | 530*200*600 | | |
| Weight(kg) | 29 | | |
| Isolation transformer | No | | |
| Self-consumption(W) | <3 | | |
| Display and communication | | | |
| Display | | | |
| Interface:RS485/Wifi/4G/ | | | |
| CAN/DRM | LCD | | |
| Safety standard | | | |
| EMC | Yes/ Opt/ Opt/ Yes/ Yes | | |
| On-grid | IEC/EN62109-1/-2, IEC/EN62477-1 | | |
| | IEC/EN 61000-6-1, IEC/EN 61000-6-3 | | |
| | : EN50549-1, Germany : VDE4105/0124, UK : G99, South Africa : NRS097-2-1:2017 | | |