

Multi PCSM

IEC

V_01

Easy maintenance.

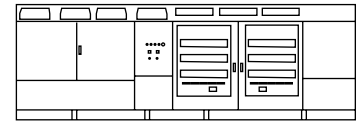
Integrated MV solution in the same enclosure.

Up to 4 independent DC inputs.

Advanced grid support.

Compatible with all battery technologies.





REFERENCES		FP4200MH2	FP4203MH2	FP4200MH4	FP4203MH4
AC	AC Output Power (kVA/kW) @40°C ^[1]	4200			
	AC Output Power (kVA/kW) @50°C ^[1]	3900			
	Operating Grid Voltage (kV)	34.5kV ±10%	33 kV ±10%	34.5 kV ±10%	33 kV ±10%
	Operating Grid Frequency (Hz)	60Hz	50Hz	60Hz	50Hz
DC	DC Voltage Range ^[3]	934V - 1500V			
	Max. DC Continuous Current per Input (A)	2295		1148	
	Number of Separate DC Inputs	2		4	
EFFICIENCY	Efficiency (Max) (η)	97.80% including MV transformer			
	CEC (η)	97.53% including MV transformer			
REFERENCES		FP4105M2	FP4105M4		
AC	AC Output Power (kVA/kW) @40°C ^[1]	4105			
	AC Output Power (kVA/kW) @50°C ^[1]	3810			
	Operating Grid Voltage (kV)	34.5kV ±10%		34.5kV ±10%	
	Operating Grid Frequency (Hz)	60Hz			
DC	DC Voltage Range ^[3]	913V - 1500V			
	Max. DC Continuous Current per Input (A)	2295		1148	
	Number of Separate DC Inputs	2		4	
EFFICIENCY	Efficiency (Max) (η)	97.93% including MV transformer			
	CEC (η)	97.50% including MV transformer			
REFERENCES		FP4010M2	FP4010M4		
AC	AC Output Power (kVA/kW) @40°C ^[1]	4010			
	AC Output Power (kVA/kW) @50°C ^[1]	3720			
	Operating Grid Voltage (kV)	34.5kV ±10%			
	Operating Grid Frequency (Hz)	60Hz			
DC	DC Voltage Range ^[3]	891V - 1500V			
	Max. DC Continuous Current per Input (A)	2295		1148	
	Number of Separate DC Inputs	2		4	
EFFICIENCY	Efficiency (Max) (η)	97.91% including MV transformer			
	CEC (η)	97.48% including MV transformer			
COMMON FEATURES					
AC	Current Harmonic Distortion (THDi)	< 3% per IEEE519			
	Power Factor (cosine phi) ^[2]	0.5 leading ... 0.5 lagging			
	Reactive Power Compensation	Four quadrant operation			
DC	Maximum DC Voltage	1500V			
	DC Voltage Ripple	< 3%			
	Max. DC Short Circuit Current per Input (kA)	250 kA with a time constant of 3ms			
	Battery Technology	All type of batteries (BMS required)			
CABINET	Dimensions [WxDxH] (ft)	21.3 x 6.5 x 7.2			
	Dimensions [WxDxH] (m)	6.5 x 2.0 x 2.2			
	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, >50°C power derating			
	Operating Relative Humidity Range	From 4% to 100% non-condensing			
	Storage Temperature Range	From -15°C to +40°C			
	Max. Altitude (above sea level) ^[5]	2000m			
CONTROL INTERFACE	Communication Protocol	Modbus TCP			
	Power Plant Controller	Optional. Third party SCADA systems supported.			
	Keyed ON/OFF Switch	Standard			
PROTECTIONS	Ground Fault Protection	Insulation monitoring device			
	Humidity Control	Active heating			
	General AC Protection & Disconn.	MV switchgear (2L+V)			
	General DC Protection & Disconn.	DC switch-disconnectors ^[6]			
	Overvoltage Protection	Type II for AC and Type I-II for DC			
CERTIFICATIONS & STANDARDS	Safety	IEC 62477-2			

NOTES [1] Values at 1.00-Vac nom and cosφ=1. Consult Power Electronics for charging mode and derating curves.

[2] Consult P-Q charts available: $Q(kVAr)=\sqrt{(S(kVA))^2-P(kW)^2}$.

[3] Consult Power Electronics for derating curves.

[4] Optional available for temperatures down to -35°C.

[5] Consult Power Electronics for altitudes above 1000m.

[6] Battery short circuit disconnection must be done on the battery side.