

MODEL	NS3060	NS3090	NS30120
Nominal Power	60 kVA / 54 kW	90 kVA / 81 kW	120 kVA / 108 kW
MAIN INPUT			
Grid system	3 Phases + Neutral + Ground		
Rated voltage / Frequency	380/400/415 VAC (Phase-Phase), 50/60 Hz		
Voltage range	-20% ~ +15%, full load -10% ~ -40%, power derating between 100%-60%		
Frequency range	40-70 Hz		
Power factor	>0.99		
Current THDi	<3%		
BYPASS INPUT			
Grid system	3 Phases + Neutral + Ground		
Rated Voltage / Frequency	380/400/415 VAC (Phase-Phase), 50/60 Hz		
Voltage range	Default -20% ~ +15%		
Frequency range	Selectable (± 1 Hz ~ ± 5 Hz), Default ± 5 Hz		
Bypass overload	110%, long term operation 110%<load<125%, 5 minutes 125%<load<150%, 1 minute 150%<load<400%, 1 second load>400%, 200 milliseconds		
OUTPUT			
Rated Voltage / Frequency	380/400/415 VAC (Phase-Phase), 50/60 Hz		
Power factor	0.9		
Voltage precision	$\pm 1.5\%$ (0-100% linear load)		
Voltage THDv	<1% from 0% to 100% linear load; <6% full non-linear load according to IEC/EN62040-3		
Inverter overload	110%, 60 minutes 125%, 10 minutes 150%, 1 minute >150%, 200 milliseconds		
Frequency regulation	50/60 Hz $\pm 0.1\%$		
Synchronized range	Selectable ± 0.5 Hz ~ ± 5 Hz, Default ± 3 Hz		
Synchronized slew rate	Selectable 0.5 Hz/s ~ 3 Hz/s, Default 0.5 Hz/s		
Crest factor	3:1		
BATTERIES			
Battery rate voltage	± 240 VDC (selectable)		
Number of batteries*	Standard: 40 (20+20) batteries 12V Selectable: 32-44, if <40 a power derating must be applied		
Charger voltage precision	1%		
Batteries arrangement	External		
Battery type	Pb / Ni-Cd		
SYSTEM			
Efficiency	Normal operation: >95% Eco Mode operation: 99% Battery operation: 95%		
Display	LED + LCD + Touch Screen		
Protection degree	IP20		
Interface	Standard equipment: RS232, RS485, USB, dry contacts Optional: SNMP, parallel kit, Cold Start, dust filter		
ENVIRONMENT			
Operating temperature	0 ~ 40 °C		
Storage temperature	-40 ~ 70 °C		
Relative humidity	0 ~ 90% (no condensing)		
Noise (dBA at 1 meter far)	65 dB maximum		
Altitude	<1000 m; load derated 1% per 100 m, from 1000 ~ 2000 m		
MECHANICAL DATA			
Dimensions W*D*H (mm)	600*980*950	600*980*1400	
Weight (Kg)	176	231	266
Colour	Cabinet: RAL 7021 (dark grey) Door: RAL 7012 (light grey)		

Note: technical specifications and data could be changed without notification

* Our standard battery cabinets are 20+20 batteries