

NGS

TECHNOLOGY:	TRUE ON LINE Double Conversion
CLASSIFICATION:	VFI-SS-111 (EN 62040-3)
POWER RANGE:	10 - 40 kVA
No. OF PHASES:	3:3



■ APPLICATIONS

- Computers network
- Data processing centers
- Industrial equipment
- Clusters
- Tele information systems
- Automation and control systems

■ SPECIFICATION

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

Rectifier IGBT the most advanced technology which provides very low THDi and high power factor.

Automatic bypass provides continuous load supply in critical conditions, such as overheating or inverter failure.

Maintenance bypass enables service handling without necessity of shutting off the load.

Communication:
RS232, RS485, MODBUS for UPS and load supervision and control,
DryContact alarm indicators; work with BMS system
SNMP integration with systems management network NMS.

Remote emergency power off (REPO) provides remote shutting off the load and UPS in the case of emergency.

Emergency power off (EPO) on UPS provides very quickly shutting off the load and UPS.

LCD control panel displays UPS and power parameters as well as hundreds of useful information.

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 reduces heat emission.

Automatic diagnostics and fully digital control (2x 32bit DSP) ensure that components and parameters are controlled without user interference.

High input power factor 0,99 reduces the value of current drawn from the mains.

The highest output power factor up to 1,0 allows load of versatile characteristics to be powered.

Wide input voltage range for normal mode ensures that 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.

Simple maintenance microprocessor control and 24/7 operation mode means that unit does not require specialized handling.

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

Excellent voltage quality is provided by 3level IGBT inverter and high frequency PWM technology, the output voltage has always stable parameters independent of input disturbances and the load characteristics.

Advanced software provides to customer full control of unit and load.

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

Redundancy configurations:
 - parallel for capacity or redundancy
 - Hot Standby

NGS

Model	NGS 10	NGS 15	NGS 40
Power	10 kW / 10 kVA	15 kW / 15 kVA	40kW / 40 kVA
No. Of phases IN : OUT	3:3		
Input			
Voltage	380 / 400 / 415 VAC		
Voltage range	-43% ÷ +20%		
Frequency	50 / 60 Hz		
Frequency range	-20% ÷ +20%		
THDi	<3%		
Input power factor	≥0,99		
Output			
Voltage	380 / 400 / 415 VAC		
Power factor	1,0		
Voltage regulation static/dynamic	±1% / ±2%		
Frequency	50 / 60 ± 0,05 Hz		
Overload capacity inverter	110% - 60 min., 125% - 10 min., 150% - 60 s, >150% - 300 ms		
Overload capacity bypass	125% - continuous, 130% - 10 min., 150% - 1 min., >150% - 300 ms		
Short-circuit resistance	340% value of nominal current for 200 ms		
Efficiency in On-Line mode	>96%		
Efficiency in Eco Mode	99%		
Crest factor	3:1		
Batteries			
Cold start	Yes (option)		
Amount of batteries in 1 string (external batteries)	36-44 pcs. Of batteries 12V		
Internal batteries	40 pcs of 7Ah/9Ah	2 x 40 psc of 12 Ah or 4 x 32 x 7/9Ah	
Charging time	3 – 8 hours up to 90% of capacity (configurable)		
Weight and dimensions			
Dimensions and weight of UPS [mm] (W x D x H) without internal batteries	250 x 840 x 715 51,5 kg	500 x 840 x 1400 140 kg	
Communications			
Working indicator	LCD + indicators LED, sound alarm		
Communication	RS232, RS485, USB , Modbus, DryContact, REPO Option: SNMP, parallel work		
Environmental			
Noise level (depends how many modules)	<58 dB @ load. 100%, <52 dB @ load. 50%		
Operating temperature for UPS	0°C ÷ 40°C		
Recommended operating temperature for UPS	15°C ÷ 25°C		
Storage temperature	-20°C ÷ 40°C		
Humidity	0 ÷ 95% (without condensing)		
Certification			
Standards	EN 62040-2:2005, EN 62040-2:2006		
Safety	IEC62040-1-1, CE, 62040-3 :2001		
Options			
- Uninterruptible external maintenance bypass	- Battery Cold Start		
- SNMP card	- Parallel card		
- Environmental sensor (EMD)			