

## NGS

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



### ■ 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		
<b>Input</b>			
Voltage	380 / 400 / 415 VAC		
Voltage range	-43% ÷ +20%		
Frequency	50 / 60 Hz		
Frequency range	-20% ÷ +20%		
THDi	<3%		
Input power factor	≥0,99		
<b>Output</b>			
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		
<b>Batteries</b>			
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)		
<b>Weight and dimensions</b>			
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	
<b>Communications</b>			
Working indicator	LCD + indicators LED, sound alarm		
Communication	RS232, RS485, USB , Modbus, DryContact, REPO Option: SNMP, parallel work		
<b>Environmental</b>			
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)		
<b>Certification</b>			
Standards	EN 62040-2:2005, EN 62040-2:2006		
Safety	IEC62040-1-1, CE, 62040-3 :2001		
<b>Options</b>			
- Uninterruptible external maintenance bypass	- Battery Cold Start		
- SNMP card	- Parallel card		
- Environmental sensor (EMD)			

Official Distributor: