RELIABILTY Power Systems

REL2900Pro 5 ~ 30KVA

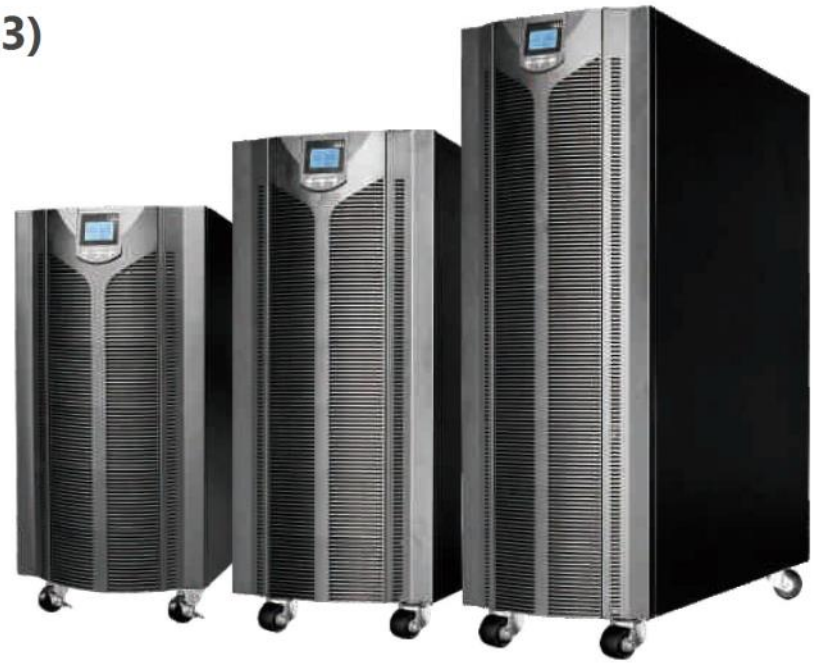
True Online Dual Conversion UPS System

www.reliability-power.com

REL2900PRO

5KVA ~ 30KVA (3:3)

PF 0.9



Features

- DSP digital control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Cold start
- Dual input
- Wide input voltage range (190V ~ 485V)
- Auto sensing frequency
- 50 / 60Hz frequency conversion mode
- Work efficiency up to 98% in ECO mode
- Auto control fan speed when loads varies
- Auto power ON/OFF according to the load capacity set by users
- Flexible battery configuration for using 14/16/18/20 pcs batteries
- Compact internal layout, miniaturized the complete unit for small footprint
- LCD+LED display, multi-functional keys operation, friendly human-machine interface
- Powerful background software for parameters configuration and online updating
- Doubling the battery charging speed, 90% capacity restored in 4 hours (standard model UPS)
- Linear derating in low voltage input, reducing battery discharging times, extending the service life of battery
- Advanced battery management (ABM), automatic floating / equalizing charge control, charger dormancy control
- Configurable switching time from battery mode to mains mode when mains power is restored, reducing the impact on power grid or generator
- Effective software and hardware protection function, powerful self-diagnostic function, abundant historical records
- Standard emergency power off (EPO)
- Standard maintenance bypass
- Standard RS232/USB communication port
- Optional RS485 / SNMP / AS400 communication port and SMS alarms
- Optional N+X redundancy parallel up to 6 units
- Optional battery temperature compensation, EMD environmental sensors

Rear Panel

1. Mains Input
2. DC Input
3. Bypass Input
4. Output
5. Mains Input Breaker
6. Bypass Input Breaker
7. Maintenance Bypass
8. Fan
9. RS232
10. USB
11. EPO
12. Battery Temperature Compensation (Optional)
13. Intelligent Slot 1 (SNMP / AS400 / RS485 Optional)
14. Intelligent Slot 2 (SNMP / AS400 / RS485 Optional)
15. Parallel Card (optional)
16. Battery Breaker

5~10k Long-Backup Model | 15~30k Long-Backup Model | 5~10k Standard Model | 15~30k Standard Model

