

TECHNOLOGY:	TRUE ON LINE Double Conversion
CLASSIFICATION:	VFI-SS-111 (EN 62040-3)
POWER RANGE:	50 ÷ 100 kW
No. OF PHASES:	3:3



■ APPLICATIONS

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

■ SPECIFICATION

Up to four unit parallel work for capacity or redundancy

True On-Line Double Conversion technology ensures excellent output voltage parameters regardless of the power disturbances and the type of receivers being powered.

IGBT rectifier the most advanced technology ensuring very low THDi and high power factor.

The modular design ensures easy power scalability in the 50 - 100kW range at any time without interrupting the system - "Hot Swap" replacement. The modular solution minimizes MTTR (Mean Time To Repair) and guarantees the possibility of configuring a N + X redundant system within a single housing, thereby increasing the reliability of the power system

Automatic Bypass uninterrupted supply of uninterrupted power supply to critical loads such as overheating or failure..

Maintenance Bypass allows servicing of devices without switching off powered receivers. Dual input provides the ability to provide a reserve power source for receivers even in the event of a device failure or UPS protection in the main track.

Communication interfaces: RS232, RS485, MODBUS for UPS monitoring and management, - DryContact relay contacts for cooperation with BMS systems, -SNMP integration with NMS network management systems, -Remote Switch Connector A. Fire (REPO) to ensure remote disconnection of power supply to receivers in the event of a fire, - A.Fire. Switch (EPO) on the control panel enables immediate disconnection of power from the receivers, -7 "LCD control and monitoring panel (touch) gives the possibility of diagnostics parameters and operation mode of the power supply, enables recording of events and, among others, graphical preview of current and voltage waveforms.

Small size the 100 kW UPS occupies a space of 0.58 m² and provides a power density of 172 kW / m².

High efficiency of the device (> 96%) limits the heat emitted, making possible cooling of rooms easier and cheaper.

ECO mode allows a significant reduction of the unit's operating costs and virtually eliminates heat emission.

Dual input lines gives possibility of using separate rectifier and Bypass power lines increases the availability of power to the receivers.

Automatic diagnostics and digital control (32 bit DSP x2) guarantees full device efficiency, component control and operating parameters without the need for user intervention.

The high value of the input power factor 0.99 limits the value of the current consumed by the device from the network.

The highest value of the output power factor 1.0 allows the load of the power supply with full active power.

The wide range of input voltage in the normal operation mode ensures stable operation of the device without the need to use the battery, which significantly affects the extension of their service life.

A wide range of input frequencies in the normal operation mode allows free use of the power supply in a network with unstable parameters and when powered from a power generator.

Simple to use - easy to connect to the network and simple switching on and off the device does not require special qualifications from the user.

Advanced battery management guarantees optimal charging and use of batteries, increases their lifespan and lowers operating costs. Temperature compensation function of the charging voltage.

Excellent quality of output voltage, achieved thanks to the use of a 3-level IGBT inverter, with the use of advanced PWM control technology, provides voltage with stable parameters, regardless of the power disturbances and the type of powered equipment.

High overload protection ensures device protection and continuity of power supply in the presence of transient transients.

Advanced software that allows the user full control over the device and powered receivers.

Configurable work parameters - nominal voltages, frequencies, preferred modes of operation, communication method - significantly broadens the range of possible applications.

Redundant configurations:

- redundant work for increased reliability
- capacitive parallel operation for increased power
- work as HotStandby

HS

Model	HS 105	
Power	50 kVA / 50 kW	100 kVA / 100 kW
Number of phases in:out	3:3	
Input		
Voltage	380 / 400 / 415 VAC	
Voltage range	-43 % ÷ 25%	
Frequency	50/60 Hz	
Frequency range	-20% ÷ 20%	
THDi	<3%	
Input power factor	≥ 0,99	
Output		
Voltage	380 / 400 / 415 VAC	
Voltage regulation static/dynamic	±1% / ±2%	
Frequency	50/60 ± 0,05 Hz	
Overload capacity	110% - 10 min, 125% - 1 min., 150% - 5 sec., >150% - 200 ms	
Efficiency	>96%	
Eco mode efficiency	99%	
Crest factor	5:1	
Batteries		
Type	Maintenance free, sealed VRLA AGM	
Cold start	yes	
Configurable batteries	36-44 psc. 12V	
Charging	3 ÷ 8 hours up to 90% of capacity	
Weight and dimensions		
Dimensions of UPS (WxDxH)	600 x 980 x 1150 mm	
Weight of UPS	165 kg	210 kg
Communications		
Operation mode indicators	Touchable 7 " LCD display, LED indicators , sound alarm, LCD in each power module	
Communication	RS232, RS485, MODBUS RTU/ASCII, USB, Dry Contact, SNMP , REPO, parallel slots	
Environmental		
Noise level depending the load and temp.	< 62 dB (A)	
Operating temperature for UPS	0 °C ÷ 40 °C	
Recommended operating temperature for UPS and batteries	15 °C ÷ 25 °C	
Storage temperature	- 15 °C ÷ 55 °C	
Humidity	5 ÷ 95 % (non condensing)	
Certifications		
Standards	EN 62040-2:2005, EN 62040-2:2006, EN 60950-1, CE	
Options		
- SNMP card	- Remote status panel	-
- Uninterruptible External Maintenance Bypass	- Software	
- Modbus card and Dry Contact	- Battery cabinets or rack.	

