K-FACTOR
THE VOLTAGE YOU NEED

PLA

THREE PHASE 10-200KVA

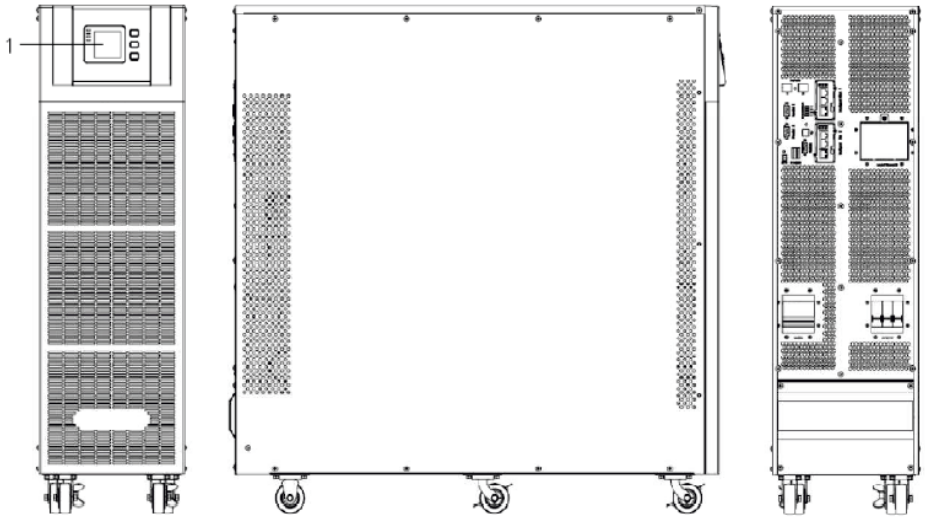
UNINTERRUPTIBLE POWER SUPPLIES - UPS TECHNICAL SPECIFICATION

PLA is a true on-line UPS, double conversion technology with high efficiency. Input and Output voltages are three-phase. Rating power available from 10kVA to 200kVA. High performance and high efficiency with PF 0,9. PLA uses power modular technology and it works in redundance mode N+x. It is a flexible system, in fact is possible to add or remove power cabinets depending by the amount of load to supply. In this way it is possible to optimize the financial investments by escalating the configuration according to the real needs. PLA can be used for any kind of load: IT, AUTOMATIC MACHINE, DATA CENTER, HOSPITAL, INDUSTRY, etc. PLA can solve every kind of problems, such as blackouts, spikes, voltage disturbances, frequency disturbances, harmonic distortion (THD <2%) current noise, brownouts, surges, and so on. PLA series uses a Digital Signal Processor (DSP) control to increase the reliability, the efficiency, and for auto protection and auto diagnosis. PLA series keep input current balanced. No unbalance problems may occur during the operation.

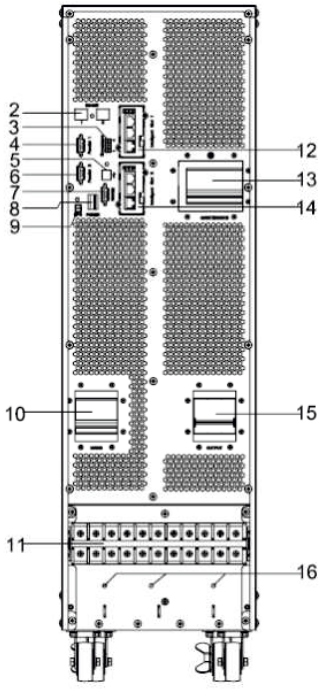
MAIN FEATURES

- True On-line UPS input three-phase + N, output three-phase + N
- Switching time 0 ms
- Power factor 0,9 – (optional 0,8)
- LCD display
- Modular power from 10kVA to 200kVA
- DSP (Digital Signal Processor)
- Input Low distortion < 2%
- ECO mode function

