STORAGE

PCS 1500Vdc energy solution

Power Converter Stations

PCS Full

Bidirectional converter, optimized for integration of High Voltage (up to 1500 VDC) ESS devices into electrical grids. With quick dynamic response, featured to provide advanced active power management under highly demanding environments (Ramp Rate, Frequency Response, Energy Shifting...)

Fast Dynamic Response

Provides advanced power management, including:

- Load Leveling
- Frequency Regulation
- Capacity Firming
- Peak Shaving
- Voltage Support
- Islanding
- Black Start
- Grid Inertia

Harsh Environments

Filters to avoid dust entrance combined with top-quality components that enable us to work in any possible scenario:
Efective operating conditions in remote high-altitude.
Coating on internal components and electronics to resist corrosive saline conditions.
Sealing elements and standard IP65 enclosure.
Protection against rain and humidity.

Shaping the energy of tomorrow

eks ENERGY

		BESS Voltages HIGHER than 1250 Vdc		
	PCS REFRENCES	PCS-3Ms-WD3-V690	PCS-3Ms-WD3-V730	PCS-3Ms-WD3-V770
AC	Nominal AC voltage [Vac] (1)	690 ±15%	730 ±15%	770 ±15%
	Rated AC power [kW/kVA] @ 95ºF/35ºC @Vdc min (2)	3409	3607	3804
	Rated AC power [kW/kVA] @ 122ºF/50ºC @Vdc min (2)	3068	3246	3424
	Maximum output current @ 95ºF/35ºC @Vdc min (2)	3069	3082	3094
	Total Current Demand Distortion (TDD)	<3%		
	Power factor (3)	Adjustable		
	Efficiency Maximum / Euroeta / CEC [%] (4)	98,3 / 98,5 / 98,5 (5)	98,3 / 98,6 / 98,6 (5)	98,4 / 98,6 / 98,6 (5)
DC	SoC Voltage range @ full power [Vdc] (2)	987-1500	1044-1500	1102-1500
	Max. DC voltage [Vdc]	1500		
	Rated input current at VDC_min [A] @35ºC	3 x 1600		
	Rated input current at VDC_min [A] @50ºC	3 x 1440		
	Withstand current [A] (6)	3 x 80kA/50ms 3 x 120kA/4ms		
	Number of Separate DC Inputs	3		
	COMMON FEATURES			
Protections	General AC Protection & Disconn	AC circuit breaker		
	General DC Protection & Disconn	DC load break switch		
	DC Overvoltage Protection	SPD (type 2)		
	Ground-fault monitoring	Yes		
	Insulation monitoring	Yes		
	Lightning protection	Optional (SPD type 1+2)		
	DC Input fuse protection (7)	Optional (8)		
Cabinet	Dimensions [WxDxH]	5212 x 2190 x 2460 mm		
	Weight	~7 tn		
	Type of Ventilation	Forced air cooling		
Environment	Degree of Protection (9)	IP65		
	Operation ambient temperature	From -4ºF to 140ºF (-20ºC to 60ºC), derating >95ºF (35ºC)		
	Maximum relative humidity	100%		
	Max. altitude above sea level	4000 masl, derating >1000 masl		
	Storage and transport temperature	From -40ºF to 149ºF (-40ºC to 65ºC)		
	Storage and transport humidity	From 5% to 85%		
Certifications & Standards (10)	IEEE 1547-2018, UL 1741 – SA & SB, IEC 62477 IEC 62109-1, IEC 62109-2, IEC62109 IEC 61000-3-4, IEC 61000-3-11, IEC 61000-3-12, IEC 61000-6-4 IEC 60529 CE Marking NEC Compliance			
Notes	(1) Other voltage configurations are possible under request. (2) Values at nominal AC voltage and cosφ=1, f=60Hz. Consult for derating curves. (3) Consult for capability curves. (4) Self-consumption is not considered in the efficiency measurement. (5) Depending on the transformer model required, standby losses and auxiliary power consumption may vary. (6) Higher values under request (7) Different DC fuse sizes are available (8) Battery short-circuit isolation must be provided on the battery side with ultra-fast battery fuses. String or group fuses, e.g. fuse type aR/aBat & DC time constant Tau (L/R) <=1ms (9) Lower protecion -IP54- is also available (10) Other applicable standards/grid codes are possible			

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