

SUPERIOR^{plus}

Uninterruptible Power Supply
10-120kVA



III Level Technology High Efficiency up to 96%

Technical Specifications

- High efficiency (96%) with IGBT rectifier and 3L Inverter
- High efficiency operation with Eco mode (98%)
- Active input power factor correction (Pf 1)
- Active input current harmonics correction (TH DI <4%)
- Low output voltage THD (<2%)
- Smart charger can increase battery life by 40%
- Parallel operation
- Temperature compensated battery charging system
- Generator-compatible operation, external by-pass feature (Optional)
- Easily synchronized with external sources
- Remote monitoring and management software, programmable dry contacts
- Output by-pass overload and short-circuit protection
- Standard non-maintenance by-pass
- Small footprint with compact dimensions
- Low installation and operating costs
- Smart fan control (depending on temperature and load)
- Wide input voltage range
- Real-time status memory

On-line
3 Phase Input
3 Phase Output

Power Factor: 1
kVA=kWatt

Specifications

	SP 10 kVA	SP 15 kVA	SP 20 kVA	SP 30 kVA	SP 40 kVA	SP 60 kVA
Model (3 Ph/ 3 Ph)						
Nominal Active Power (Watt)	10.000	15.000	20.000	30.000	40.000	60.000
RECTIFIER INPUT						
Nominal Voltage	380/400/415 V (Ph-Ph) 3Ph+N					
Input Voltage Range (VAC) (at 50% Load)	Min. -35% / Max +25%					
Input Voltage Range (VAC) (at full Load, with battery charging)	Min. -18% / Max +18%					
Frequency (Hz)	50 /60 ± % 5					
Input Current Distortion Rate	< 5%					
Power Factor	> 0.99					
BYPASS						
Nominal Voltage	380/400/415 V (Ph-Ph) 3Ph+N					
Voltage Tolerance	± 10%					
Frequency Tolerance (Hz)	± 10%					
Transfer Time (ms)	< 0.01					
OUTPUT						
Nominal Voltage (VAC) (Ph-Ph)	380/400/415 V (Ph-Ph - Adjustable)					
Power Factor	1					
Efficiency	Up to 96% (*)					
Wave Form	Sinusoidal					
Frequency (Hz)	50 or 60 (Adjustable)					
Frequency Tolerance (Battery Operation)	0.01%					
Voltage Regulation (Static)	±1%					
Output Voltage Change at unbalance load	< % 0.5					
Maximum phase angle variation	< 0.1°					
Crest Factor	3:1					
Overload Protection (sec)	60 sec (at 100-125% Load) / 10 sec (at 126-150% Load)					
Total Harmonic Distortion	Linear load < %3 / Non linear load <% 5					
BATTERY						
Battery Type	Maintenance-Free Lead Acid Batteries					
Battery String (Blocks)	20-30	30			40	
Protections	Overload Protection, High Temperature, Input Over Voltage, Input & Output Over Current, Back-Feed Protection, Intelligent Charging Algorithm – Deep Charge Protection – Battery Test (Automatic/ Manual), Short- Circuit Protection					
COMMUNICATION						
Standard Interface	RS232 – EPO – External cabinet temperature					
Options	Modbus - 4 Programmable Relay-Contacts - SNMP					
ENVIRONMENT						
Operating Temperature Range (°C)	0 - 40 °C					
Battery Temperature Range (°C)	20 C - 25 °C (Recommended For Longer Battery Life)					
Maximum Altitude without Derating (m)	1000					
Relative Humidity Range	% 20-95 (Non-Condensing)					
Acoustic Noise (dBA)	< 55 (at 1m)					
PHYSICAL						
Dimensions (HxWxD) (mm)	855 x 300 x 715		990x 300 x 865		1200x430x960	1000X450X900
Weight (kg) (without battery)	53 Kg Pallet 44 Kg net		70 Kg Pallet 62 Kg net	75 Kg Pallet 67 Kg net	90 Kg Pallet 80 Kg Net	105 Kg Pallet 95 Kg net
Paint	RAL 9005					
STANDARDS						
Safety	IEC/EN 62040-1					
EMC	IEC/EN 62040-2					
Performance	IEC/EN 62040-3					
Design	ISO 9001:2008 - ISO 14001:2004					
Protection Class	IP 20 (other IP as option)					

**DELTA reserves the right to change the Technical Specifications and design without notice.