



THREE PHASE ONLINE DOUBLE CONVERSION UPS

GROUPS 99XX Series from 160kVA to 800kVA

160KVA ~ 800KVA (3:3)



GROUPS 99XX series UPS 160KVA-800KVA double conversion technology with a very advanced design criteria improves the performance of components, minimizes the quantity of raw material used on the magnetic and reduces the number of semiconductors thus reducing servicing time and ownership costs. This UPS has high efficiency (>93%) and input power factor (>0.99) built-in output isolation transformer. The inverter transformer prevents the direct feed-through of the battery potential into the critical load and allows a very high rejection ratio of the power supply disturbances (spikes, surges etc).

Features

- Online double-conversion with DSP control
- IGBT rectifier and high input power factor (>0.99)
- High efficiency 93%
- Output power factor 0.9
- Low input distortion: THD<5%
- Generator compatible
- Output isolation transformer
- Inverter IGBT technology with high frequency communication
- High immunity to external disturbances
- Independent control on the three inverter phases
- High instantaneous overload capacity
- High MTBF (>200,000h)
- Capability of supplying distorted loads, containing output voltage distortion with crest factors
- Front access makes maintenance and replacement easy, save space
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- Low MTTR (<0.5h)
- Standard emergency power off (EPO)
- Standard RS232 / RS485 / dry contacts communication port
- Optional SNMP communication port
- Optional N+X redundancy parallel up to 6 units

Online Transformer Base UPS

Specifications

MODEL	GROUPS 9916	GROUPS 9920	GROUPS 9925	GROUPS 9930	GROUPS 9940	GROUPS 9950	GROUPS 9960	GROUPS 9980
Capacity	160 KVA 144 KW	200 KVA 180 KW	250 KVA 225 KW	300 KVA 270 KW	400 KVA 360 KW	500 KVA 450 KW	600 KVA 540 KW	800 KVA 720 KW
INPUT								
Rated voltage	380 V / 400 V / 415 Vac							
Voltage range	346 V ~ 456 V (full load) 304 V ~ 346 V (power derating 10%)							
Rated frequency	50 / 60 Hz							
Frequency range	50 / 60 Hz ± 5 Hz							
Power factor	≥ 0.99							
Total harmonic distortion (THDI)	≤ 3%							
Input current-limiting	1.1 times of rated current (0.1 ~ 1.1 settable)							
Rectifier delay start	10 s (1 ~ 300 settable)							
Bypass voltage range	± 20% (settable)							
OUTPUT								
Rated voltage	380 V / 400 V / 415 Vac							
Voltage regulation	± 1%							
Frequency	Synchronized with utility in mains mode; 50 / 60 Hz ± 0.1% in battery mode							
Waveform	Sinusoidal							
Crest factor	3:1							
Total harmonic distortion (THDV)	≤ 2% (linear load); ≤ 5% (non-linear load)							
Transfer time	0 ms							
Inverter overload capability	105% ~ 110% for 60 minutes; 110% ~ 125% for 10 minutes;							
Slight adjustment of inverter output voltage	± 5 V							
BATTERIES								
DC voltage	600 Vdc (support 576 Vdc / 588 Vdc / 612 Vdc / 624 Vdc)							
Number of battery	50 pcs (support 48 / 49 / 51 / 52 pcs)							
Charging current	Charging rate (settable) × battery capacity (settable) × number of battery group (settable)							
Battery state display	Battery remaining capacity and backup time							
Battery self-test	Settable periodic self-test; manually configurable test time and voltage							
SYSTEM								
Efficiency	Line mode ≥ 93%, ECO mode ≥ 98%							
Max. parallel numbers	6							
Protections	Short-circuit, overload, overtemperature, overvoltage, undervoltage, battery low voltage and fan failure							
IP rating	IP 20							
Display	5.7 inches LCD touch screen							
COMMUNICAITONS								
RS232 / RS485 / dry contacts	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10							
SNMP (optional)	Power management from SNMP manager and web browser							
OTHERS								
Operating temperature	0 ~ 40°C							
Storage temperature	- 25°C ~ 55°C (no battery)							
Humidity	5% ~ 95% (non-condensing)							
Noise level at 1 m	< 65 dB				< 70 dB		< 75 dB	
Dimensions (W × D × H) (mm)	800 × 860 × 1700		1210 × 860 × 1950		2380 × 860 × 1950		4300 X 860 X 1900	
Packaged dimensions (W × D × H) (mm)	900 × 1000 × 1950		1300 × 1000 × 2200		1300 × 1000 × 2200 (×2)		4400 X 1000 X 2200	
Net/Gross weight (kg)	790 / 810	1135 / 1200	1275 / 1340	1355 / 1420	2090 / 2200	2300 / 2410	2800	2900

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.