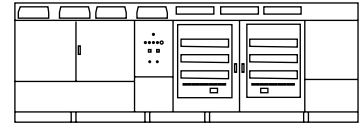


PCSM

IEC

Easy maintenance.
Integrated MV solution in the same enclosure.
Advanced grid support.
Compatible with all battery technologies.





REFERENCES	FP5150MH	FP5151MH	FP5152MH	
AC	AC Output Power (kVA/kW) @30 °C ^[1]		5360	
	AC Output Power (kVA/kW) @35 °C ^[1]		5150	
	AC Output Power (kVA/kW) @40 °C ^[1]		4940	
	AC Output Power (kVA/kW) @50 °C ^[1]		4520	
	Operating Grid Voltage (kV)	34.5 kV ±10%	33 kV ±10%	30 kV ±10%
	Operating Grid Frequency (Hz)	60 Hz	50 Hz	50 Hz
	Current Harmonic Distortion (THDi)	<3% per IEEE 519		
	Power Factor (CosPhi) ^[2]	0.5 leading ... 0.5 lagging		
	Reactive Power Compensation	Four quadrant operation		
	Overload Capability	166% - 100 ms / 150% - 5 s / 120% - 8 s / 110% - 15 s		
DC	DC Voltage Range Full Power ^[3]		1019 V - 1500 V	
	Maximum DC Voltage		1500 V	
	DC Voltage Ripple		<3%	
	Max. DC Continuous Current (A)		5367	
	Max. DC Short Circuit Current (kA)		500 kA with a time constant of 1 ms	
	Battery Technology		All type of batteries (BMS required)	
EFFICIENCY & AUX. SUPPLY	Efficiency (Max) (η)		98.00% including MV transformer	
	CEC (η)		97.53% including MV transformer	
CABINET	Dimensions [WxDxH] (ft)		21.3 x 6.5 x 7.5	
	Dimensions [WxDxH] (m)		6.5 x 2.0 x 2.3	
	Weight (lbs)		30865	
	Weight (kg)		14000	
	Type of Ventilation		Forced air cooling	
ENVIRONMENT	Degree of Protection		IP55	
	Operating Temperature Range ^[4]		From -25 °C to +60 °C, >30 °C power derating	
	Operating Relative Humidity Range		From 4% to 100% non-condensing	
	Storage Temperature Range		From -40 °C to +60 °C	
	Max. Altitude (above sea level) ^[5]	2000 m	1000 m	
CONTROL INTERFACE	Communication Protocol		Modbus TCP	
	Power Plant Controller		Optional	
	Keyed ON/OFF Switch		Standard	
PROTECTIONS	Ground Fault Protection		Insulation monitoring device	
	Humidity Control		Active heating	
	General AC Protection & Disconnection		36 kV MV switchgear (2L+V)	
	General DC Protection & Disconnection		High-speed fuses, Motorized DC disconnect switches ^[6]	
	Overvoltage Protection		Type 2 for AC and Type 1+2 for DC	
CERTIFICATIONS & STANDARDS	Safety		IEC 62109-1 / IEC 62109-2 / IEC 62477-1 / IEC 62477-2	
	Utility Interconnect ^[7]		IEC 62116 / / G99 / VDE 4110-4120-4130 / CEI 0-16 / NTS 2.1 / EN 50549	

NOTES

- [1] Values at 1.00-Vac nom and CosPhi=1.
Consult Power Electronics for derating curves and overload capability in grid forming mode.
[2] Consult P-Q charts available: $Q(kVar)=\sqrt{(S(kVA))^2-P(kW)^2}$.
[3] Consult Power Electronics for derating curves. In the event of overvoltage in the grid, the minimum DC voltage will vary proportionally with the AC voltage.
[4] Optional available for temperatures below to -25 °C.
[5] Consult Power Electronics for altitudes above 1000 m.
[6] Battery short circuit disconnection must be done on the battery side.
[7] Consult Power Electronics for other applicable standards / grid codes.