

TECHNOLOGY:	TRUE ON LINE Double Conversion
CLASSIFICATION:	VFI-SS-111 (EN 62040-3)
POWER RANGE:	30 ÷ 300 kVA
No. OF PHASES:	3:3



■ APPLICATIONS

- Large computer networks
- Data processing centres
- Clusters
- Medical and industrial equipment
- Tele-information systems
- Automation and control systems

■ Specification

Fully scalable - 30kVA power modules

True On-Line Double Conversion Technology provides perfect output voltage parameters, regardless of the input voltage and the load.

High input power factor reduces the value of current drawn from the mains.

Rectifier and Inverter SPWM IGBT lower cost - simple hardware circuit - high IGBT utilization - excellent THDi and Input Power Factor performance.

Highest output power factor PF=1 allows load of versatile characteristics to be powered.

Modular hot swap design allows maintenance or repair work without turning OFF the inverter. Hot swappable power and bypass module.

Wide input voltage range for normal mode ensures that the batteries are used only if necessary - in fact, only when the input voltage is completely lost.

Automatic Bypass (Static Switch) provides continuous load supply in critical conditions, such as overheating or inverter failure.

Wide input frequency range for normal mode gives possibility for seamless operation with different power sources - as mains or the generating set.

Maintenance Bypass (uninterruptible) enables service handling without necessity of shutting off the load.

Advanced Battery Management gives reliability of optimal charging and using batteries, elongates its lifetime and reduces operating costs.

Communication:

USB, RS-232 for UPS and load supervision and control,
DryContact alarm indicators,
Ethernet interface for computer-network communication with SNMP protocol support

Excellent voltage quality is provided by IGBT inverter and high-frequency PWM technology; the output voltage has always stable parameters, independent of input disturbances and the load characteristics.

Small dimensions requires small area for unit operation.

High overload capacity indicates power reliability during transient conditions and high resistance on handling faults.

High efficiency (>96%) reduces heat dissipation and limits power consumption costs.

User configurable settings enable user to set nominal voltages, frequency, preferred operating modes..

ECO-Mode gives possibility of significant cost reduction and in practice stops heat emission.

Remote Emergency Power Off port (REPO) provides remote shutting off the load and UPS in case of emergency.

Configurable number of batteries 32-40pcs and charging current – allows user to set required autonomy time.

Emergency Power Off (EPO) button placed on UPS control panel provides immediate shutting off the load.

Automatic diagnostics ensure that components and parameters are controlled without user interference.

Redundancy configurations:
 Parallel for capacity or redundancy,
 Hot Standby

BW

Model	BW
Capacity kVA	30 ÷ 300 kVA
Capacity of power module	30kVA / 30kW
Number of phases in:out	3:3
Hotswap power module	Yes
Possibility of configuration	10, 15, 20, 25 or 30 kW power module
Input	
Voltage	380 / 400 / 415 VAC
Voltage range	305 – 478 Vac for load ≥70% 208 – 478 Vac for load <70%
Frequency	50/60 Hz
Frequency range	-20% ÷ +20 %
THDi	<3%
THDu linear/not linear	<1% / <3%
Input power factor	≥ 0.99
Output	
Voltage	380 / 400 / 415 VAC
Voltage regulation static/dynamic	±1% / ±3%
Frequency	50/60 ± 0.05 Hz
Overload capacity	110% - 60 min., 125% - 10 min., 150% - 60 sec., > 150% - 2sec.
Efficiency	>96%
Eco Mode efficiency	99%
Crest factor	3:1
Batteries	
Type	Maintenance free, sealed VRLA AGM
Quantity	32÷40 pcs
Cold start	yes
Charging	4 – 8 hours up to 90% of capacity, in accordance with DIN 41773
Weight and dimensions	
Weight and dimensions of cabinet (WxDxH)	BW STS
	600 mm x 1100 mm x 2000 mm
	275 kg
Weight and dimensions of power module (WxDxH)	BW PM 30
	440 mm x 650 mm x 135 mm (3U)
	34,5 kg
Communications	
Operation mode indicators	LCD touch screen, LED indicators, sound alarm
Communication	RS-232, USB, Dry Contact, SNMP slot, REPO, parallel work connector, Automatic diagnostic and error logs. Logs error > 2600
Environmental	
Noise Level depending the load and temp.	< 60 dB (A)
Operating temperature for UPS	0 °C ÷ 40 °C
Recom. operating temperature for UPS and batteries	15 °C ÷ 25 °C
Storage temperature	- 20 °C ÷ 40 °C
Humidity	0 ÷ 95 % (non condensing)
Certifications	
Standards	CE, EN62040-1:2008, EN62040-2:2006,
Options	
- SNMP Web	- External battery cabinets
- Environmental sensor (EMD)	- External Maintenance Bypass
- REPO	- 30kVA Power modules

