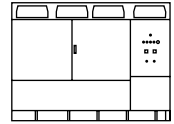

Easy maintenance.
Multilevel topology.
Advanced grid support.
Bus Plus. Combine Solar and Storage.





COMMON FEATURES

AC	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
DC	Maximum DC Voltage	1500 V
	Number of Inputs	Up to 40
	Number of Freemaq DC/DC ^[4]	Up to 4
EFFICIENCY	Efficiency (Max) (η)	98.95%
	Euroeta (η)	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)	10365
	Weight (kg)	4700
	Type of Ventilation	Forced air cooling
ENVIRONMENT	Degree of Protection	NEMA 3R / IP55
	Operating Temperature Range ^[5]	From -25 °C to +60 °C, >30 °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
	Ground Fault Protection	GFDI and isolation monitoring device
PROTECTIONS	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

	FS5000K	
AC	AC Output Power (kVA/kW) @30 °C ^[1]	5030
	AC Output Power (kVA/kW) @35 °C ^[1]	5000
	AC Output Power (kVA/kW) @40 °C ^[1]	4780
	AC Output Power (kVA/kW) @50 °C ^[1]	4345
	Max. AC Output Current (A) @30 °C	4400
DC	Operating Grid Voltage (VAC)	660 V ±10%
	DC Voltage Range Full Power ^[3]	934 V - 1300 V
	Max. DC Continuous Current (A) ^[4]	5495
	Max. DC Short Circuit Current (A) ^[4]	8000

REFERENCES

	FS5075K	
AC	AC Output Power (kVA/kW) @30 °C ^[1]	5260
	AC Output Power (kVA/kW) @35 °C ^[1]	5075
	AC Output Power (kVA/kW) @40 °C ^[1]	4860
	AC Output Power (kVA/kW) @50 °C ^[1]	4430
	Max. AC Output Current (A) @30 °C	4400
DC	Operating Grid Voltage (VAC)	690 V ±10%
	DC Voltage Range Full Power ^[3]	976 V - 1300 V
	Max. DC Continuous Current (A) ^[4]	5498
	Max. DC Short Circuit Current (A) ^[4]	8000

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: $Q(kVAr) = \sqrt{(S(kVA))^2 - P(kW)^2}$.
- [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 below to -25 °C.
- [6] Consult Power Electronics for other applicable standards / grid codes.