MVS3200/4480-LV

MV Turnkey Solution for 1500 Vdc String Inverter SG350HX / SG350HX-20

SAVED INVESTMENT

- Up to 4.48 MW block design
- Easy transportation due to standard container design
- All pre-assembled for easy set-up and commissioning

SAFETY

- MV and LV isolated, independent control room
- All key components front accessible, no need walk-in operation

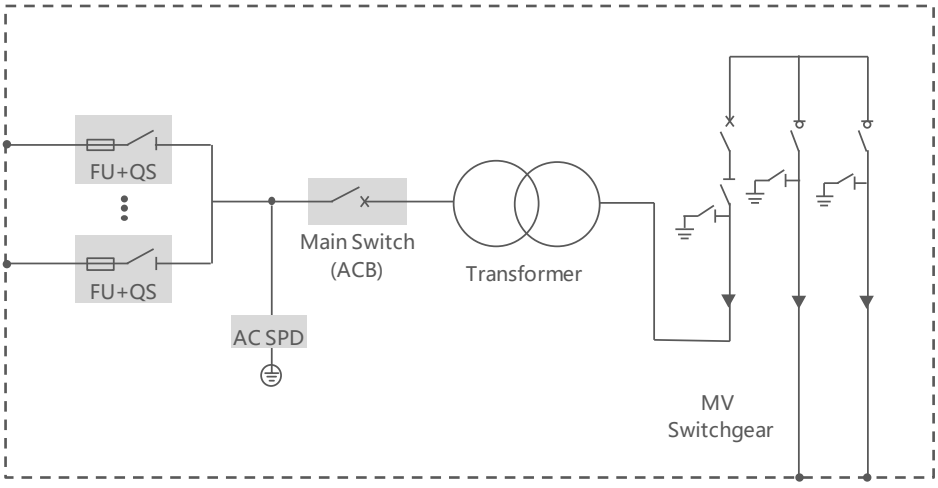
EASY O&M

- Online analysis for fast trouble shooting
- Modular design, main device easy replacement

RELIABLE

- All components type-tested
- Compliance with standards: IEC 60076, IEC 62271, IEC 61439

CIRCUIT DIAGRAM



SUNGROW
Clean power for all

Type designation	MVS3200-LV	MVS4480-LV
Transformer		
Transformer type	Oil immersed	
Rated power	3200 kVA @ 40 ℃	4480 kVA @ 40 ℃
Max. power	3520 kVA @ 30 ℃	4928 kVA @ 30 ℃
Vector group	Dy11	
LV / MV voltage	0.8 kV / (10 - 35) kV	
Maximum input current at nominal voltage	2540 A	3557 A
Frequency	50 Hz / 60 Hz	
Tapping on HV	0 , ± 2 * 2.5 %	
Efficiency	≥ 99 % (optional: Tier2)	
Cooling method	ONAN (Oil Natural Air Natural)	
Impedance	7 % (± 10 %)	8 % (± 10 %)
Oil type	Mineral oil (PCB free)	
Winding material	Al / Al	
Insulation class	A	
MV switchgear		
Insulation type	SF6	
Rated voltage range	24 kV – 40.5 kV	
Rated current	630 A	
Internal arcing fault	IAC AFL 20 kA / 1 s	
LV panel		
Main switch specification	4000 A / 800 Vac / 3P, 1 pcs	
Disconnector specification	260 A / 800 Vac / 3P, 10 pcs	260 A / 800 Vac / 3P, 14 pcs
Fuse specification	400A / 800 Vac / 1P, 30 pcs	400 A / 800 Vac / 1P, 42 pcs
Protection		
AC input protection	Fuse+Disconnector	
Transformer protection	Oil-temperature, Oil-level, Oil-pressure, Buchholz	
Relay protection	50 / 51, 50N / 51N	
Surge protection	AC Type I + II	
General data		
Dimensions(W*H*D)	6058 mm * 2896 mm * 2438 mm	
Approximate weight	15 T	17 T
Operating ambient temperature range *	-20 ℃ to 60 ℃ (optional: -30 ℃ to 60 ℃)	
Auxiliary transformer supply	15 kVA / 400 V (optional: max. 40 kVA)	
Degree of protection	IP54	
Allowable relative humidity range (non-condensing)	0 % – 95 %	
Operating altitude	1000 m (standard) / > 1000 m (optional)	
Communication	Standard: RS485, Ethernet, Optical fiber	
Compliance	IEC 60076, IEC 62271-200, IEC 62271-202, IEC 61439-1, EN 50588-1	

* 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.