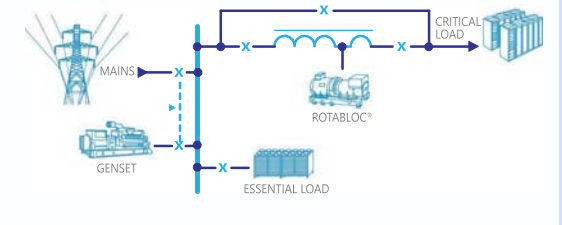
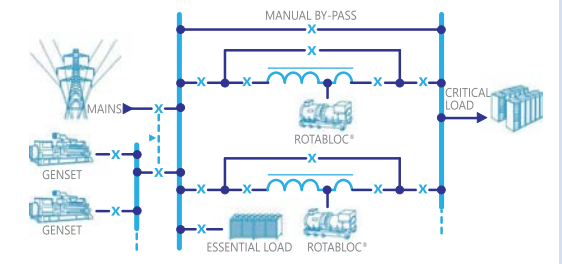
Dynamic Rotary UPS

High-efficiency purely dynamic UPS that meets the stringent electrical demands of the most modern electronic loads

real source of power



Single Module



Parallel Installation

Rotabloc® KPS®

The Dynamic Rotary UPS Rotabloc® a high-efficiency purely dynamic UPS that meets the stringent electrical demands of the most modern electronic loads.

Rotabloc® KPS® is an extremely robust product based upon efficient, conventional electrical and mechanical components. Critical functions do not use fragile components such as power semi-conductors and capacitors, chemical batteries. Furthermore, the simple design excludes complex technologies such as friction couplings, magnetic bearings, high speed flywheels, vacuum or gaseous containment, sophisticated electronic converters, etc. Its simplicity leads to ultimate reliability and very low service costs which, added to the energy saved by the low UPS losses, pro duce a very low Total Cost of Ownership.

The Optimum Solution to the Power Quality Problems

The KPS® is simply based upon efficient, conventional electrical and mechanical components. Its simplicity leads to ultimate reliability and very low service costs which, added to the energy saved by the low UPS losses and the lack of air-conditioning energy, produces a very low Total Cost of Ownership. The system consists of a conventional synchronous rotating alternator machine connected to a tapped choke via circuit-breakers in a dedicated switchboard. The energy storage is based on an electro-mechanical principle of stored energy in the patented Accumulator which is directly coupled (mechanically) to the alternator. Critical functions do not use fragile components such as power electronics, electro-chemical batteries, active magnetic bearings, electro-mechanical or mechanical clutches.

Green Technology

- High efficiency
- No batteries-no need for expensive replacement cycle
- No air conditioning required
- Dynamic Autonomy Control (DAC): Automatic speed adaptation for optimum efficiency at partial load
- With 91% of all voltage interruptions lasting less than 1 second (European urban locations), the KPS® will protect the load without generator set starts

Single Module

UPS Rotabloc® KPS® associated with a generator for continuous power supply. Full flexibility for critical/essential load sizing. Separate maintenance of UPS and gensets. Compatible with all modern gensets.

Parallel Installation

UPS Rotabloc® KPS® Plug & Run redundant system No master control system No single point of failure Redundant communication via optic fiber ring Separated redundancy of Gensets and UPS Modularity, scalability and flexibility

400kVA • 500kVA • 600kVA • 800kVA • 400kVA • 800kVA • 1000kVA • 1250kVA • 1600kVA • 1750kVA • 2000kVA

MAKELSAN®
Uninterruptible Power Supplies

FEATURE	BENEFIT
Outstanding Voltage Conditioning Microcuts	◎ Protects critical Users against mains voltage fluctuations, sags and ◎ Naturally compensates power factor without need for PFC equipment ◎ Filters load harmonics and voltage harmonics from mains ◎ Eliminates Flicker
Total Power Failure Protection	◎ Sustainable continuous power supply ◎ Ride-through mode covers 90% mains failures without genset start ◎ Flexible DRUPS solution when associated with standard genset
Robust Rotary Technology	◎ Conventional electrical / mechanical machine ◎ High reliability ◎ Low cost maintenance
High Efficiency	◎ Energy saving ◎ Unrivaled Total Cost of Ownership (TCO) ◎ Green technology
High Short-Circuit Power	◎ Fast fault-clearing capacity ensuring protections selectivity ◎ Suitable for high peak currents (motors and mechanical loads) ◎ Suitable for high crest factors (non linear loads)
Modular and Resilient "Plug & Run" Paralleling	◎ Flexibility from day one ◎ Scalability for future extension ◎ High resilience thanks to full redundancy without single point of failure ◎ Ideal for Tier-III / Tier-IV applications
Easy Interfacing	◎ User-friendly digital display (HMI) ◎ Basic interface via simple contacts ◎ Powerful communication features : • SCADA / BMS interface via MODBUS RTU/TCP • Internet access • PC supervision • Remote monitoring, alarming and paging features
Low Maintenance	◎ Simple maintenance operations ◎ Unaffected up-time: no need to stop UPS during maintenance ◎ Automatic Lubrication System for maximum reliability and lowest TCO.

MODEL	POWER	
50 Hz or 60 Hz	kVA	kW
KPS-400 - 50/60	400	320
KPS-500 - 50/60	500	400
KPS-500HP - 50/60	500	500
KPS-630 - 50/60	630	504
KPS-800 - 50/60	800	640
KPS-1000 - 50/60	1000	800
KPS-1250TW - 50/60	1250	1000
KPS-1600TW - 50/60	1600	1280
KPS-1750TW - 50/60	1750	1400
KPS-2000TW - 50/60	2000	1600