

ONLINE UPS

RELIABLE POWER BACKUP
FOR SMART INFRASTRUCTURE



VOLT PLUS - VOLT PLUS XL

10 to 40 kVA UPS



Pure Sine
Wave Output



Intelligent
Microprocessor
Control



High Overload
Capacity



Overload & Short
Circuit Protection



Smart LCD
Display

VOLT PLUS - VOLT PLUS XL

Lithium ready technology, maximum efficiency and versatility with the smallest footprint in its class.

VOLT PLUS

10-40 kVA

UPS with PF1 (kVA=kW)
provides the highest efficiency
with the smallest footprint

The smallest footprint in its class (0.22 m² for 20 kVA with 40x9 Ah internal batteries) and its vertical internal layout ensure a low TCO.

Two interchangeable versions, 3:3 or 3:1-3, can easily be selected on-site (for 10, 15 and 20 kVA) for maximum installation flexibility.

Internal battery up to 40 x 9 Ah (for 10, 15 and 20 kVA).

VOLT PLUS XL

10-40 kVA

Compact and versatile UPS
with easily configurable
single- or three-phase output

Flexible and compact design suitable for various configurations.

Long autonomy time thanks to the high number of integrated batteries.

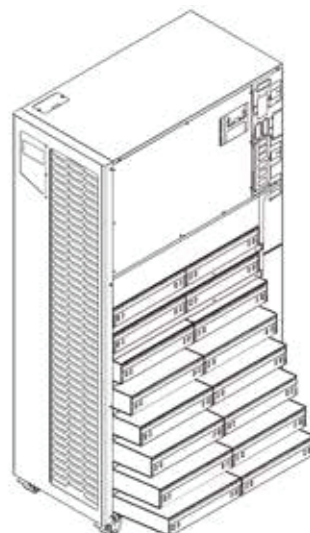
Thanks to the vertical internal layout of the components, maintenance, board replacement and scheduled battery change activities are simplified.

VOLT Plus XL range allows for the installation of an internal isolation transformer for input and output.



Applications

- Server rooms
- Micro and mini data centres
- Telecommunications equipment
- Electromedical equipment
- Industrial applications
- Ideal for generators



High internal battery
density

VOLT PLUS - VOLT PLUS XL

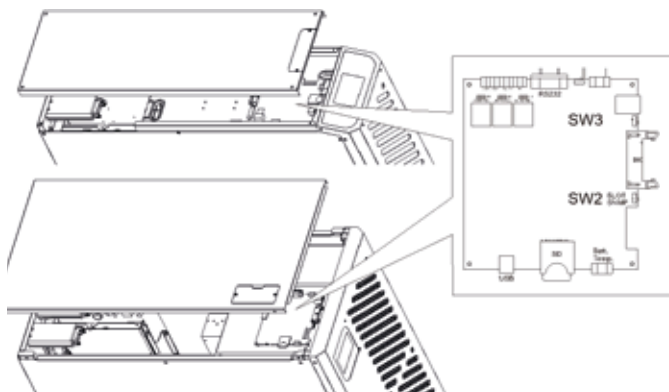
- PF 1 ensures maximum power availability: $kVA=KW$ for VOLT Plus 10-15-20-30-40 TTS.
- The patented GLM® function enables efficient management and reuse of energy produced by regenerative loads (e.g., elevators, electric motors, CNC machines, etc.).
- Compatible with lithium-ion batteries or other technologies.
- THDi <3% for low impact on the mains supply.
- The internal backfeed contactor integration eliminates the need for an external contactor.
- All models make it possible to maximize the energy available for loads with frequencies other than those of the power grid without loss of performance.
- Cold start function included.
- Designed to minimise impact on generators and avoid the need for oversizing them.
- Up to 95% efficiency in online mode.
- Internal manual bypass and 4-pole switches.
- Vertical internal layout ensures easy maintenance.
- Fail-safe: the UPS indicates when the phase rotation is connected incorrectly without interrupting the supply from the inverter to the loads , while keeping the batteries charged.
- High overload capacity for up to 1 minute at 150% load.
- Built-in high performance charger (10 kVA with standard charger for up to 10 A)
- Variable battery configuration: 26 to 40 individual 12V blocks settable from the touch display.
- Up to 6 units can be connected in parallel for power or redundancy, settable from the touch display
- Separate or common batteries that can be configured for parallel systems.
- 4.3" colour LCD touch screen display for user-friendly interface (14 selectable languages).
- Wide range of communication options included: two ports as standard, 1xRS232 and 1xUSB, programmable dry contacts plus two additional slots for optional cards .
- Log file for up to 800 events, and UPS information and settings can be easily downloaded to an SD card.

Key options

- SNMP, RS485, ModBus card.
- Parallel kit.
- Removable internal battery compartments for easy battery maintenance.
- External temperature sensor for a battery cabinet.
- Movable touch panel 7" with 3 programmable dry contacts for remotely monitoring up to 64 units.
- Internal backfeed contactor.



