SG3400/3125/2500HV-MV-20

SUNGROW
Clean power for all

MV Turnkey Station for 1500 Vdc System - MV Separate Transformer + RMU



HIGH YIELD

- Advanced three-level technology, max. inverter efficiency 99 %

EASY O&M

- Integrated current, voltage and MV parameters monitoring function for online analysis and fast trouble shooting
- Modular design, easy for maintenance
- Convenient external touch screen

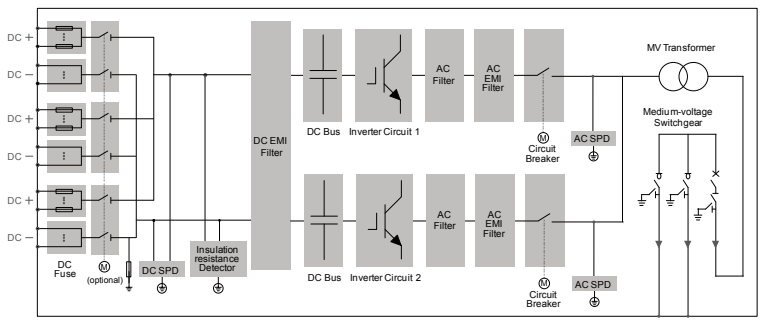
SAVED INVESTMENT

- Low transportation and installation cost due to 20-foot container design
- DC 1500 V system, low system cost
- Integrated MV transformer and switchgear
- Q at night function optional

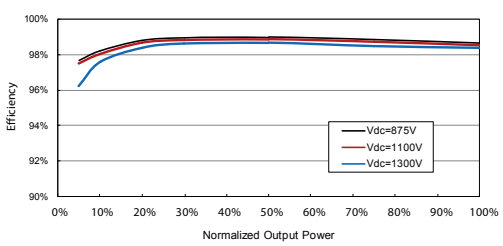
GRID SUPPORT

- Compliance with standards: IEC 61727, IEC 62116
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG3400HV-20)



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Type designation	SG3400HV-MV-20	SG3125HV-MV-20	SG2500HV-MV-20
Input (DC)			
Max. PV input voltage		1500 V	
Min. PV input voltage / Startup input voltage	875 V / 915 V	875 V / 915 V	800 V / 840 V
MPP voltage range for nominal power	875 – 1300 V	875 – 1300 V	800 – 1300 V
No. of independent MPP inputs		1	
No. of DC inputs	18(optional:22, 24 negative grounding or floating; 28 negative grounding)		18 – 24
Max. PV input current	4178 A	4178 A	3508 A
Max. DC short-circuit current		4800 A	
Output (AC)			
AC output power	3593 kVA@ 25 ˚C/ 3437 kVA@ 45 ˚C	3593 kVA@ 25 ˚C / 3437 kVA@ 45 ˚C / 3125 kVA@ 50 ˚C	2750 kVA@ 45 ˚C / 2500 kVA@ 50 ˚C
Max. AC output current	3458 A	3458 A	2886 A
AC voltage range		10 – 35 kV	
Nominal grid f requency / Grid f requency range		50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz	
THD		< 3 % (at nominal power)	
DC current injection		< 0.5 % In	
Power factor at nominal power / Adjustable power factor		> 0.99 / 0.8 leading – 0.8 lagging	
Feed-in phases / Connection phases		3 / 3	
Efficiency			
Inverter Max. efficiency		99.0 %	
Inverter Euro. efficiency		98.7 %	
Transformer			
Transformer rated power	3437 kVA	3125 kVA	2500 kVA
Transformer max. power	3593 kVA	3593 kVA	2750 kVA
LV / MV voltage	0.6 kV / 10 – 35 kV	0.6 kV / 10 – 35 kV	0.55 kV / 10 – 35 kV
Transformer vector		Dy11	
Transformer cooling type		ONAN (Oil Natural Air Natural)	
Oil type		Mineral oil (PCB free) or degradable oil on request	
Protection and Function			
DC input protection		Load break switch + fuse	
Inverter output protection		Circuit breaker	
AC MV output protection		Circuit breaker	
Overvoltage protection		DC Type I + II / A C Type II	
Grid monitoring / Ground fault monitoring		Yes / Yes	
Insulation monitoring		Yes	
Overheat protection		Yes	
Q at night function		Optional	
General Data			
Dimensions (W*H*D)		6058 * 2896 * 2438 mm	
Weight	17T	17 T	18T
Degree of protection	IP54 (Inverter: IP55)	IP54 (Inverter: IP55)	IP54
Operating ambient temperature range	-35 to 60 ˚C (> 45 ˚C derating)	-35 to 60 ˚C (> 50 ˚C der ating)	-35 to 60 ˚C (> 50 ˚C derating)
Allowable relative humidity range (non-condensing)		0 – 95 %	
Cooling method		Temperature controlled forced air cooling	
Max. operating altitude		1000 m (standard) / > 1000 m (optional)	
Display		Touch screen	
Communication		Standard: RS485, Ethernet; Optional: optical fiber	
Compliance		CE, IEC 62109, IEC 62116, IEC 61727	
Grid support		Q at night function (optional), L / HVRT, active & reactive power control and power ramp rate control	

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