Transformerless Type

PlusMAX 1 Series

20KVA to 200KVA

Key Features

- > Parallel up to 4
- Compact footprint
- > High frequency design
- Output power factor 0.9
- Adjustable battery quantity
- Intelligent battery management
- Double conversion on-line topology
- > Efficiency up to 94% in inverter mode
- > Enhanced environmental adaptability design

Typical Application



Security and Surveillance System



Manufacturing Process Control



Financial Services



Petro Chemical Industry



20-40KS



60-80KS



100-200KS



Telecom



Building Management



Data Center



Automatic Control System



Transformerless Type

Specification

MODEL	PlusMAX 1-20KS	PlusMAX 1-30KS	PlusMAX 1-40KS	PlusMAX 1-60KS	PlusMAX 1-80KS		
CAPACITY							
Power rating KVA	20	30	40	60	80		
Power rating KW	18	27	36	54	72		
INPUT							
Topology	PWM, IGBT based						
Rated voltage	380Vac/220Vac (400/	415Vac selectable)					
Voltage range	-45% ~ +25%, depends on load percentage						
Input power factor	0.99						
THD(i)	<3%						
Rated Frequency	50/60Hz auto sensing						
Frequency range	42-72Hz						
OUTPUT	12 72112						
Power factor	0.9						
Efficiency	Up to 94% in online mode; >98% in ECO mode						
Output voltage	380Vac/220Vac +/- 1% (400/415Vac selectable)						
Output frequency	50/60Hz						
Overload Capacity	<105% continuous run; 105%-125% 10min; 150% 1min						
THDV	<2% for Linear load						
Unbalanced load	100%						
Crest factor	3:1						
BYPASS							
Internal static switch	Standard						
Bypass voltage	380Vac (+/- 15%)						
Maintenance bypass switch	Standard						
BATTERY							
Battery type	VRLA						
Backup time	Varies from battery capacity and load situation						
Battery PCS	20KS/30KS/40KS/60KS/80KS: 28-36 PCS adjustable, 32 PCS as default						
Recharge time	8 hours to 90%						
COMMUNICATION							
Interface	RS232, USB, 2 Com slots, 3 Building alarm, EPO						
Com cards (optional)	SNMP/WEB, Modbus/Ethernet, AS400, NMC						
ENVIRONMENT							
Running temperature	UPS:0-40°C; Battery: 25°C						
Storage	-25 ~ 55°C without battery; +15 ~ 25°C with battery						
Humidity	5% ~ 95%						
Elevation	No derating < 1000m						
Noise level	20kVA≤55 dBA@1 meter front side; 30-40kVA≤62 dBA@1 meter front side;						
	60-120kVA≤65 dBA@1 meter front side; 160-200kVA≤70 dBA@1 meter front side						
DIMENSION							
W*D*H (mm)	420*715*900			600*720*1200			
REGULATION	<u> </u>			<u> </u>			
Safety	IEC/EN 62040-1						
EMC	IEC/EN 62040-2						
Performance	IEC/EN 62040-4						
Quality	ISO9001						
Certification	CE						

^{*}Product specifications are subject to change without further notice.



Transformerless Type

Specification

MODEL	PlusMAX 1-100KS	PlusMAX 1-120KS	PlusMAX 1-160KS	PlusMAX 1-200KS			
CAPACITY							
Power rating KVA	100	120	160	200			
Power rating KW	90	108	144	180			
INPUT							
Topology	PWM, IGBT based						
Rated voltage	380Vac/220Vac (400/415Vac selectable)						
Voltage range	-45% ~ +25%, depends on load percentage						
Input power factor	0.99						
THD(i)	<3%						
Rated Frequency	50/60Hz auto sensing						
Frequency range	42-72Hz						
OUTPUT							
Power factor	0.9						
Efficiency	Up to 94% in online mode; >98% in ECO mode						
Output voltage	380Vac/220Vac +/- 1% (400/415Vac selectable)						
Output frequency	50/60Hz						
Overload Capacity	<105% continuous run; 105%-125% 10min; 150% 1min						
THDV	<2% for Linear load						
Unbalanced load	100%						
Crest factor	3:1						
BYPASS							
Internal static switch	Standard						
Bypass voltage	380Vac (+/- 15%)						
Maintenance bypass switch	Standard						
BATTERY							
Battery type	VRLA						
Backup time	Varies from battery capacity and load situation						
Battery PCS	100KS/120KS/160KS/200KS: 36-40 PCS adjustable, 40 PCS default						
Recharge time	8 hours to 90%						
COMMUNICATION							
Interface	RS232, USB, 2 Com slots, 3 Building alarm, EPO						
Com cards (optional)	SNMP/WEB, Modbus/Ethernet, AS400, NMC						
ENVIRONMENT							
Running temperature	UPS:0-40°C; Battery: 25°C						
Storage	-25 ~ 55°C without battery; +15 ~ 25°C with battery						
Humidity	5% ~ 95%						
Elevation	No derating < 1000m						
Noise level	20kVA≤55 dBA@1 meter front side; 30-40kVA≤62 dBA@1 meter front side;						
	60-120kVA≤65 dBA@1 meter front side; 160-200kVA≤70 dBA@1 meter front side						
DIMENSION	100 12011111111111111111111111111111111						
W*D*H (mm)	600*800*1876		600*830*1876				
REGULATION			333 333 .010				
Safety	IEC/EN 62040-1						
EMC	IEC/EN 62040-1						
Performance	IEC/EN 62040-4						
	ISO9001						
Quality	LISO9001						

^{*}Product specifications are subject to change without further notice.

