

# ST3727KWH(L)-D1250HV+ SG3125HV-MV

Energy Storage System



## HIGH INTEGRATION

- DC coupled energy storage system integrated with PV inverter
- Advanced integration technology ensures optimal system performance and lower cost



## SAFE AND RELIABLE

- DC electric circuit safety management includes fast breaking and anti-arc protection
- Multi-state monitoring and linkage actions ensure battery system safety



## EFFICIENT AND FLEXIBLE

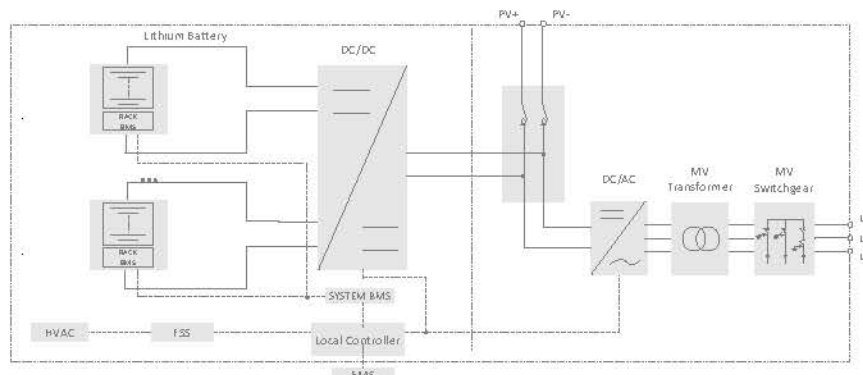
- Intelligent cell-level temperature control ensures higher efficiency and longer battery cycle life
- Modular design supports parallel connection and easy system expansion



## SMART AND FRIENDLY

- Integrated local controller enables single point of communication interface
- Fast state monitoring and faults record enables pre-alarm and faults location

## CIRCUIT DIAGRAM



System Type	ST3727KWH(L)-D1250HV+SG3125HV-MV
<b>PV Data</b>	
Max. PV input voltage	1,500 V
MPPT voltage range for nominal power	875 – 1,300 V
Number of PV inputs	24
Max. PV input current	3,997 A
<b>Battery Data</b>	
Cell type	LFP , 280 AH
Configuration of system	416S10P
Battery capacity (BOL)	3,727 kWh
Battery voltage range	1,123.2 – 1,497.6 V
BMS communication interfaces	RS485, Ethernet
BMS communication protocols	Modbus RTU, Modbus TCP
<b>DCDC Data</b>	
Working voltage range	500 – 1,500 V
Nominal power	1,250 kW
Max. current	1,400 A
<b>AC Data</b>	
Nominal AC power	3,125 kVA @ 50 °C / 3,437 kVA @ 45 °C
Max. THD of current	< 3 % (at nominal power)
DC component	< 0.5 % In
Grid voltage range	20 – 35 kV
Power factor	> 0.99 (at nominal power)
Adjustable power factor	0.8 leading – 0.8 lagging
Nominal grid frequency	50 Hz /60 Hz
Grid frequency range	45 – 55 Hz / 55 – 65 Hz
Isolation method	Transformer
<b>Transformer</b>	
Transformer rated power	3,125 kVA
LV/MV voltage	0.6 kV / 20 - 35 kV
Transformer vector	Dy11
Transformer cooling type	ONAN (Oil Natural Air Natural)
Oil type	Mineral oil (PCB free) or degradable oil on request
<b>General Data</b>	
Dimensions of PCS unit (W * H * D)	6,058*2,896*2,438 mm
Dimensions of battery unit (W * H * D)	12,192*2,896*2,438 mm
Weight of PCS unit	15.0 T
Weight of battery unit (with / without battery)	46.3 T / 16.3 T
Degree of protection	IP54
Operating temperature range	-30 to 50 °C (> 45 °C derating)
Relative humidity	0 – 95 % (non-condensing)
Max. working altitude	1000 m (standard) / > 1000 m (optional)
Cooling concept of battery chamber	Heating, Ventilation and Air Conditioning
Cooling concept of PCS chamber	Temperature controlled forced air cooling
Fire suppression system of battery unit	Novel230 extinguishment system
Communication interfaces	RS485, Ethernet
Compliance	CE, IEC 62477-1, IEC 61000-6-2, IEC61000-6-4, IEC62619