

## CORE

|                 |                                       |
|-----------------|---------------------------------------|
| TECHNOLOGY:     | <b>TRUE ON LINE Double Conversion</b> |
| CLASSIFICATION: | <b>VFI-SS-111</b> (EN 62040-3)        |
| POWER RANGE:    | <b>1 - 10 kVA</b>                     |
| No. OF PHASES:  | <b>1:1</b>                            |



### ■ APPLICATIONS

- Servers
- Working stations
- Lighting
- Laboratory equipment
- Security 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.

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

**Communication:**

**USB, RS232** for UPS and load supervision and control.

**TVSS** to protect tele information equipment.

**SNMP slot** allows connect SNMP card to manage UPS throw network or AS400 card with potential free contactors.

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

**Small dimensions only 2U control panel** displays UPS and power parameters as well as hundreds of useful information.

**High efficiency** up to 95% in online mode to minimizes energy consumption and reduces heat emissions, which makes cooling of rooms cheaper.

**ECO-Mode** allows 99% efficiency and additional energy savings.

**CVCF Frequency converter mode** allows UPS to operate in the 50 Hz or 60 Hz to supply non-standard receivers.

**Automatic diagnostics** guarantee full device performance, control of components and operating parameters without user intervention.

**The high value of input power factor** restricts the current value of the device from professional network.

**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.

**Optional battery charger** for 6 and 10kVA units gives ability to connect high capacity batteries for long autonomy.

**The ability to extend the backup time** by adding battery modules allows you to precisely adjust the required autonomy time.

**The high output power factor PF=1** guarantees up to 30% more active power compared to other power supplies in this class.

**Wide input frequency range** for normal mode makes possible to freely use the power supply in a mixed network of city-generator.

**Auto restart** guarantees maintenance-free operation in case of long power failure.

**Cold start** provides possibility to launch UPS without main voltage.

**Advanced battery management** guarantees optimum battery charging and usage. The 3-stage charging process extends their service life up to 50% and reduces operating costs.

**Excellent voltage quality** achieved by using the IGBT (3L) inverter and high frequency PWM modulation ensures that the voltage is delivered in extremely stable parameters, regardless of power interference and the type of power supply.