UPS event logs and settings can be easily exported to an SD-Card



Instant disconnected battery warning

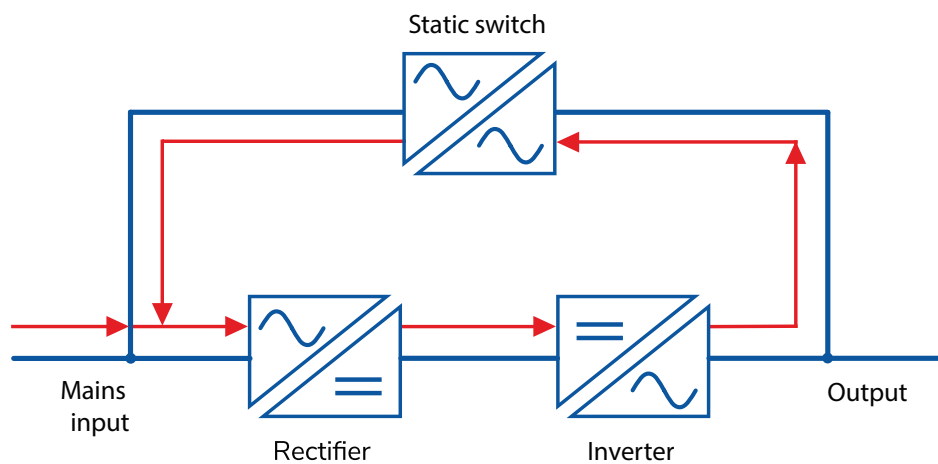


Instant battery
disconnection alert

VOLT PLUS - VOLT PLUS XL

Easy and efficient commissioning and maintenance thanks to the Smart ageing self-test function

- The test function is able to monitor performance over time to identify potential deterioration in the various UPS components.
- More than 90% energy saving thanks to the possibility of performing verification tests without a real load.
- Possible to set up automatic on-site testing at any time: before commissioning or during UPS maintenance.
- Components can be tested by simulating different load conditions without a real load.



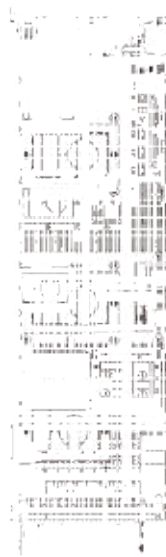
VOLT
10/15/20 KVA 3/1



VOLT PLUS
10/15/20 kVA



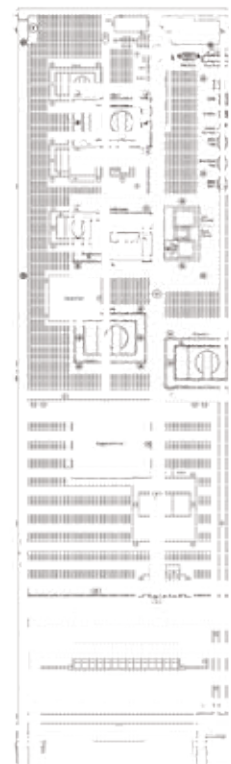
VOLT PLUS
30/40 kVA



VOLT PLUS XL
10/15/20 kVA



VOLT PLUS XL
30/40 kVA

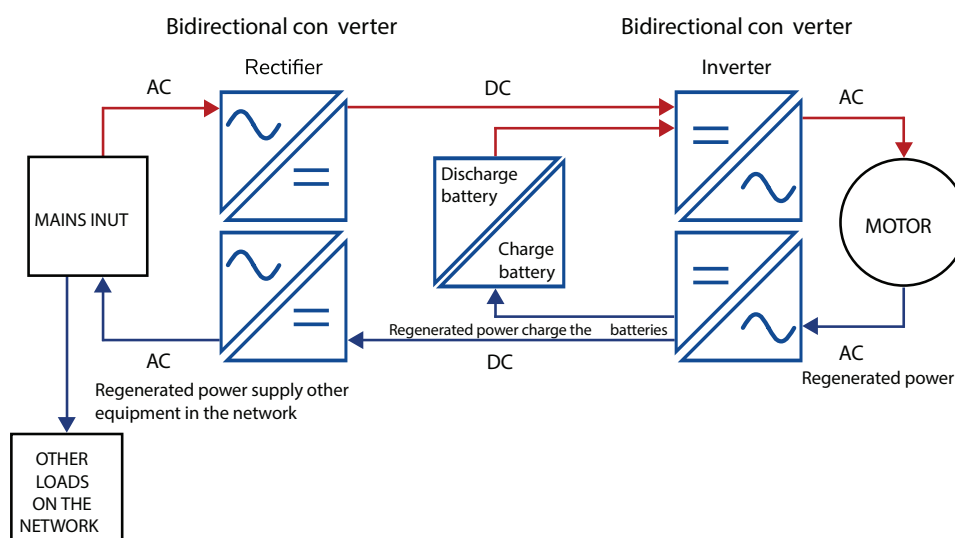


Continuous power supply in the presence of regenerative loads

Traditional UPS systems often fail when faced with energy returning from the load. The VOLT UPS, however, ensures a continuous power supply to the protected load even in the presence of regenerative energy.



