



RELIABILITY Power Systems

REL2900G4 40 ~ 120KVA

True Online Dual Conversion UPS System

REL2900G4

40 kVA ~ 120 kVA
(3:3)
PF 1.0



Features

- Advanced dual-core DSP control technology and 3-level technology
- Output power factor 1.0
- Active Power Factor Correction Technology, input power factor up to 0.99
- System efficiency improved to 96%, energy saving rate is doubled
- Working efficiency up to 99% in ECO mode
- Dual input design, supporting independent bypass
- Advanced digital and parallel technology, providing higher reliability than single system
- Wide input voltage range, 50 / 60 Hz auto-sensing frequency
- 50 Hz / 60 Hz frequency conversion mode
- Compact internal layout, small footprint
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Features strong fault tolerance, one fan damaged takes 50% of the load, two fans damaged take 30% of the load
- Conformal coating technology to make UPS operate in harsh environment for a long time
- Effective hardware and software protection, robust self-diagnosis function, abundant event log for future
- Linear downgrading in low voltage input reducing battery discharging times
- Flexible battery configuration setting, selectable battery numbers: 30 ~ 44 pcs
- Digitally controlled charger (Max. 36 A)
- Ability to switch on the UPS by battery in the absence of mains power (Cold start)
- Zero switching time for UPS power supply mode when the mains power is unstable, ensuring the output is uninterrupted
- Settable delayed start time when mains power is restored
- 5 inches LCD colorful touch screen, friendly human & machine interface
- Powerful background software for parameters configuration and online upgrade
- Advanced multi-platform communication for UPS monitoring: RS232, USB, RS485, NET, dry contacts, SNMP card, Wi-Fi card and GPRS card
- Intelligent battery management, automatic equalized and float charging control, charger dormancy control, improving the reliability of charger and extending the battery life
- Options and accessories: RS232, USB, RS485, NET, parallel, LBS, dry contacts, EPO and battery temperature compensation interfaces supplied; optional SNMP card, Wi-Fi card, GPRS card, battery temperature sensor, EMD detector and SMS alarms

Specifications

MODEL	REL2900G4				
Capacity	40 kVA / 40 kW	60 kVA / 60 kW	80 kVA / 80 kW	100 kVA / 100 kW	120 kVA / 120 kW
INPUT					
Input wiring	Three-phase five-wire (3Φ + N + PE)				
Rated voltage	380 / 400 / 415 Vac				
Voltage range	304 ~ 485 Vac (no downgrading), 138 ~ 304 Vac (linear downgrading between 40% ~ 100% load)				
Rated frequency	50 / 60 Hz (auto-sensing)				
Frequency range	40 ~ 70 Hz				
Power factor	≥ 0.99				
Bypass voltage range	-60% ~ +20% (settable)				
Total harmonic distortion (THDI)	≤ 3%				
OUTPUT					
Output wiring	Three-phase five-wire (3Φ + N + PE)				
Rated voltage	380 / 400 / 415 Vac				
Voltage regulation	± 1%				
Frequency	Synchronized with utility in mains mode, 50 / 60 Hz ± 0.1% in battery mode				
Waveform	Sinusoidal				
Power factor	1				
Total harmonic distortion (THDv)	≤ 1% (linear load); ≤ 4% (non-linear load)				
Crest factor	3:1				
Overload	105% ~ 110% for 60 min, 110% ~ 125% for 10 min, 125% ~ 150% for 1 min, > 150% for 0.2 s				
BATTERIES					
DC voltage	± 192 Vdc (± 180 ~ ± 264 Vdc settable) 40 kVA built-in battery: ± 240 Vdc (80 pcs 9 Ah/12 V)				
Number of battery	32 pcs (30 ~ 44 pcs settable)				
Charging current (max.)	12 A	24 A		36 A	
Recharge time	Depend on the capacity of battery				
SYSTEM					
Efficiency	Max. 96% in online mode, 99% in ECO mode				
Transfer time	0 ms				
Protections	Short-circuit, overload, overtemperature, excessive low battery, overvoltage, undervoltage, fans failure				
Max. number of parallel connections	4				
Communications	Standard configuration: RS232, USB, RS485, NET, dry contacts; Optional configuration: SNMP card, Wi-Fi card, GPRS card				
Display	5 inches colorful LCD touch screen				
OTHERS					
Operating temperature	0°C ~ 40°C				
Storage temperature	-25°C ~ 55°C (without battery)				
Relative humidity	0% ~ 95% (non-condensing)				
Altitude	≤ 1000 m; above 1000 m, downgrading 1% for each additional 100 m				
IP rating	IP 20				
Noise level at 1 m	≤ 65 dB				
Dimensions (W × D × H) (mm)	360 × 850 × 885	360 × 850 × 950	360 × 850 × 1200	440 × 850 × 1200	
Packaged dimensions (W × D × H) (mm)	450 × 940 × 1055	450 × 940 × 1120	450 × 940 × 1370	530 × 940 × 1370	
Net weight (kg)	95, 295 (built-in BAT)	130.5	156	198	
Gross weight (kg)	110, 310 (built-in BAT)	145	172	218.5	

- All specifications are subject to change without notice.
- Custom-made specifications are acceptable.
- Derate capacity to 90% when the number of batteries is set to 30 pcs.

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