

# powerworks

## PW3

## 50KVA – 300KVA ON-LINE DOUBLE CONVERSION UPS

THREE PHASE TRANSFORMERLESS UPS WITH  
PARALLEL OPERATION CAPABILITY

### TECHNOLOGY

On-line double conversion with  
static bypass

### APPLICATION

True on-line protection for mission critical  
data centres, computer suites and industrial  
control room applications

Simple set up for parallel operation up to  
8 units to achieve n + 1 redundancy or for  
expanding load



## BENEFITS AND FEATURES

- True on-line, double conversion technology
- Advanced PWM inverter
- Independent phase regulation
- High efficiency power conversion
- Input power factor >0.96
- Low harmonic distortion of the supply
- Admissible output overload of up to 125% (10')
- Separate rectifier and reserve inputs standard on all models
- Static and maintenance bypass standard on all models
- Zero transfer time to bypass
- Redundant and parallel versions up to 8 UPS modules
- Digital control by ASIC
- User interface through alpha numeric display programmable in 5 languages
- RS232, RS485 (optional), AS-400 communication ports
- Advanced Battery Management (ABM)
- Water cooled power section above 160kVA
- Compact design
- "Green Mode" option available
- Isolation transformer option available

MODEL	POWER RATING		UPS DIMENSIONS (MM) WIDTH X HEIGHT X DEPTH MM	WEIGHT (KG)
	KVA	KW		
PW3 50	50	40	530 x 1220 x 950	180
PW3 60	60	48	700 x 1900 x 740	295
PW3 80	80	64	700 x 1900 x 740	330
PW3 100	100	80	700 x 1900 x 740	370
PW3 120	120	96	700 x 1900 x 740	450
PW3 160	160	128	1260 x 1800 x 800	570
PW3 200	200	160	1260 x 1800 x 800	600
PW3 250	250	200	1260 x 1800 x 800	630
PW3 300	300	240	1260 x 1800 x 800	630

### Technology

On-line, double conversion, transformerless

### Input

Voltage 3 x 380 / 400 / 415 V (3P + N)  
 Input range 3 x 330 - 480 + N  
 Frequency 40 - 70 Hz  
 6 pulses rectifier With walk-in-time (soft start)  
 Input power factor >0,95 or better

### Output

Voltage 3 x 380 / 400 / 415 V (3P + N) nominal  
 Accuracy ±1% at steady state  
 ±4% at dynamic state 50% load step  
 ±5% with load step of 100%  
 Frequency 50/60Hz, selectable synchronisation ±1%, 2%, 5%,  
 and 10% ±0.005% Free running ±0.005%  
 Slew rate ±1 HZ per second  
 Wave form Sinusoidal  
 Efficiency 92% to 94%, >95% (green mode)  
 Total Harmonic Distortion (THD) <3%  
 Admissible overload 125% for 10 minutes

### Static Bypass

Type and actuation criteria Solid state, digital control  
 Transfer time Zero  
 Voltage 3 x 380 / 400 / 415V (3P + N)  
 Frequency 50 or 60Hz  
 Re-transference Automatic on alarm clear  
 Admissible overload 1000% for 100ms  
 Transfer to Bypass Immediate for overloads greater than 150%

### Manual Bypass

Transference type Manual, integral for service

### Batteries

Type Sealed Lead Acid, maintenance free, gas recombination  
 Recharging time From end of autonomy up to 80%, 4 hours typical  
 Protection Protection against overvoltages, undervoltages and  
 alternating current component  
 Charging voltage management ABM-charging curve according to the temperature

### Communication

Communication ports RS-232 and AS-400 as standard

### Environment adaptability options

12 pulse rectifier + THD filter  
 Extended autonomies  
 Other battery types  
 Isolation bypass transformer and external manual bypass  
 Monitoring and automatic shutdown software  
 Frequency and voltage adaptability  
 Separate bypass line

## ADDITIONAL SERVICES

### UPS

A full range of UPS systems from 1kVA to 300kVA and above, configured to precisely meet your needs.

### Generators

Diesel Generators provide extended backup time for both the UPS and other critical systems.

### Modular IT Rooms

Custom built and fully fitted out high integrity computer rooms offering excellent protection against fire, flood and other environmental risks.

### Electrical Installation

Complete end to end installation service to the highest standards.

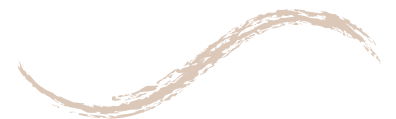
### Maintenance and Emergency Service

24 hours a day x 7 days a week engineering support.

### Remote Monitoring and Software

Complete range of network ready monitoring and automatic service shutdown software.

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