KWL890

KWL890 series UPS 160 ~ 500KVA use double conversion technology with advanced design criteria to improve the performance of components, minimizes the quantity of raw material 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 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

MODEL	KWL89160	KWL 89200	KWL 89250	KWL 89300	KWL 89400	KWL 89500
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
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 Units	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℃					

Storage temperature	- 25℃ ~ 55℃ (no battery)					
Humidity	5% ~ 95% (non-condensing)					
Noise level at 1 m	< 65 dB				< 70 dB	
Dimensions (W×D×H) (mm)	800 × 860 × 1700	1210 × 860 × 1950			2380 × 860 × 1950	
Packaged dimensions (W×D×H) (mm)	900 × 1000 × 1950	1300 × 1000 × 2200			1300 × 1000 × 2200 (×2)	
Net / Gross weight (kg)	790 / 816	1135 / 1200	1275 / 1340	1355 / 1420	2090 / 2200	2300 / 2410