

MVS4480-US

MV Turnkey Solution for 1500 Vdc String Inverter SG350HX-US



SAVE INVESTMENT

- Standard ISO 20ft. Container, easy for transportation
- Pre-assembly in factory, only AC cable wiring needed onsite



EASY O&M

- Online monitoring easy for fault analysis
- Modular design, main device easy replacement
- Front accessible for maintenance



SAFETY

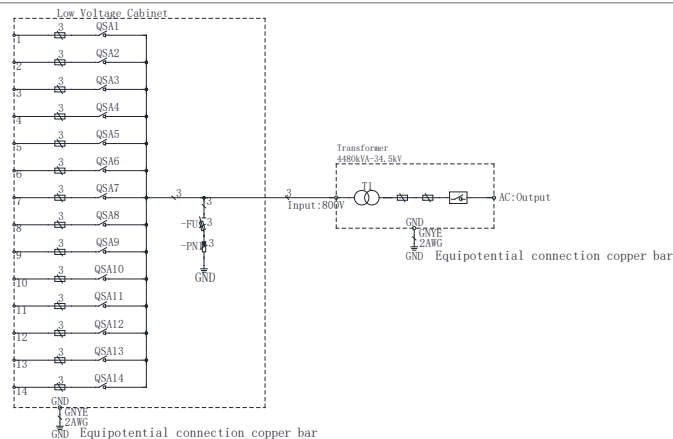
- UL listed transformer and LV switchboard
- NEC code compliance, LOTO



RELIABLE

- 10GW+ String Inverter SKID deployed globally
- SKID fully tested in factory

CIRCUIT DIAGRAM



Type designation	MVS4480-US
Transformer	
Transformer type	Oil immersed
AC output power	4480 kVA @ 40 °C, 4928 kVA @ 30 °C
Vector group	Dy1 / Dy11 / YNy0 / Customized (it needs to be confirmed with Sungrow)
LV / MV voltage	0.8 kV / 34.5 kV
Maximum input current at nominal voltage	254 A * 14
Frequency	60 Hz
Tapping on HV	0, ± 2 * 2.5 %
Efficiency	99 % @ 100 % load (4480 KVA)
Cooling method	KNAN / ONAN (for Mineral Oil (-40°C))
Impedance	Two Windings Typ. $\approx 8 \% \pm 7.5 \%$ (IEEE Tolerance) for 34.5 KV
Oil type	Ester Oil / Mineral Oil (-40 °C)
Winding material	Al / Al
Insulation class	A
LV Panel	
Disconnecter specification	275 A / 800 Vac / 3P, 14 pcs
Fuse specification	350 A / 800 Vac / 1P, 42 pcs
Protection	
Transformer protection	Expulsion fuse + Backup fuse
Transformer alarm contacts	Oil temperature alarm & trip, Oil level trip, Pressure trip
Surge protection	Type II
General data	
Dimensions (W * H * D)	6058 mm * 2896 mm * 2438 mm
Approximate weight	16000 kg
Operating ambient temperature range *	-30 °C - 60 °C
Auxiliary power supply	5 kVA, 120 Vac Optional: 40 kVA (35 KVA / 480 V, 5 KVA / 120 V)
Degree of protection	Type 3R
Allowable relative humidity range (non-condensing)	0 % – 95 %
Operating altitude	1000 m (Standard) / > 1000 m (Customized) (3280.8 ft (standard) / > 3280.8 ft (Customized))
Communication	RS485, Ethernet
Compliance	IEEE C57.12.00, C57.12.90, C57.12.28, Low-voltage cabinet UL891, Aux.power cabinet UL508

* The ambient temperature is determined as the average temperature obtained from at least four evenly distributed temperature monitoring points located at a distance of 1 meter from the equipment, at a height halfway up the machine. The temperature sensors must be shielded from airflow, thermal radiation, and rapid temperature fluctuations to prevent display inaccuracies.