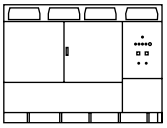
Multi PCSK

Modularity.
Easy maintenance.
Up to 4 independent DC inputs.
Advanced grid support.
Compatible with all battery technologies.



Freemaq Multi PCSK



720 V

REFERENCES		FP4998K2	FP4998K4	FP5150K2	FP5150K4
AC	AC Output Power @30 °C [1]	5360 kVA / kW			
	AC Output Power @35 °C [1]	5150 kVA / kW			
	AC Output Power @40 °C [1]	4940 kVA / kW			
	AC Output Power @50 °C [1]	4520 kVA / kW			
	Max. AC Output Current @30 °C	4298 A			
	Operating Grid Voltage	720 V ±10%			
	Operating Grid Frequency	60 Hz		50 / 60 Hz	
	Current Harmonic Distortion (THDi)	<3% per IEEE 519			
	Power Factor (CosPhi) [2]	0.5 leading... 0.5 lagging			
	Reactive Power Compensation	Four quadrant operation			
	Overload Capability	166% - 100 ms / 150% - 5 s / 120% - 8 s / 110% - 15 s			
DC	DC Voltage Range [3]	1019 V – 1500 V			
	Maximum DC Voltage	1500 V			
	DC Voltage Ripple	<3%			
	Max. DC Continuous Current	2478 A	1239 A	2658 A	1329 A
	Max. DC Short Circuit Current per Input	500 kA with a time constant of 1 ms			
	Battery Technology	All type of batteries (BMS required)			
EFFICIENCY & AUX. SUPPLY	Efficiency (Max) (η)	98.95%			
	Euroeta (η)	98.51%			
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			
	Grid Forming (VISMA) / Black Start Capable	Standard			
PROTECTIONS	Ground Fault Protection	Insulation monitoring device			
	Humidity Control	Active heating			
	General AC Protection & Disconnection	Circuit breaker			
	General DC Protection & Disconnection	High-speed fuses, Motorized DC disconnect switches [4]			
	Overvoltage Protection	Type II for AC and Type I+II for DC			
STANDARDS	Safety	UL 1741 / CSA 22.2 No.107.1-16 / IEC 62109-1 / IEC 62109-2 / IEC 62477-1			
	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 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] Battery short circuit disconnection must be done on the battery side.
[5] Consult Power Electronics for other applicable standards / grid codes.

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