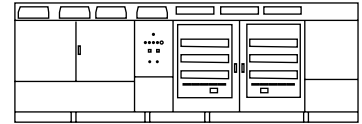


PCSM

UL

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





COMMON FEATURES

AC	Operating Grid Frequency (Hz)	60Hz		
	Current Harmonic Distortion (THDi)	< 3% per IEEE519		
	Power Factor (CosPhi) ^[1]	0.5 leading ... 0.5 lagging		
	Reactive Power Compensation	Four quadrant operation		
	Overload Capability ^[8]	166% - 100 ms / 150% - 5 s / 120% - 8 s / 110% - 15 s		
DC	Maximum DC Voltage	1500V		
	DC Voltage Ripple	< 3%		
	Max. DC Continuous Current (A)	4590		
	Max. DC Short Circuit Current (kA)	500 kA with a time constant of 1 ms		
CABINET	Battery Technology	All type of batteries (BMS required)		
	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		
ENVIRONMENT	Type of Ventilation	Forced air cooling		
	Degree of Protection	NEMA 3R		
	Operating Temperature Range ^[2]	From -25°C to +60°C, >40°C power derating		
	Operating Relative Humidity Range	From 4% to 100% non-condensing		
	Storage Temperature Range	From -40°C to +60°C		
CONTROL INTERFACE	Max. Altitude (above sea level) ^[3]	2000m		
	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.	38 kV MV switchgear (20 or 25 kA)		
	General DC Protection & Disconn. ^[4]	High-speed fuses, Motorized DC disconnect switches		
	Overvoltage Protection	Type II for AC and Type I+II for DC		
CERTIFICATIONS & STANDARDS	Safety	UL 1741 / CSA 22.2 No.1071-16		
	Installation	NEC 2023		
	Utility Interconnect ^[5]	UL 1741 SA & SB / RULE 21 / RULE 14H / IEEE 15471:2020		
REFERENCES		FP4200M	FP4201M	FP4204M
AC	AC Output Power (kVA/kW) @40°C ^[6]	4200		
	AC Output Power (kVA/kW) @50°C ^[6]	3900		
	Operating Grid Voltage (kV)	34.5 kV ±10%	13.8 kV ±10%	12.47 kV ±10%
DC	DC Voltage Range ^[7]	934V - 1500V		
EFFICIENCY	Efficiency (Max) (η)	98.00% including MV transformer		
	CEC (η)	97.53% including MV transformer		
REFERENCES		FP4105M		
AC	AC Output Power (kVA/kW) @40°C ^[6]	4105		
	AC Output Power (kVA/kW) @50°C ^[6]	3810		
	Operating Grid Voltage (kV)	34.5kV ±10%		
DC	DC Voltage Range ^[7]	913V - 1500V		
EFFICIENCY	Efficiency (Max) (η)	97.93% including MV transformer		
	CEC (η)	97.50% including MV transformer		
REFERENCES		FP4010M		
AC	AC Output Power (kVA/kW) @40°C ^[6]	4010		
	AC Output Power (kVA/kW) @50°C ^[6]	3720		
	Operating Grid Voltage (kV)	34.5kV ±10%		
DC	DC Voltage Range ^[7]	891V - 1500V		
EFFICIENCY	Efficiency (Max) (η)	97.91% including MV transformer		
	CEC (η)	97.49% including MV transformer		

NOTES

- [1] Consult P-Q charts available: $Q(kVAr) = \sqrt{(S(kVA))^2 - P(kW)^2}$.
- [2] Optional available for temperatures below to -25 °C.
- [3] Consult Power Electronics for altitudes above 1000m.
- [4] Battery short circuit disconnection must be done on the battery side.
- [5] Consult Power Electronics for other applicable standards / grid codes.
- [6] Values at 1.00-Vac nom and CosPhi=1. Consult Power Electronics for derating curves and overload capability in grid forming mode.
- [7] 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.
- [8] Available from January 2027.