**Overload resistance** is reliable power supply with transient states and high fault tolerance.

**Advanced software** gives the user complete control over the device and the power receivers.

**REPO connector** provides the ability to remotely switch off the power supply in the case of fire.

**Programmable output sockets** allows you to manage the presence of output voltage during battery operation.

**Parallel operation** for 6 and 10kVA units provides maximum reliability for critical load.

# UNINTERRUPTIBLE POWER SUPPLY



| Model  | Core 1K  | Core 2K             | Core 3K                          | Core 6K  | Core 10K      |
|--|--|---------------------|----------------------------------|--|---------------|
| Power  | 1000 VA / 900 W  | 2000 VA/ 1800 W     | 3000 VA / 2700 W                 | 6000 VA / 6000 W                               | 10 kVA / 10kW |
| No. Of phases IN : OUT                                 | 1:1  |                     |                                  |  |               |
| <b>Input</b>   |  |                     |                                  |  |               |
| Voltage  | 200 / 208 / 220 / 230 / 240 VAC  |                     |                                  |  |               |
| Voltage range  | -30% ÷ +30% @ 100% ≥ load. ≥ 80%<br>-40% ÷ +30% @ 80% ≥ load. ≥ 70%<br>-48% ÷ +30% @ 70% ≥ load. ≥ 60%<br>-52% ÷ +30% @ 60% ≥ load. ≥ 0% |                     |                                  |  |               |
| Frequency  | 50 / 60 Hz   |                     |                                  |  |               |
| Frequency range  | -20% ÷ +20%  |                     |                                  |  |               |
| THDi   | <3%  |                     |                                  |  |               |
| Input power factor                                     | ≥0,99  |                     |                                  |  |               |
| Input connector  | IEC320-C13/C14   | IEC320-C19/C20      |                                  | wiring   |               |
| <b>Output</b>  |  |                     |                                  |  |               |
| Voltage  | 200 / 208 / 220 / 230 / 240 VAC  |                     |                                  |  |               |
| Output power factor                                    | 0,9  |                     |                                  | 1,0  |               |
| Voltage regulation static/dynamic                      | ±1% / ±3%  |                     |                                  |  |               |
| Frequency  | 50 / 60 Hz ± 0,05 Hz   |                     |                                  |  |               |
| Overload capacity inverter                             | 110% - no limit, 130% - 5 min., 140% - 30 sec., >140% - 1,5 sec.   |                     |                                  | 110% - 10 min., 130% - 1 min., > 130% - 1 sec. |               |
| Efficiency On-Line mode                                | >92%   |                     |                                  | >95%   |               |
| Efficiency Eco mode                                    | 99%  |                     |                                  |  |               |
| Controlled socket groups – with programmable power off | 1 x 4 psc.   |                     |                                  | n/a  |               |
| Type and number of sockets                             | IEC320-C13 x 8   | IEC320-C13 x 8      | IEC320-C13 x 8<br>IEC320-C19 x 1 | n/a  |               |
| Terminal board   | n/a (Plug&Play)  |                     |                                  |  | yes           |
| Creast factor  | 3:1  |                     |                                  |  |               |
| Surge Protection L-N                                   | 320V/460 J   |                     |                                  | n/a  |               |
| <b>Batteries</b>                                       |  |                     |                                  |  |               |
| Amount of internal batteries                           | 3 x 7/9 Ah   | 4 x 7/9 Ah          | 6 x 7/9 Ah                       | -  |               |
| Max. back up time with internal batteries (min)        |  |                     |                                  |  |               |
| 100% load  | 8  | 4                   | 4                                | -  |               |
| 75 % load  | 12   | 7                   | 7                                | -  |               |
| 50 % load  | 20   | 12                  | 12                               | -  |               |
| 25 % load  | 43   | 28                  | 28                               | -  |               |
| Cold start   | Yes  |                     |                                  |  |               |
| Connector for external batteries                       | Yes  |                     |                                  |  |               |
| Charging time  | 4 hours up to 90% of capacity (configurable)   |                     |                                  |  |               |
| <b>Weight and dimensions</b>                           |  |                     |                                  |  |               |
| Dimensions and weight of UPS (W x D x H)               | 438 x 410 x 88 (2U)  | 438 x 510 x 88 (2U) | 438 x 630 x 88 (2U)              | 438 x 665 x 88 (2U)                            |               |
|  | 14,2 kg  | 19,5 kg             | 27,4 kg                          | 17,0 kg  | 20,0 kg       |
| Dimensions and weight of battery module (W x D x H)    | 438 x 410 x 88 (2U)  | 438 x 510 x 88 (2U) | 438 x 630 x 88 (2U)              | 438 x 630 x 133 (3U)                           |               |
|  | 21,3 kg  | 24 kg               | 40,8 kg                          | 63 kg  |               |
| <b>Communications</b>                                  |  |                     |                                  |  |               |
| Working indicator                                      | LCD + indicators LED, alarm sound alarm  |                     |                                  |  |               |
| Communications   | Standard: USB, RS232, TVSS, Smart slot, REPO<br>Options: Dry Contact, SNMP card,   |                     |                                  |  |               |
| <b>Environmental</b>                                   |  |                     |                                  |  |               |
| Noise level  | <45 dB   |                     |                                  | <50 dB   |               |
| Operating temperature for UPS                          | 0°C ÷ 40°C   |                     |                                  |  |               |
| Recommended operating temperature for UPS              | 15°C ÷ 25°C  |                     |                                  |  |               |
| Storage temperature                                    | -25°C ÷ 55°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>   |  |                     |                                  |  |               |
| - SNMP cards   | - Drycontact (AS-400)  |                     |                                  |  |               |
| - Environmental sensor (EMD)                           | - Additional battery module  |                     |                                  |  |               |
| - Maintenance bypass                                   | - Rail kits 19"  |                     |                                  |  |               |
| - EPO  |  |                     |                                  |  |               |



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