NEPCSH-4000-MV
NEPCSH-3200-MV
Power Conversion System

Applications

- Renewable Power Plant Integration (Ramp rate control, energy shifting),
- Grid Ancillary Control (Frequency regulation, peak shaving)
- Distributed Network and Micro-grid (Peak shaving, autonomous operation)

Great Performance

- Advanced three-level technology, max. efficiency reaches 98.8%
- Effective forced air cooling
- High DC voltage up to 1500V
- Battery charge & dis-charge management and black start function integrated

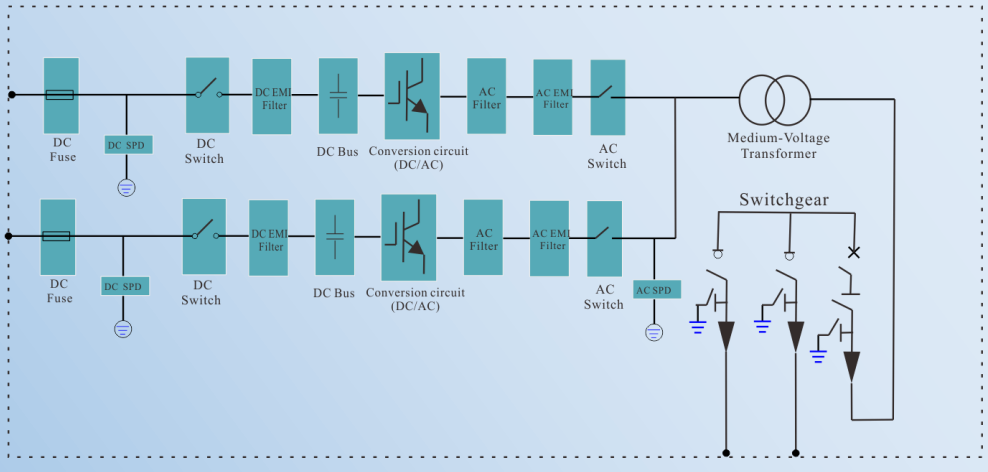
Grid Support

- Compliant with EN IEC 62477-1, IEC 61000-6- 2/4, EN 50549-1/2
- L/HVRT, L/HFRT, specified power factor control and reactive power support

Easy O&M

- Integrated monitoring function and fast trouble shooting
- Integrated auxiliary power supply panels for external devices
- Low transportation and installation cost

Circuit Diagram.



Subject to change without notice.

Type Designation	NEPCSH-3200-MV IEC	NEPCSH-4000-MV IEC
PCS DC-side		
Max. DC Voltage	1500V	
Min. DC Voltage	1000V	
DC Voltage Range	1000~1500V	
Max. DC Current	1967A*2	2030A*2
No. of DC Inputs	2	
AC-side (Grid)		
Nominal AC Power(at 45˚C)	1600kVA*2	2000kVA*2
Converter Port Max. AC Output Current	1617A*2	1674A*2
Converter Port Nominal AC Voltage	630V	690V
Converter Port AC Voltage Range	567 ~ 693V	621 ~ 759V
Nominal Grid Frequency/Grid Frequency Range	50Hz/45~55Hz,60Hz/55~65Hz	
Harmonic (THD)	< 3%(at nominal power)	
Power Factor at Nominal Power / Adjustable Power Factor	>0.99/-1~+1	
Adjustable Reactive Power	-95 %~95 %	
Feed-in Phases/AC Connection	3/3	
AC-side (Off-Grid)		
Converter Port Nominal AC Voltage	630V	690V
Converter Port AC Voltage Range	567 ~ 693V	621 ~ 759V
AC Voltage Distortion	<3%(Linear load)	
DC Voltage Component	<0.5%Un (Linear balance load)	
Unbalance Load Capacity	100% ThdU<1%(under linear load)	
Nominal Frequency/Frequency Range	50Hz/45~55Hz,60Hz/55~65Hz	
Efficiency		
Converter Max. Efficiency	Max. efficiency 98.8 %/CEC Efficiency 98.5%	
Transformer		
Nominal Power	3200kVA	4000kVA
LV/MV Voltage	0.63kV/11~35kV	0.69kV/11~35kV
Transformer vector	Dy11	
Transformer cooling type	ONAN	
Oil type	Mineral oil (PCB free) or degradable oil on request	
Protection		
DC Input Protection	Load break switch + fuse	
Converter Output Protection	Circuit breaker	
AC Output Protection	Circuit breaker	
Over Voltage Category	Ⅱ(DC)/ Ⅲ (AC Main)	
Grid Monitoring/Ground Fault Monitoring	Yes/Yes	
Insulation Monitoring	Yes	
Overheat Protection	Yes	

General Parameters	
Dimensions (W*H*D)	6058*2896*2438mm
Weight	19000 kg
Degree of Protection	IP54 (Converter: IP21)
Operating Ambient Temperature Range	-25 to 50℃ (> 45℃ derating)
Allowable Relative Humidity Range	0~95 %,No condensation
Cooling Method	Temperature controlled forced air cooling
Max. Operating Altitude	4000m (>2000m derating)
Display	Touch screen
Communication	Modbus RTU, Modbus TCP/IP, CAN, IEC 104, IEC61850
Compliance	IEC62477-1; IEC61000-6-4; IEC-61000-6-2; NTSYCS:2020
Grid Support	L/HVRT, FRT, active & reactive power control and power ramprate control, Volt-var, Volt-watt, Frequency-watt

*Subject to actual delivery.

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