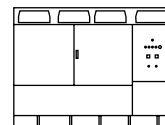




HEMK

Easy maintenance.
Multilevel topology.
Advanced grid support.
Bus Plus. Combine Solar and Storage.





REFERENCES		FS4997K	FS4998K	FS4999K
AC	AC Output Power @30 °C ^[1]	5030 kVA / 4999 kW	5260 kVA / 4999 kW	4999 kVA / kW
	AC Output Power @35 °C ^[1]	5000 kVA / 4999 kW	5075 kVA / 4999 kW	4999 kVA / kW
	AC Output Power @40 °C ^[1]	4780 kVA / kW	4860 kVA / kW	
	AC Output Power @50 °C ^[1]	4345 kVA / kW	4430 kVA / kW	
	Max. AC Output Current @30 °C	4400 A		4183 A
	Operating Grid Voltage	660 V ±10%	690 V ±10%	
DC	DC Voltage Range ^[2]	934 V - 1500 V	976 V - 1500 V	
	Max. DC Continuous Current ^[3]	5410 A	5177 A	
	Max. DC Short Circuit Current ^[3]	8000 A		
COMMON FEATURES				
AC	Operating Grid Frequency	60 Hz		50 Hz
	Current Harmonic Distortion (THDi)	< 3% per IEEE 519		
	Power Factor (CosPhi) ^[4]	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)	98.93%	98.94%	
	Euroeta (η)	98.48%	98.50%	
CABINET	Footprint dimensions [WxDxH]	9.8 x 6.5 x 7.5 ft		
	Footprint dimensions [WxDxH]	3.0 x 2.0 x 2.3 m		
	Weight	10365 lbs		
	Weight	4700 kg		
	Type of Ventilation	Forced air cooling		
ENVIRONMENT	Degree of Protection	NEMA 3R / IP55		
	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		
	Max. Altitude (above sea level)	2000 m / >2000 m power derating (max. 4000 m)		
CONTROL	Communication Protocol	Modbus TCP		
PROTECTIONS	Ground Fault Protection	GFDI and insulation monitoring device		
	Humidity Control	Active heating		
	General AC Protection & Disconn.	Circuit breaker		
	General DC Protection & Disconn.	Fuses, Motorized DC disconnect switches		
	Overvoltage Protection	Type II protection for AC and DC		
STANDARDS	Safety	UL 1741 / CSA 22.2 No.1071-16 / IEC 62109-1 / IEC 62109-2		
	Installation	NEC 2023		
	Utility Interconnect ^[5]	UL 1741 SA & SB / IEEE 1547.1 / IEC 62116 / G99 / VDE 4110-4120-4130 / CEI 0-16 / NTS 2.1 / EN 50549 / IEEE 2800		

NOTES

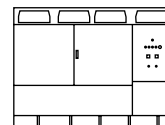
[1] Values at 1.00-Vac nom and CosPhi=1. Consult Power Electronics for derating curves.

[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 P-Q charts available: $Q(kVar) = \sqrt{(S(kVA))^2 - P(kW)^2}$.

[5] Consult Power Electronics for other applicable standards / grid codes.



REFERENCES		FS5000K	FS5075K
AC	AC Output Power @30 °C ^[1]	5030 kVA / kW	5260 kVA / kW
	AC Output Power @35 °C ^[1]	5000 kVA / kW	5075 kVA / kW
	AC Output Power @40 °C ^[1]	4780 kVA / kW	4860 kVA / kW
	AC Output Power @50 °C ^[1]	4345 kVA / kW	4430 kVA / kW
	Max. AC Output Current @30 °C		4400 A
	Operating Grid Voltage	660 V ±10%	690 V ±10%
DC	DC Voltage Range ^[2]	934 V – 1500 V	976 V – 1500 V
	Max. DC Continuous Current ^[3]	5443 A	5447 A
	Max. DC Short Circuit Current ^[3]		8000 A
COMMON FEATURES			
AC	Operating Grid Frequency		50 / 60 Hz
	Current Harmonic Distortion (THDi)		< 3% per IEEE 519
	Power Factor (CosPhi) ^[4]		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)	98.93%	98.94%
	Euroeta (η)	98.48%	98.50%
CABINET	Footprint dimensions [WxDxH]		9.8 x 6.5 x 7.5 ft
	Footprint dimensions [WxDxH]		3.0 x 2.0 x 2.3 m
	Weight		10365 lbs
	Weight		4700 kg
	Type of Ventilation		Forced air cooling
ENVIRONMENT	Degree of Protection		NEMA 3R / IP55
	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
	Max. Altitude (above sea level)		2000 m / >2000 m power derating (max. 4000 m)
CONTROL	Communication Protocol		Modbus TCP
PROTECTIONS	Ground Fault Protection		GFDI and insulation monitoring device
	Humidity Control		Active heating
	General AC Protection & Disconn.		Circuit breaker
	General DC Protection & Disconn.		Fuses, Motorized DC disconnect switches
	Overvoltage Protection		Type II protection for AC and DC
STANDARDS	Safety		UL 1741 / CSA 22.2 No.1071-16 / IEC 62109-1 / IEC 62109-2
	Installation		NEC 2023
	Utility Interconnect ^[5]		UL 1741 SA & SB / IEEE 1547.1 / IEC 62116 / G99 / VDE 4110-4120-4130 / CEI 0-16 / NTS 2.1 / EN 50549 / IEEE 2800

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