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Easy maintenance.
Advanced grid support.
Integrated MV solution in the same enclosure.
Bus Plus. Combines Solar and Storage.



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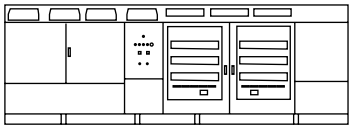

REFERENCES		FS4105MH	FS4010MH
AC	AC Output Power (kVA/kW) @40 °C [1]	4105	4010
	AC Output Power (kVA/kW) @50 °C [1]	3810	3720
	Operating Grid Voltage (kV) [2]	34.5 kV ±10%	
	Operating Grid Frequency (Hz)	60 Hz	
DC	DC Voltage Range [4]	913 V - 1500 V	891 V - 1500 V
EFFICIENCY	Efficiency (Max) (η) (preliminary)	97.76% including MV transformer	97.75% including MV transformer
	Euroeta (η) (preliminary)	97.50% including MV transformer	97.48% including MV transformer
ENVIRONMENT	Max. Altitude (above sea level) [7]	2000 m	
COMMON FEATURES			
AC	Current Harmonic Distortion (THDi)	< 3% per IEEE 519	
	Power Factor (cos phi) [3]	0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night	
DC	Maximum DC Voltage	1500 V	
	Number of Inputs	Up to 40	
	Max. DC Continuous Current (A) [5]	4590	
	Max. DC Short Circuit Current (A) [5]	6940	
	Number of Freemaq DC/DC [5]	Up to 4	
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 [6]	From -40 °C to +60 °C, >40 °C power derating	
	Operating Relative Humidity Range	From 4% to 100%	
	Storage Temperature Range	From -40 °C to +60 °C	
CONTROL	Communication Protocol	Modbus TCP	
	Power Plant Controller	Optional	
	Keyed ON/OFF Switch	Standard	
PROTECTIONS	Ground Fault Protection	GFDI and insulation monitoring device	
	Humidity Control	Active heating	
	General AC Protection & Disconn.	36 kV MV switchgear (2L+V)	
	General DC Protection & Disconn.	Fuses, Motorized DC disconnect switches	
	Overvoltage Protection	Type II protection for AC and DC	
STANDARDS	Safety	IEC 62109-1 / IEC 62109-2	

NOTES

[1] Values at 1.00·Vac nom and cosφ=1. Consult Power Electronics for derating curves.
[2] Consult Power Electronics for other configurations.
[3] Consult P-Q charts available: $Q(kVAr)=\sqrt{(S(kVA)^2-P(kW)^2)}$.
[4] 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.
[5] Consult Power Electronics for Freemaq DC/DC connection configurations.
[6] Optional available for temperatures below -25 °C.
[7] Consult Power Electronics for altitudes above 1000 m.

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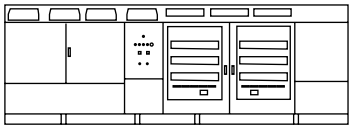

REFERENCES		FS4200MH	FS4206MH	FS4207MH
AC	AC Output Power (kVA/kW) @40°C [1]	4200		
	AC Output Power (kVA/kW) @50°C [1]	3900		
	Operating Grid Voltage (kV) [2]	34.5 kV ±10%	33 kV ±10%	
	Operating Grid Frequency (Hz)	60 Hz	50 Hz	
DC	DC Voltage Range [4]	934 V - 1500 V		
EFFICIENCY	Efficiency (Max) (η) (preliminary)	97.8% including MV transformer		
	Euroeta (η) (preliminary)	97.51% including MV transformer		
ENVIRONMENT	Max. Altitude (above sea level) [7]	2000 m		1000 m
COMMON FEATURES				
AC	Current Harmonic Distortion (THDi)	< 3% per IEEE 519		
	Power Factor (cos phi) [3]	0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night		
DC	Maximum DC Voltage	1500 V		
	Number of Inputs	Up to 40		
	Max. DC Continuous Current (A) [5]	4590		
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