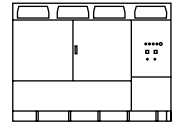


---

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





		690V			660V			645V		
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 [1]	2195	3290	4390	2100	3150	4200	2055	3080	4105
	AC Output Power (kVA/kW) @50°C [1]	2035	3055	4075	1950	2925	3900	1905	2855	3810
	Operating Grid Voltage (VAC)	690V ±10%			660V ±10%			645V ±10%		
DC	DC Voltage Range [3]	976V - 1500V			934V - 1500V			913V - 1500V		
EFFICIENCY	Efficiency (Max) (η) (preliminary)	98.84%	98.87%	98.93%	98.81%	98.84%	98.90%	98.78%	98.81%	98.87%
	Euroeta (η) (preliminary)	98.45%	98.48%	98.65%	98.45%	98.48%	98.65%	98.40%	98.43%	98.60%

		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 [1]	2005	3005	4010	1955	2935	3915	1910	2865	3820
	AC Output Power (kVA/kW) @50°C [1]	1860	2790	3720	1815	2725	3635	1775	2660	3545
	Operating Grid Voltage (VAC)	630V ±10%			615V ±10%			600V ±10%		
DC	DC Voltage Range [3]	891V - 1500V			870V - 1500V			849V - 1500V		
EFFICIENCY	Efficiency (Max) (η) (preliminary)	98.76%	98.79%	98.85%	98.76%	98.79%	98.84%	98.76%	98.78%	98.84%
	Euroeta (η) (preliminary)	98.39%	98.42%	98.59%	98.38%	98.41%	98.57%	98.37%	98.39%	98.56%

**COMMON FEATURES**

FRAME		2	3	4
AC	Max. AC Output Current (A) @40°C	1837	2756	3674
	Operating Grid Frequency (Hz)	50/60Hz		
	Current Harmonic Distortion (THDi)	< 3% per IEEE519		
	Power Factor (cosine phi) [2]	0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night		
DC	Maximum DC Voltage	1500V		
	Number of Inputs	Up to 20	Up to 30	Up to 40
	Max. DC Continuous Current (A) [4]	2295	3443	4590
	Max. DC Short Circuit Current (A) [4]	3470	5205	6940
CABINET	Number of Freemaq DC/DC [4]	Up to 4		
	Dimensions [WxDxH] (ft)	9.8 x 6.5 x 7.2		
	Dimensions [WxDxH] (m)	3.0 x 2.0 x 2.2		
	Weight (lbs)	11465	11795	12125
ENVIROMENT	Weight (kg)	5200	5350	5500
	Type of Ventilation	Forced air cooling		
	Degree of Protection	NEMA 3R / IP55		
	Operating Temperature Range [5]	From -25°C to +60°C, >50°C power derating		
	Operating Relative Humidity Range	From 4% to 100% non-condensing		
CONTROL INTERFACE	Storage Temperature Range	From -15°C to +40°C		
	Max. Altitude (above sea level)	2000m / >2000m power derating (Max. 4000m)		
	Communication Protocol	Modbus TCP		
PROTECTIONS	Power Plant Controller	Optional		
	Keyed ON/OFF Switch	Standard		
	Ground Fault Protection	GFDI and isolation monitoring device		
	Humidity Control	Active heating		
CERTIFICATIONS & STANDARDS	General AC Protection & Disconn.	Circuit breaker		
	General DC Protection & Disconn.	Fuses, DC switch-disconnectors		
	Overvoltage Protection	Type 2 protection for AC and DC		
NOTES	Safety	UL 1741 / CSA 22.2 No.107:1-16 / IEC 62109-1 / IEC 62109-2		
	Installation	NEC 2020 / IEC		
	Utility Interconnect	UL 1741 SA & SB / RULE 21 / RULE 14H / IEEE 1547:1 2020 / IEC 62116:2014		

**NOTES**

- [1] Values at 1.00-Vac nom and cosφ=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:  $Q(kVA_r) = \sqrt{(S(kVA))^2 - P(kW)^2}$ .
- [3] Consult Power Electronics for derating curves.
- [4] Consult Power Electronics for Freemaq DC/DC connection configurations.
- [5] Optional available for temperatures down to -35°C.