

Guaranteed Technical Particular: PCS 125 KVA, 400 Vac

Model	PCS 125kVA, 400 Vac	
Rating	Rated Power	125 kVA
	Rated AC voltage	400 V
	Rated DC voltage	720 V
Input AC	Main input Voltage	400 V 3Ph/3 Wire
	Operating Voltage range	±10 %
	Grid Frequency	50 Hz
	Operating Frequency Range	50Hz ± 10% (45-55 Hz)
Standalone Operation	Rated output Voltage	400 V 3Ph/3 Wire
	Rated output AC current	180 A
	Frequency	50 Hz, +/-1%
	Voltage harmonic distortion	<3% (Linear load)
	Power factor	0.8 (lagging) to 0.8(leading)
	Voltage regulation	<2% (Linear load)
	Overload capacity	110% for 60s
Voltage Asymmetry with unbalance load	< 1.5% (resistive load)	
DC Input	Rated DC voltage	720 V
	DC Voltage range	630-890 Vdc *
	Rated DC current	205 A
	DC disconnection isolator	Yes (Inbuilt)
Battery Charger	Rated AC input	400 V 3Ph/3 Wire
	Rated charging power	125 KW
	Charging method	CC-CV
	Battery maximum charging voltage	890Vdc
	Battery maximum charging current	205 A
On grid Performance	Current THD	<3% at rated power
	Reactive Power compensation	0.8 leading to 0.8 lagging at rated power
Efficiency	Maximum efficiency	98.5% **
	European efficiency	97.93% ***
Protection	DC Over voltage limitation protection	Yes
	DC side short circuit protection	Yes
	AC Over voltage protection	Yes
	AC Over current protection	Yes
	Over temperature protection	Yes
	Load side short circuit protection	Yes
	PLL synchronisation lost protection	Yes
	Load side protection device	MCCB (L-S-I protection)
	DC side protection device	Fuse
	AC side surge protection-Inbuilt	SPD (Type I+II+III)
	DC surge protection inbuilt	SPD (Type I+II)
	Black start capability	Yes(with External Power)
Communication	Local monitoring/Display (Optional)	10.1" LCD display (HMI)-Touch screen
	Built in energy data logger	Yes (5 Years)
	Emergency power off	Yes
	Field bus communication	MODBUS TCP-IP

General data	Dimension (H/W/D), mm	1950 x 630 x 920 (mm3)
	Weight	400 Kg Aprox
	Operating temperature range	-10°C to +50°C
	Relative humidity	5~95%, Non condensing/Non dripping
	Operation elevation	< 2000 m
	Degree of protection	IP-54(Power electronics)
	Pollution digree	PD 3
	Protective class	Class 1
	Over voltage category	OVC III Mains
	Environmental category	Outdoor with Canopy
	Noise level (Typical)	< 80 dbA
	Cooling	Forced air
	Seismic zone	Zone 4
	Corrosion class	4C2
Auxiliary power requirement	Auxiliary power Source	Single Phase AC
	Auxiliary consumption (Without heater) power Source	400 Watts
	Standby consumption	< 20 W
	Running time consumption (without fan)	100 W
	Heater power consumption	500 W
	Fan power consumption	300 W
	Auxiliary supply voltage	230 Volts
	Allowable voltage variations	+/- 30 Volts
	External UPS requirement with back up time	Yes/5 minutes
	Compliance standards	EMC
Anti Islanding protection		IEEE 1547
Safety		IEC 62477
Efficiency		IEC 61683: 1999
Harmonics		IEEE 519
Environmental stress tests		IEC 60068-2-1,2,14 & 30
IP Test		IEC 60529

*	In Grid connected mode unity PF operation is considered at rated discharging/Charging power.
***	Mentioned data is based on theoretical calculation