Specifications

MODEL	REL2900Pro—Long Backup Model					
Capacity	5 kVA / 4.5 kW	8 kVA / 7.2kW	10 kVA / 9 kW	15 kVA / 13.5 kW	20 kVA / 18 kW	30 kVA / 27 kW
INPUT						
Rated voltage	360 V / 380 V / 400 V / 415 Vac					
Voltage range	277 ~ 485 Vac (no derating); 190 ~ 277 Vac (linear derating between 50% and 100% load)					
Rated frequency	50 / 60 Hz (auto-sense)					
Frequency range	40 ~ 70 Hz					
Power factor	⩾ 0.99					
Total harmonic distortion (THDI)	⩽ 5%					
Bypass voltage range	-40% ~ + 15% (settable)					
OUTPUT						
Voltage	360 V / 380 V / 400 V / 415 Vac (settable)					
Voltage regulation	± 1%					
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)					
Waveform	Sinusoidal					
Crest factor	3:1					
Total harmonic distortion (THDV)	⩽ 2% (linear load); ⩽ 5% (non-linear load)					
Transfer time	Mains mode to battery mode: 0 ms; Inverter mode to bypass mode: 0 ms					
Inverter overload capability	102% ~ 125%: transfer to bypass in 10 mins; 125% ~ 150%: transfer to bypass in 1 min; > 150%: transfer to bypass in 0.5 s					
Bypass overload capability	102% ~ 125%: shut down in 20 mins; 125% ~ 150%: shut down in 2 mins; > 150%: shut down in 1 s					
BATTERIES						
DC voltage	Long Back-up Model:192 VDC (168V / 192V / 216V / 240V optional)					
Batteries Placement	External Battery Installation					
Recharge time	Long Back-up Model: depend on the capacity of battery					
SYSTEM						
Efficiency	⩾ 93%, ECO mode 98%					
Display	LCD + LED					
Alarm	Battery mode, low battery, fans fault etc.					
Max. parallel numbers	6					
EMI	IEC / EN62040-2					
EMS	IEC61000-4-2 (ESD)					
	IEC61000-4-3 (RS)					
	IEC61000-4-4 (EFT)					
	IEC61000-4-5 (surge)					
COMMUNICATIONS						
RS232 / USB / RS485 / dry contacts	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10					
SNMP	Power management from SNMP manager and web browser					
OTHERS						
Humidity	20 ~ 90% RH @ 0 ~ 40℃ (non-condensing)					
Noise level	⩽ 60 dB (1m)			⩽ 65 dB (1m)		
Dimensions (W × D × H) (mm)	350 × 655 × 732					
Packaged dimensions (W × D × H) (mm)	472 × 780 × 920					
Net weight (kg)	55			60	61	65
Gross weight (kg)	65			70	71	75

- Derate capacity to 90% when the output voltage is adjusted to 360Vac.
- All specifications subject to change without notice.
- Custom-made specifications are acceptable.

Specifications

MODEL	REL2900Pro—Standard Backup Model					
Capacity	5 kVA / 4.5 kW	8 kVA / 7.2kW	10 kVA / 9 kW	15 kVA / 13.5 kW	20 kVA / 18 kW	30 kVA / 27 kW
INPUT						
Rated voltage	360 V / 380 V / 400 V / 415 Vac					
Voltage range	277 ~ 485 Vac (no derating); 190 ~ 277 Vac (linear derating between 50% and 100% load)					
Rated frequency	50 / 60 Hz (auto-sense)					
Frequency range	40 ~ 70 Hz					
Power factor	⩾ 0.99					
Total harmonic distortion (THDI)	⩽ 5%					
Bypass voltage range	-40% ~ + 15% (settable)					
OUTPUT						
Voltage	360 V / 380 V / 400 V / 415 Vac (settable)					
Voltage regulation	± 1%					
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)					
Waveform	Sinusoidal					
Crest factor	3:1					
Total harmonic distortion (THDV)	⩽ 2% (linear load); ⩽ 5% (non-linear load)					
Transfer time	Mains mode to battery mode: 0 ms; Inverter mode to bypass mode: 0 ms					
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Bypass overload capability	102% ~ 125%: shut down in 20 mins; 125% ~ 150%: shut down in 2 mins; > 150%: shut down in 1 s					
BATTERIES						
DC voltage	Standard model:192 VDC (168V / 192V / 216V / 240V optional)					
Batteries Placement	Built-in Battery Pack for Standard Backup					
Recharge time	Standard model: 90% capacity restored in 4 hours					
SYSTEM						
Efficiency	⩾ 93%, ECO mode 98%					
Display	LCD + LED					
Alarm	Battery mode, low battery, fans fault etc.					
Max. parallel numbers	6					
EMI	IEC / EN62040-2					
EMS	IEC61000-4-2 (ESD)					
	IEC61000-4-3 (RS)					
	IEC61000-4-4 (EFT)					
	IEC61000-4-5 (surge)					
COMMUNICATIONS						
RS232 / USB / RS485 / dry contacts	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10					
SNMP	Power management from SNMP manager and web browser					
OTHERS						
Humidity	20 ~ 90% RH @ 0 ~ 40℃ (non-condensing)					
Noise level	⩽ 60 dB (1m)		⩽ 65 dB (1m)			
Dimensions (W × D × H) (mm)	350 × 785 × 858		350 × 785 × 1078			
Packaged dimensions (W × D × H) (mm)	472 × 910 × 1050		472 × 910 × 1260			
Net weight (kg)	115		155	175	235	
Gross weight (kg)	125		170	190	250	

- Derate capacity to 90% when the output voltage is adjusted to 360Vac.
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- Custom-made specifications are acceptable.

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