



TECHNOLOGY: **TRUE ON LINE Double Conversion**

CLASSIFICATION: **VFI-SS-111** (EN 62040-3)

POWER RANGE: **10, 15, 20 kVA**

No. OF PHASES: **3:3 , 3:1**

## 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 load 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:

**USB, Intelligent slot** to monitor and manage the operation of the power supply and receivers,  
**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 stops 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

# UNINTERRUPTIBLE POWER SUPPLY



THE POWER IS ON

Power	10 kW / 10 kVA		15 kW / 15 kVA	20kW / 20 kVA
No. Of phases IN : OUT	3:3, 3:1			
Input				
Voltage	380 / 400 / 415 VAC			
Voltage range	-53% ÷ +30%			
Frequency	50 / 60 Hz			
Frequency range	-20% ÷ +20%			
THDi	<3%			
Input power factor	≥0,99			
Output				
Voltage	380 / 400 / 415 VAC or 220 / 230 / 240 VAC			
Power factor	1,0			
Voltage regulation static/dynamic	±1% / ±2%			
THDu linear / not linear load	<1% / <3%			
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			
Shot-circuit resistance	340% value of nominal current for 200 ms			
Efficiency in On-Line mode/Eco mode	>96% / 99%			
Crest factor	3:1			
Batteries				
Cold start	Yes			
Amount of batteries in string	16 - 20 pcs x 12 V	32 – 40 psc x 12 V		
Max amount of internal batteries	40 psc of 7/9 Ah			
Max charger current	12 A			
Charging time	3 – 8 hours up to 90% of capacity (configurable)			
Weight and dimensions				
Dimensions and weight of UPS (W x D x H)	250 x 627 x 827 mm			
	44 kg	47 kg		
Communications				
Working indicator	LCD + indicators LED, sound alarm			
Communication	USB , IntelligentSlot, EPO, parallel work Option: SNMP, DryContact, Modbus, RS485			
Environmental				
Noise level	<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			
- ModBus card	- DryContact card			

