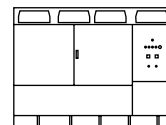




HEMK

Easy maintenance.
Multilevel topology.
Advanced grid support.
Full power voltage range.
Bus Plus. Combine Solar and Storage.





690 V				660 V			645 V			
FRAME	2	3	4	2	3	4	2	3	4	
REFERENCES	FS2195K	FS3290K	FS4390K	FS2101K	FS3151K	FS4200K	FS2055K	FS3080K	FS4105K	
AC	AC Output Power (kVA/kW) @40 °C ^[4]	2195	3290	4390	2100	3150	4200	2055	3080	4105
	AC Output Power (kVA/kW) @50 °C ^[4]	2035	3055	4075	1950	2925	3900	1905	2855	3810
	Operating Grid Voltage (VAC)	690 V ±10%			660 V ±10%			645 V ±10%		
DC	DC Voltage Range ^[5]	976 V - 1500 V			934 V - 1500 V			913 V - 1500 V		
EFFICIENCY	Efficiency (Max) (η)	98.84%	98.87%	98.94%	98.86%	98.89%	98.95%	98.85%	98.88%	98.81%
	Euroeta (η)	98.34%	98.49%	98.51%	98.36%	98.51%	98.53%	98.24%	98.39%	98.41%
630 V				615 V			600 V			
FRAME	2	3	4	2	3	4	2	3	4	
REFERENCES	FS2005K	FS3005K	FS4010K	FS1955K	FS2935K	FS3915K	FS1910K	FS2865K	FS3820K	
AC	AC Output Power (kVA/kW) @40 °C ^[4]	2005	3005	4010	1955	2935	3915	1910	2865	3820
	AC Output Power (kVA/kW) @50 °C ^[4]	1860	2790	3720	1815	2725	3635	1775	2660	3545
	Operating Grid Voltage (VAC)	630 V ±10%			615 V ±10%			600 V ±10%		
DC	DC Voltage Range ^[5]	891 V - 1500 V			870 V - 1500 V			849 V - 1500 V		
EFFICIENCY	Efficiency (Max) (η)	98.79%	98.82%	98.88%	98.75%	98.78%	98.77%	98.82%	98.85%	98.78%
	Euroeta (η)	98.28%	98.43%	98.45%	98.20%	98.35%	98.37%	98.18%	98.33%	98.35%
COMMON FEATURES										
FRAME	2				3		4			
AC	Max. AC Output Current (A) @40 °C				1837		2756		3674	
	Operating Grid Frequency (Hz)				50/60 Hz					
	Current Harmonic Distortion (THDi)				< 3% per IEEE519					
	Power Factor (CosPhi) ^[1]				0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night					
DC	Maximum DC Voltage				1500 V					
	Number of Inputs				Up to 20		Up to 30		Up to 40	
	Max. DC Continuous Current (A) ^[2]				2295		3443		4590	
	Max. DC Short Circuit Current (A) ^[2]				3470		5205		6940	
	Number of Freemaq DC/DC ^[2]				Up to 4					
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 ^[3]				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					
	Max. Altitude (above sea level)				2000 m / >2000 m power derating (Max. 4000 m)					
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.				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				UL 1741 SA & SB / RULE 21 / RULE 14H / IEEE 1547:1 2020 / IEC 62116:2014					

NOTES

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

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

[3] Optional available for temperatures below -25 °C.

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

[5] 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.