

COMBO, INNOVA 3/1:1

TECHNOLOGY:	TRUE ON LINE Double Conversion
CLASSIFICATION:	VFI-SS-111 (EN 62040-3)
POWER RANGE:	10kVA , 20kVA
No. OF PHASES:	3/1 : 1
SOFTWARE:	WinPower



■ APPLICATIONS

- Building infrastructure equipment
- Security systems
- Laboratory equipment
- Servers

■ SPECIFICATION

Flexible solution with configurable number of input phases and internal batteries

True On-Line Double Conversion Technology (VFI - IEC62040) provides perfect output voltage parameters, regardless of the input voltage and the load.

Extremely efficient battery charging system user is able to use high capacity batteries in order to maximize backup times.

Full digital control ensures reliability and power density (DSP).

Automatic Bypass (Static Switch) provides continuous load supply in critical conditions, such as overheating or inverter failure.

Communication ports:
RS-232, USB for UPS (Uninterruptible Power Supply) monitoring,
Ethernet interface for computer network communication with SNMP protocol support,

LCD Control Panel displays UPS and power parameters as well as hundreds of useful information in multi-language.

Small dimensions requires small area for unit operation.

High efficiency reduces heat dissipation and limits power consumption costs.

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

Wide input voltage range for normal mode ensures that the 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.

Easy operation microprocessor control and fully automatic mode ensure maintenance-free work.

Automatic startup ensures maintenance-free operation even after the unit was switched-off after long time mains failure.

Advanced Battery Management gives reliability of optimal charging and using batteries, elongates its lifetime and reduces operation costs.

Excellent voltage quality is provided by IGBT inverter and high-frequency SPWM modulation method; the output voltage has always stable parameters, independent of input disturbances and load characteristics.

High overload capacity indicates power reliability during transient conditions and high resistance on handling faults.

Advanced software provides full control over the unit and the load.

Configurable input phases enables you to select single or three phase input

High output power factor allows load of versatile characteristics to be connected.

COMBO - INNOVA

Model	COMBO 10K	INNOVA 20K
Capacity VA/W	10000 / 9000	20000 / 18000
Number of phases in:out	3/1 : 1	
Input		
Voltage (single phase)	220 / 230 / 240 VAC	
Voltage range (single phase)	110 - 276 VAC	
Voltage (three phase)	380 / 400 / 415 VAC	
Voltage range (three phase)	190 VAC – 478 VAC	
Frequency	50/60 Hz ± 10%	
Input power factor	≥ 0.99 (full load)	
THDi	< 3%	
Output		
Voltage	200 / 208 / 220 / 230 / 240 VAC	
Voltage regulation	±1% / ±3%	
Frequency	50/60 ± 0.05 Hz	
Overload capacity at PF=0.8	112% - continuous ; 123% - 5min. ; 146% - 1 min. ; 168% - 10 sec. ; >168% - 2 sec.	
Efficiency Online/Eco-Mode	95% / 99%	
Crest ratio	3:1	
Terminal board	yes	
Batteries		
Type	Maintenance free, sealed VRLA AGM	
DC Voltage	288 VDC	
Max number of internal batteries	2 x 24 x 9Ah	
Battery startup	yes	
External battery connector	yes	
Recharging time	4 – 8 hours up to 90% of capacity after complete discharge	
Weight and dimensions without batteries		
Dimensions of UPS (WxHxD)	350 x 890 x 650 mm	
Weight: UPS (without batteries)	42 kg	43 kg
Communications		
Operation mode indicators	LCD Panel, sound alarm	
Communication	RS-232, SNMP slot, USB, REPO, Dry Contact, Parallel port	
Environmental		
Noise Level depending the load and temp.	≤ 50 dB (A)	≤ 52 dB (A)
Operating temperature for UPS	0 °C ÷ 50 °C	
Recom. operating temperature for UPS and batteries	15 °C ÷ 25 °C	
Storage temperature	- 20 °C ÷ 40 °C	
Humidity	0 ÷ 95 % (non condensing)	
Certifications		
Standards	CE, EN62040-2 (EMC), EN62040-1-1 (LVD)	
Options		
- Software WinPower	- REPO	
- SNMP Web Card	- External Battery Cabinets	
- Environmental sensor (EMD)	- External Battery Bypass	
- Relay Card (AS400)		

