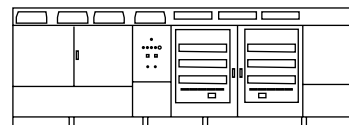

Easy maintenance.
Advanced grid support.
Integrated MV solution in the same enclosure.
Econ Mode. Remove no-load losses.
Bus Plus. Combines Solar and Storage.





REFERENCES		FS4999MH	FS5000MH	FS5001MH	FS5002MH
AC	AC Output Power (kVA/kW) @30 °C ^[1]	4999	5030		
	AC Output Power (kVA/kW) @35 °C ^[1]	4999	5000		
	AC Output Power (kVA/kW) @40 °C ^[1]	4860	4780		
	AC Output Power (kVA/kW) @50 °C ^[1]	4430	4345		
	Operating Grid Voltage (kV)	33 kV ±10%	34.5 kV ±10%	33 kV ±10%	30 kV ±10%
	Rated Impulse Withstand Voltage	145 kV			
	Operating Grid Frequency (Hz)	50 Hz	60 Hz	50 Hz	50 Hz
DC	DC Voltage Range Full Power ^[3]	976 V – 1500 V	934 V – 1500 V		
	Max. DC Continuous Current (A) ^[4]	5498	5495		
	Max. DC Short Circuit Current (A) ^[4]	8000			
ENVIRONMENT	Degree of Protection	IP55			
	Max. Altitude (above sea level) ^[6]	1000 m	2000 m	1000 m	
PROTECTIONS	General AC Protection & Disconnection	36 kV MV switchgear (2L+V)			
REFERENCES		FS5075MH	FS5076MH	FS5077MH	
AC	AC Output Power (kVA/kW) @30 °C ^[1]	5260			
	AC Output Power (kVA/kW) @35 °C ^[1]	5075			
	AC Output Power (kVA/kW) @40 °C ^[1]	4860			
	AC Output Power (kVA/kW) @50 °C ^[1]	4430			
	Operating Grid Voltage (kV)	34.5 kV ±10%	33 kV ±10%	30 kV ±10%	
	Rated Impulse Withstand Voltage	145 kV			
	Operating Grid Frequency (Hz)	60 Hz	50 Hz	50 Hz	
DC	DC Voltage Range Full Power ^[3]	976 V – 1500 V			
	Max. DC Continuous Current (A) ^[4]	5498			
	Max. DC Short Circuit Current (A) ^[4]	8000			
ENVIRONMENT	Degree of Protection	IP55			
	Max. Altitude (above sea level) ^[6]	2000 m	1000 m		
PROTECTIONS	General AC Protection & Disconnection	36 kV MV switchgear (2L+V)			
COMMON FEATURES					
	Current Harmonic Distortion (THDi)	<3% per IEEE 519			
	Power Factor (CosPhi) ^[2]	0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night			
DC	Maximum DC Voltage	1500 V			
	Number of Inputs	Up to 40			
	Number of Freemaq DC/DC ^[4]	Up to 4			
EFFICIENCY	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	Operating Temperature Range ^[5]	From -40 °C to +60 °C, >30 °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			
	Grid Forming (VISMA) / Black Start Capable	Standard			
PROTECTIONS	Ground Fault Protection	GFDI and isolation monitoring device			
	Humidity Control	Active heating			
	General DC Protection & Disconnection	Fuses, Motorized DC disconnect switches			
	Overvoltage Protection	Type 2 protection for AC and DC			
STANDARDS	Safety	IEC 62109-1 / IEC 62109-2			
	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.
[2] Consult P-Q charts available: $Q(kVar) = \sqrt{(S(kVA))^2 - P(kW)^2}$.
[3] Consult Power Electronics for derating curves above 1300 Vdc. In the event of overvoltage in the grid, the minimum DC voltage will vary proportionally with the AC voltage.
[4] Consult Power Electronics for Freemaq DC/DC connection configurations.
[5] Optional available for temperatures below -25 °C.
[6] Consult Power Electronics for altitudes above 1000 m.
[7] Consult Power Electronics for other applicable standards / grid codes.