The problem: many industrial machines, including elevators, are powered by electric motors that frequently start and stop. During deceleration, these motors produce regenerative energy. If unmanaged, this regenerative load can cause over-voltage, damaging critical equipment and reducing the efficiency of industrial operations. Specifically, regenerative energy causes the dc bus to over-voltage in conventional UPS systems, leading them to cease operation.



- Complete solution for regenerative energy management (glm)
Patented solution, easily activated via software, this solution provides comprehensive management of regenerative energy.
- Robust hardware
The bidirectional design of the VOLT UPS converters ensures hardware durability.
- Eco-friendly
Reuse up to 90% of the energy produced by regenerative loads.
- No oversizing needed
No need to oversize UPS power or battery capacity. The battery voltage remains controlled, and the load stays protected.

VOLT PLUS - VOLT PLUS XL

VOLT PLUS - VOLT PLUS XL TECHNICAL DATA SHEET

MODEL*			VOLT10D 3/1	VOLT15D 3/1	VOLT 20D 3/1	VOLT10S Plus	VOLT15S Plus	VOLT20S Plus	VOLT30S Plus	VOLT40S Plus
POWER	KVA		10	15	20	10	15	20	30	40
	KW		9	13,5	18	10	15	20	30	40
INPUT	Rated voltage		400V three-phase+neutral							
	Voltage tolerance		±20% @100% load, -40/+20% @50% load							
	Rated frequency		40 - 70 Hz							
	Power factor		≥ 0,99							
	Current distortion (THDi)			3/1	≤ 5% at full load		≤ 3% at full load			
		3/3	≤ 3% at full load							
OUTPUT	Rated voltage			3/1	220/230/240 V single-phase+neutral		380/400/415 V three-phase+neutral			
				3/3	380/400/415 V three-phase+neutral					
	Voltage stability		±1% (static load)							
	Frequency		50/60 Hz							
	Frequency stability		±0,01% (free running)							
	Power factor		0.9				1			
	Crest factor		3:1							
	Voltage distortion		≤2% with linear load, ≤5% with distorting load							
	Overload		110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute							
BATTERY	Number per string (batt 12V)		32-40 configurable			26-40 config.	32-40 configurable			
	Max charging current**		10 A	15 A	21 A	10 A	15 A	21 A	30 A	39 A
	Common battery for parallel configuration		Supported							
	Max internal battery quantity	Standard	40 batteries 12V/7-9 Ah						N.A.	
		XL	160 batteries 12V/7-9 Ah						120 batteries 12V/7-9 Ah	
EFFICIENCY	VFI mode		Up to 95%							
	ECO mode		Up to 98%							
	In battery		Up to 94%							
BYPASS	Rated voltage			3/1	220/230/240 V single - phase+neutral		380/400/415 V three-phase+neutral			
				3/3	380/400/415 V three - phase+neutral					
	Voltage tolerance		Basic window ±10% (programmable ±5% - ±15%) Critical window ±25% (programmable ±16% - ±30%)							
	Frequency		50/60 Hz							
	Frequency tolerance		±1 Hz / ±3 Hz (selectable)							
GENERAL	Parallel connection		Up to 6 units							
	Dimensions (WxDxH) mm	Standard	260x850x890							
		XL				440x850x1570				
	Weight (kg)	Standard	74	76	76	74	76	76	85	88
		XL				142	144	144	145	148
	Protection class		IP 20							
CONNECTIVITY	User interface		4.3" colour LCD touch screen display with removable SD card							
	Built-in communication ports		USB, RS232, EPO, 1 in/3 out dry contact relays (programmable) and additional slots for optional cards							
	Optional accessories		Cards: SNMP, RS-485 ModBus, 6 in/6 out dry contact relays, touch panel for remote monitoring							
ENVIRONMENTAL PARAMETERS	Operating temperature***		0-40°C							
	Relative humidity		0-95% (non-condensing)							
	Altitude (a.s.l.)		<1000 m with no power derating, >1000 m with 1% derating for every 100 m.							
	Audible noise at 1 m.		<52 dBA						<55 dBA	
REGULATIONS	Standards		IEC EN 62040-1, IEC EN 62040-2, IEC EN62040-3							
	Marking		CE, UKCA							

*Models KRD: dual inputs (3/3 or 3/1); Models KRS: single input (3/3) ** Subject to conditions *** To be verified according to the battery parameters