DUTYPOINT SETTING THE BAR

PRODUCT DATASHEET RESIPOWER RK40S

ResiPOWER RK40S

Three-phase online UPS

PRODUCT FEATURES

- The smallest footprint in its class and its vertical internal layout ensure a low TCO
- PF I guarantees maximum power availability: Kva=KW for RK10S, RK15S, RK20S, RK30S and RK40S
- THDi <3% for low impact on the mains supply
- High protection on neutral line thanks to 3 poles battery breakers
- Built-in backfeed contactor
- Converts frequencies without derating, maximising power availability for loads with frequencies other than the mains input frequency
- Cold start function included
- Designed to minimise impact on generators and avoid the need for over-dimensioning them
- Up to 95% efficiency in online mode
- Internal manual bypass and 4-pole switches
- Vertical internal layout ensures easy maintenance
- Wrong phase sequence rotation protection
- High overload capacity for up to 1 minute at 150% load
- Built-in high-performance charger (10 kVA with standard charger for up to 10 A)
- Variable battery configuration: 26 to 40 individual 12 V blocks settable from the touch display
- Compatible with lithium-ion batteries or other technologies
- Up to 6 units can be connected in parallel for power or redundancy, settable from the touch display
- Separate or common batteries that can be configured for parallel systems
- Colour LCD touchscreen display for a user-friendly interface (14 selectable languages)
- Wide range of communication options included: two ports as standard, 1 x RS232 and 1 x USB, programmable dry contacts, plus two additional slots for optional cards



KEY OPTIONS

- SNMP, RS-485 ModBus cards
- Battery temperature sensor
- Parallel kit
- Remote touch panel for monitoring up to 64 units with 3 programmable output contacts

UPS settings and log file info up to 800 events can be easily downloaded to SD.



Settings and log file info

Removable SD card



LCD panel







PRODUCT DATASHEET RESIPOWER RK40S

TECHNOLOGY AND VERSATILITY WITH THE SMALLEST FOOTPRINT IN ITS CLASS

| Model | | RK40S |
|-----------------------------|---|---|
| Power | kVA | 40 |
| | kW | 40 |
| Input | Rated voltage | 400 V three-phase+neutral |
| | Voltage tolerance | ±20% @100% load, -40/+20% @50% load |
| | Rated frequency | 40-70 Hz |
| | Power factor | ≥ 0.99 |
| | Current distortion (THDi) | ≤ 3% at full load |
| Output | Rated voltage | 380/400/415 V three-phase+neutral |
| | Voltage stability | ±1% (static load) |
| | Frequency | 50/60 Hz |
| | Frequency stability | ±0.01% (free running) |
| | Power factor | 1 |
| | Crest factor | 3:1 |
| | Voltage distortion | $\leq\!\!2\%$ with linear load, $\leq\!\!5\%$ with distorting load |
| | Overload | 110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute |
| Battery | Number per string (batt 12V) | 32-40 configurable |
| | Max. charging current* | 39 A |
| | Common battery for parallel configuration | Supported |
| | Internal battery | N.A. |
| Efficiency | VFI mode | Up to 95% |
| | ECO mode | Up to 98% |
| | In battery | Up to 94% |
| Bypass | Rated voltage | 380/400/415 V three-phase+neutral |
| | Voltage tolerance | Basic window ±10% (programmable ±5% - ±15%) Critical window ±25% (programmable ±16% - ±30%) |
| | Frequency | 50/60 Hz |
| | Frequency tolerance | ±1 Hz / ±3 Hz (selectable) |
| General | Parallel connection | Up to 6 units |
| | Dimensions (W x D x H) mm | 260 x 850 x 890 (including wheels) |
| | Weight (kg) | 88 |
| | Protection class | IP 20 |
| Connectivity | User interface | 4.3" colour LCD touch screen display with removable SD card |
| | Built-in communication ports | USB, RS232, EPO, 1 in/3 out dry contact relays (programmable) and additional slots for optional cards |
| | Optional accessories | Cards: SNMP, RS-485 ModBus, 6 in/6 out dry contact relays, touch panel for remote monitoring |
| Environmental parameters | Operating temperature** | 0-40°C |
| | Relative humidity | 0-95% (non-condensing) |
| | Altitude (a.s.l.) | <1000 m with no power derating, >1000 m with 1% derating for every 100 m |
| | Audible noise at 1 m | <55 dBA |
| Regulations | Standards | IEC EN 62040-1, IEC EN 62040-2, IEC EN 62040-3 |
| | Marking | CE, UKCA |

*Subject to conditions. **To be verified according to the battery parameters. Specifications subject to change without notice - Rev. 2023/04.