Optional: SNMP, MODBUS, RELAY. Standard: USB port, RS485, EPO contact



Front view Side view Rear view



Rear view without cover

1) LCD panel
2) RS485 port
3) Clean contacts
4) Parallel Port 1
5) USB port
6) Parallel Port 2
7) RS232 port
8) Power switch
9) REPO port
10) Input switch
11) Terminal blocks for input, output and battery
12) Intelligent slot 1 (SNMP /Relay board)
13) Manual By-pass switch with its cover
14) Intelligent slot 2 (SNMP/Relay board)
15) Output switch
16) Terminal blocks for Ground connection

K-FACTOR SRL unipersonale - Via Giotto 9 – 42014 Castellarano (RE) - Italy - VAT# IT 02422010369
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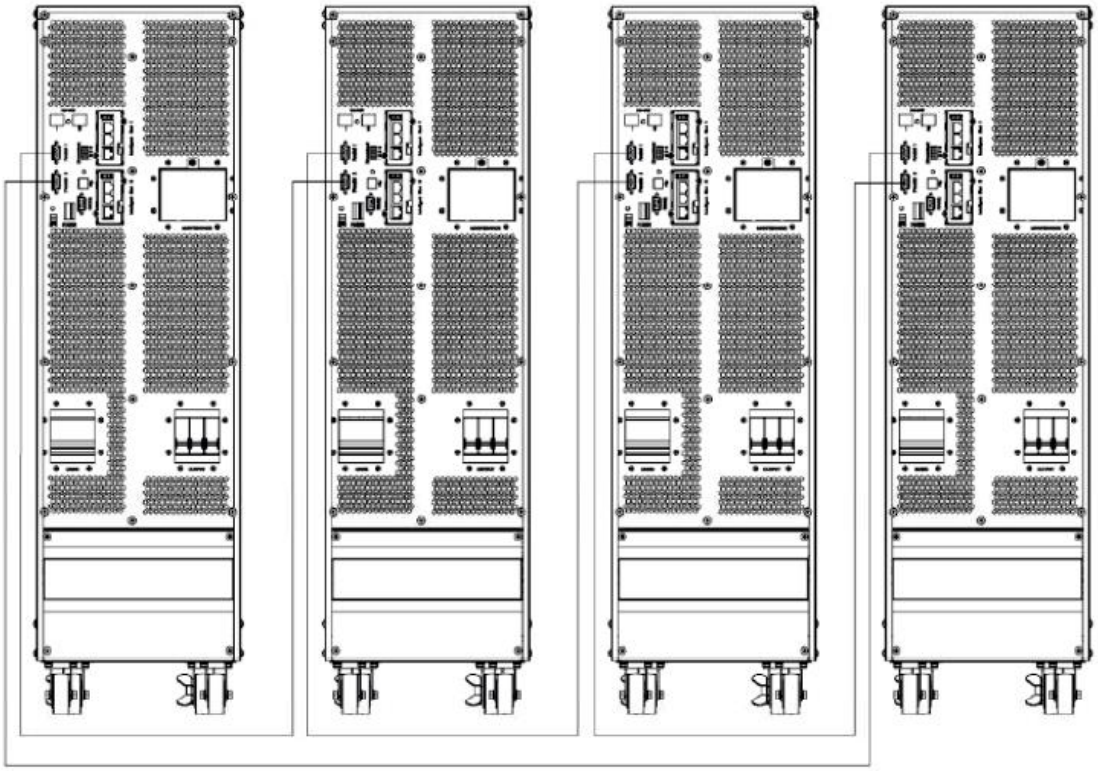
MODULAR POWER TECHNOLOGY

Modular power technology used for PLA series is an easy "Parallel concept".
PLA series has an intelligent sensor which automatically detects other UPSs with same power.
No settings via software, no parallel boards needed, UPS it is always ready and with a self test reset and adjust its output power.
Parallel control cables are shielded with double isolation to avoid noise interference.
The cables are connected in ring mode, as shown in the picture below.
Ring connection is very reliable.



