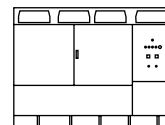




HEMK

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





Preliminary

COMMON FEATURES

FRAME		2	3	4
	Operating Grid Frequency (Hz)	50 / 60 Hz		
	Current Harmonic Distortion (THDi)	< 3% per IEEE 519		
	Power Factor (CosPhi) ^[2]	0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night		
	Maximum DC Voltage	1500 V		
	Number of Inputs	Up to 20	Up to 30	Up to 40
EFFICIENCY	Number of Freemaq DC/DC ^[4]	Up to 4		
	Efficiency (Max) (η)	98.86%	98.89%	98.95%
	Euroeta (η)	98.36%	98.51%	98.53%
CABINET	Dimensions [WxDxH] (ft)	9.8 x 6.5 x 7.5		
	Dimensions [WxDxH] (m)	3.0 x 2.0 x 2.3		
	Weight (lbs)	8600	9700	10365
	Weight (kg)	3900	4400	4700
	Type of Ventilation	Forced air cooling		
ENVIRONMENT	Degree of Protection	NEMA 3R / IP55		
	Operating Temperature Range ^[5]	From -25°C to +60°C, >35°C power derating		
	Operating Relative Humidity Range	From 4% to 100% non-condensing		
	Storage Temperature Range	From -40°C to +60°C		
	Max. Altitude (above sea level)	2000 m / >2000 m power derating (max. 4000 m)		
CONTROL INTERFACE	Communication Protocol	Modbus TCP		
	Power Plant Controller	Optional		
	Keyed ON/OFF Switch	Standard		
PROTECTIONS	Ground Fault Protection	GFDI and isolation monitoring device		
	Humidity Control	Active heating		
	General AC Protection & Disconn.	Circuit breaker		
	General DC Protection & Disconn.	Fuses, Motorized DC disconnect switches		
	Overvoltage Protection	Type 2 protection for AC and DC		
CERTIFICATIONS & STANDARDS	Safety	UL 1741 / CSA 22.2 No.1071-16 / IEC 62109-1 / IEC 62109-2		
	Installation	NEC 2023		
	Utility Interconnect ^[6]	UL 1741 SA & SB / IEEE 1547.1 / IEC 62116 / G99 / VDE 4110-4120-4130 / CEI 0-16 / NTS 2.1 / EN 50549		
REFERENCES		FS2500K	FS3750K	FS5000K
AC	AC Output Power (kVA/kW) @35°C ^[1]	2500	3750	5000
	AC Output Power (kVA/kW) @40°C ^[1]	2390	3585	4780
	AC Output Power (kVA/kW) @50°C ^[1]	2170	3260	4345
	Max. AC Output Current (A) @35°C	2187	3280	4374
	Operating Grid Voltage (VAC)	660 V ±10%		
DC	DC Voltage Range Full Power ^[3]	934 V - 1300 V		
	Max. DC Continuous Current (A) ^[4]	2730	4095	5460
	Max. DC Short Circuit Current (A) ^[4]	4127	6191	8255
REFERENCES		FS2540K	FS3805K	FS5075K
AC	AC Output Power (kVA/kW) @35°C ^[1]	2540	3805	5075
	AC Output Power (kVA/kW) @40°C ^[1]	2430	3645	4860
	AC Output Power (kVA/kW) @50°C ^[1]	2215	3325	4430
	Max. AC Output Current (A) @35°C	2123	3185	4247
	Operating Grid Voltage (VAC)	690 V ±10%		
DC	DC Voltage Range Full Power ^[3]	976 V - 1300 V		
	Max. DC Continuous Current (A) ^[4]	2653	3980	5306
	Max. DC Short Circuit Current (A) ^[4]	4011	6016	8022

NOTES

[1] Values at 1.00-Vac nom and CosPhi=1. Consult Power Electronics for derating curves. The maximum AC output power must be limited to meet the P-Q capability requirement at the inverter level of some grid codes.

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

[3] 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.

[4] Consult Power Electronics for Freemaq DC/DC connection configurations.

[5] Optional available for temperatures down to -35°C.

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