

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.

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

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

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

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

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

**Small dimensions** requires small area for unit operation.

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

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

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

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

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

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

**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.

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

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

**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.

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

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

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

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

**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
<b>Input</b>	
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
<b>Output</b>	
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
<b>Batteries</b>	
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
<b>Weight and dimensions</b>	
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
<b>Communications</b>	
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
<b>Environmental</b>	
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)
<b>Certifications</b>	
Standards	CE, EN62040-1:2008, EN62040-2:2006,
<b>Options</b>	
- SNMP Web	- External battery cabinets
- Environmental sensor (EMD)	- External Maintenance Bypass
- REPO	- 30kVA Power modules

