

# ResiPOWER RK20D

## Three-phase online UPS

### PRODUCT FEATURES

- The smallest footprint in its class and its vertical internal layout ensure a low TCO
- 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
- Internal battery up to 40 x 9 Ah (for 10, 15 and 20 kVA)
- 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.

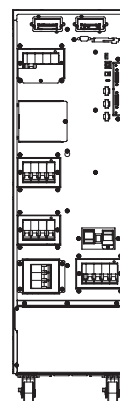


Settings and log file info

LCD panel

Removable SD card

### Back panel



### TECHNOLOGY AND VERSATILITY WITH THE SMALLEST FOOTPRINT IN ITS CLASS

Model		RK20D
Power	kVA	20
	kW	18
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)	3/1 - ≤ 5% at full load
		3/3 - ≤ 3% at full load
Output	Rated voltage	3/1 - 220/230/240 V single-phase+neutral 3/2 - 380/400/415 V three-phase+neutral
	Voltage stability	±1% (static load)
	Frequency	50/60 Hz
	Frequency stability	±0.01% (free running)
	Power factor	0.9
	Crest factor	3:1
	Voltage distortion	≤2% with linear load, ≤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*	21 A
	Common battery for parallel configuration	Supported
	Internal battery	Housing available for 40 x 12V 7/9 Ah batteries
Efficiency	VFI mode	Up to 95%
	ECO mode	Up to 98%
	In battery	Up to 94%
Bypass	Rated voltage	3/1 - 220/230/240 V single-phase+neutral 3/2 - 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)
	Parallel connection	Up to 6 units
General	Dimensions (W x D x H) mm	260 x 850 x 890 (including wheels)
	Weight (kg)	76
	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	<52 dBA
Regulations	Standards	IEC EN 62040-1, IEC EN 62040-2, IEC EN62040-3
	Marking	CE, UKCA

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

