

MV Turnkey Solution for 1500 Vdc System



HIGH YIELD

- 3-level technology, inverter max. efficiency 99%
- High DC / AC ratio up to 1.5

EASY O&M

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

SAVED INVESTMENT

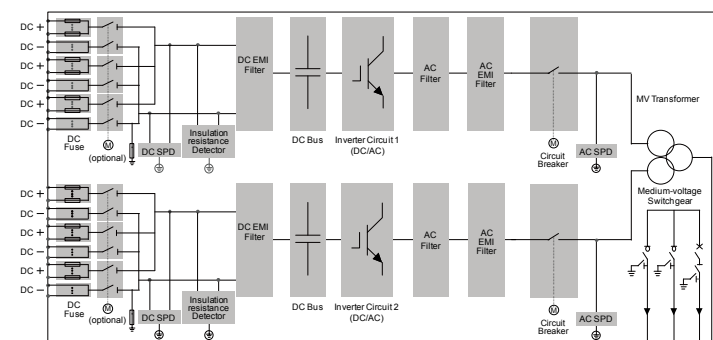
- Two 10-feet containers and one 20-feet container
- Easy transportation and installation due to standard container design
- Q at night function (Optional)

GRID SUPPORT

- Compliance with standards: IEC 61727, IEC 62116
- Reactive & active power control
- Low / High voltage ride through (L / HVRT), Frequency ride through (FRT)

Type designation	6.25 MVA MV Turnkey Station	6.8 MVA MV Turnkey Station
Input (DC)		
Max. PV input voltage	1500V	
Min. PV input voltage / Startup input voltage	875 V / 915 V	
MPP voltage range for nominal power	875 – 1300 V	
No. of independent MPP inputs	2	
No. of DC inputs	42 (optional: 48 negative grounding or floating; 56 negative grounding)	
Max. PV input current	2 * 4178 A	
Output (AC)		
AC output power	2 * 3593 kVA @ 25 °C / 2 * 3437 kVA @ 45 °C / 2 * 3125 kVA @ 50 °C	2 * 3593 kVA @ 25 °C / 2 * 3437 kVA @ 45 °C
AC voltage range	20 – 35 kV	
Nominal grid frequency / Grid frequency 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	6250 kVA	6873 kVA
Transformer max. power	7186 kVA	
LV / MV voltage	0.6 – 0.6 kV / 20 – 35 kV	
Transformer vector	Dy11 y11	
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 / AC Type II	
Grid monitoring / Ground fault monitoring	Yes / Yes	
Insulation monitoring	Yes	
Overheat protection	Yes	
Q at night function	Optional	
General Data		
Dimensions	2 * 10-feet container + 20-feet container	
Weight	35 T	
Degree of protection	IP54 (Inverter: IP55)	
Auxiliary power supply	415 V, 15 kVA (Optional: max. 40 kVA)	
Operating ambient temperature range	-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, FRT, active & reactive power control and power ramp rate control	

CIRCUIT DIAGRAM



EFFICIENCY CURVE

