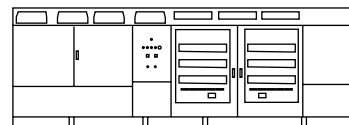

Easy maintenance.
Integrated MV solution in the same enclosure.
Advanced grid support.
Compatible with all battery technologies.





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		
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		
ENVIRONMENT	Weight (kg)	14000		
	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		
CONTROL INTERFACE	Operating Relative Humidity Range	From 4% to 100% non-condensing		
	Storage Temperature Range	From -40°C to +60°C		
	Max. Altitude (above sea level) ^[3]	2000m		
	Communication Protocol	Modbus TCP		
PROTECTIONS	Power Plant Controller	Optional. Third party SCADA systems supported.		
	Keyed ON/OFF Switch	Standard		
	Ground Fault Protection	Insulation monitoring device		
	Humidity Control	Active heating		
CERTIFICATIONS & STANDARDS	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		
	Safety	UL 1741 / CSA 22.2 No.1071-16		
REFERENCES	Installation	NEC 2023		
	Utility Interconnect ^[5]	UL 1741 SA & SB / RULE 21 / RULE 14H / IEEE 1547.1:2020		
AC	AC Output Power (kVA/kW) @40°C ^[6]	FP4200M	FP4201M	FP4204M
	AC Output Power (kVA/kW) @50°C ^[6]			
	Operating Grid Voltage (kV)	34.5 kV ±10%	13.8 kV ±10%	12.47 kV ±10%
	DC Voltage Range ^[7]	934V - 1500V		
EFFICIENCY	Efficiency (Max) (η)	98.00% including MV transformer		
	CEC (η)	97.53% including MV transformer		
AC	AC Output Power (kVA/kW) @40°C ^[6]	FP4105M		
	AC Output Power (kVA/kW) @50°C ^[6]	4105		
	Operating Grid Voltage (kV)	3810		
	DC Voltage Range ^[7]	34.5kV ±10%		
DC	Efficiency (Max) (η)	913V - 1500V		
	CEC (η)	97.93% including MV transformer		
	Efficiency (Max) (η)	97.50% including MV transformer		
	CEC (η)	97.91% including MV transformer		
AC	AC Output Power (kVA/kW) @40°C ^[6]	FP4010M		
	AC Output Power (kVA/kW) @50°C ^[6]	4010		
	Operating Grid Voltage (kV)	3720		
	DC Voltage Range ^[7]	34.5kV ±10%		
DC	Efficiency (Max) (η)	891V - 1500V		
	CEC (η)	97.91% including MV transformer		
	Efficiency (Max) (η)	97.49% 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 down to -35°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.