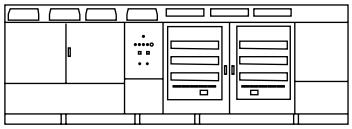
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REFERENCES		FS4997MU	FS4998MU	FS5000MU	FS5075MU
AC	AC Output Power @30 °C [1]	5030 kVA / 4999 kW	5260 kVA / 4999 kW	5030 kVA / kW	5260 kVA / kW
	AC Output Power @35 °C [1]	5000 kVA / 4999 kW	5075 kVA / 4999 kW	5000 kVA / kW	5075 kVA / kW
	AC Output Power @40 °C [1]	4780 kVA / kW	4860 kVA / kW	4780 kVA / kW	4860 kVA / kW
	AC Output Power @50 °C [1]	4345 kVA / kW	4430 kVA / kW	4345 kVA / kW	4430 kVA / kW
	Operating Grid Voltage	34.5 kV ±10%			
	Rated Impulse Withstand Voltage	150 kV			
	Operating Grid Frequency	60 Hz			
DC	DC Voltage Range [2]	934 V – 1500 V	976 V - 1500 V	934 V – 1500 V	976 V – 1500 V
	Max. DC Continuous Current [3]	5460 A	5226 A	5495 A	5498 A
	Max. DC Short Circuit Current [3]	8000 A			
ENVIRONMENT	Degree of Protection	NEMA 3R			
	Max. Altitude (above sea level) [4]	2000 m			
PROTECTIONS	General AC Protection & Disconnection	38 kV MV switchgear (V)			
COMMON FEATURES					
AC	Current Harmonic Distortion (THDi)	<3% per IEEE 519			
	Power Factor (CosPhi) [5]	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 [3]	Up to 4			
EFFICIENCY	Efficiency (Max) (η)	98.01% including MV transformer	98.02% including MV transformer	98.01% including MV transformer	98.02% including MV transformer
	CEC (η)	97.74% including MV transformer	97.75% including MV transformer	97.74% including MV transformer	97.75% including MV transformer
CABINET	Footprint dimensions [WxDxH]	21.3 x 6.5 x 7.5 ft			
	Footprint dimensions [WxDxH]	6.5 x 2.0 x 2.3 m			
	Weight	30865 lbs			
	Weight	14000 kg			
	Type of Ventilation	Forced air cooling			
ENVIRONMENT	Operating Temperature Range	From -40 °C to +60 °C, >30 °C power derating (optional below -25 °C)			
	Operating Relative Humidity Range	From 4% to 100%			
	Storage Temperature Range	From -40 °C to +60 °C			
CONTROL	Communication Protocol	Modbus TCP			
PROTECTIONS	Ground Fault Protection	GFDI and insulation monitoring device			
	Humidity Control	Active heating			
	General DC Protection & Disconnection	Fuses, Motorized DC disconnect switches			
	Overvoltage Protection	Type II protection for AC and DC			
STANDARDS	Safety	UL 1741 / CSA 22.2 No.107.1-16			
	Installation	NEC 2023			
	Utility Interconnect [6]	UL 1741 SA & SB / IEEE 1547.1 / IEEE 2800			

NOTES

[1] Values at 1.00·Vac nom and CosPhi=1. Consult Power Electronics for derating curves.
[2] 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.
[3] Consult Power Electronics for Freemaq DC/DC connection configurations.
[4] Consult Power Electronics for altitudes above 1000 m.
[5] Consult P-Q charts available: $Q(kVAr)=\sqrt{(S(kVA)^2-P(kW)^2)}$.
[6] Consult Power Electronics for other applicable standards / grid codes.

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