The parallel configuration guarantees an higher reliability than a single "full power" UPS. For making a correct configuration it is important to meet the items written below:
1) Every UPS must have the same power and connected to the same by-pass line .
2) The electric cables (input, output, by-pass) must have the same length and same characteristics

MODEL			PLA10	PLA15	PLA20	PLA30	PLA40	PLA60
Input	Power		10KVA 9KW	15KVA 13.5KW	20KVA 18KW	30KVA 27KW	40KVA 36KW	60KVA 54KW
	No. of phases		3 phase 4 wires + PE					
	Rated voltage		380/400/415Vac					
	Voltage range		208~478Vac					
	Frequency range		45-55Hz a 50Hz / 56-66Hz to 60Hz (auto sensing)					
	Power factor		≥0.99					
	THDi		≤2%(100% non linear load)					
	By-pass voltage range		Max voltage.: 220Vac:+25% (optional +5%,+10%,+15%) 230Vac:+20% (optional +10%,+15%) 240Vac:+15% (optional +10%) Min voltage.: -45% (optional -20%、-30%) Frequency protection range: ±10%					
	Generator input		Supported					
Output	No. of phases		3 phase 4 wires + PE					
	Rated voltage		380/400/415Vac					
	Power factor		0.9					
	Voltage accuracy		±1%					
	Frequency	Line	±1%、±2%、±4%、±5%、±10% rated frequency (optional)					
		Battery	(50/60±0.1%)Hz					
	Crest Factor		3:1					
	THD		≤1% linear load - ≤3% non linear load					
Efficiency			≥96,5%	≥97,5%				
Battery	Quantity		Dynamic 16-18-20pcs (configurable)					
	Autonomy		10’ standard with embedded battery					
Overload			Normal op.: 110% 60' - 125% 10' - 150% 1' - >150% switch to bypass					
Self-check			Automatic self test at switch on					
Display			LCD: Voltage IN/OUT - Frequency IN/OUT - Load - Battery Voltage Operating Temp. - Overload - Failure – Alarms					
Interface			USB - RS485 - Clean Contacts- Intelligent slot					
Communication			SNMP (optional) - MODBUS (optional) - RELAY card (optional)					
Operating temperature			Operating: 0° + 40° / Storage: -25° + 55°					
Dimensions (DxWxH) mm			828x250x868					828x500x868
Number of units			1					2

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MODEL			PLA80	PLA100	PLA120	PLA160	PLA180	PLA200
Input	Power		80KVA 72KW	100KVA 90KW	120KVA 108KW	160KVA 144KW	180KVA 144KW	200KVA 160KW
	No. of phases		3 phase 4 wires + PE					
	Rated voltage		380/400/415Vac					
	Voltage range		208~478Vac					
	Frequency range		45-55Hz a 50Hz / 56-66Hz to 60Hz (auto sensing)					
	Power factor		≥0.99					
	THDi		≤2%(100% non linear load)					
	By-pass voltage range		Max voltage.: 220Vac:+25% (optional +5%,+10%,+15%) 230Vac:+20% (optional +10%,+15%) 240Vac:+15% (optional +10%) Min voltage.: -45% (optional -20%、-30%) Frequency protection range: ±10%					
	Generator input		Supported					
Output	No. of phases		3 phase 4 wires + PE					
	Rated voltage		380/400/415Vac					
	Power factor		0.9				0.8	
	Voltage accuracy		±1%					
	Frequency	Line	±1%、±2%、±4%、±5%、±10% rated frequency (optional)					
		Battery	(50/60±0.1%)Hz					
	Crest Factor		3:1					
	THD		≤1% linear load - ≤3% non linear load					
Efficiency			≥96,5%	≥97,5%				
Battery	Quantity		Dynamic 16-18-20pcs (configurable)					
	Autonomy		10’ standard with embedded battery					
Overload			Normal op.: 110% 60' - 125% 10' - 150% 1' - >150% switch to bypass					
Self-check			Automatic self test at switch on					
Display			LCD: Voltage IN/OUT - Frequency IN/OUT - Load - Battery Voltage Operating Temp. - Overload - Failure – Alarms					
Interface			USB - RS485 - Clean Contacts- Intelligent slot					
Communication			SNMP (optional) - MODBUS (optional) - RELAY card (optional)					
Operating temperature			Operating: 0° + 40° / Storage: -25° + 55°					
Dimensions (DxWxH) mm			828x500x868	828x750x868		828x1000x868		
Number of units			2	3		4		

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