SH125CX

Multi-MPPT Commercial & Industrial Hybrid Inverter

Preliminary



HIGH YIELD

- Max. nominal power 125kW, DC/AC ratio up to 2.0
- DC coupling for higher efficiency & CAPEX saving
- Ideal for retrofitting and new installation scenario
- Support variable EMS applications for high returns

FLEXIBLE INSTALLATION

- Higher current input, adaptable to all mainstream PV modules
- Flexible Expansion from kilowatt to megawatt
- Support Backup application and diesel generator connection

Ultimate Safety

- AFCI 3.0, intelligent DC arc interrupter, with a detection range of 450m
- Intelligent string-level protection for enhanced safety

Simplified O&M

- Self-cleaning air duct for reduced maintenance and boosted efficiency
- IP66 protection and C5 Anti-corrosion, suitable for various harsh environments
- Precision string monitoring and I-V diagnosis for quick fault detection

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Type designation	SH125CX
Input (DC)	
Max. PV input power	250 kWp
Max. PV input voltage *	1100 V
Min. PV input voltage / Startup input voltage	180 V / 200 V
Rated PV input voltage	600 V
MPPT voltage range **	180 V - 1000 V
No. of independent MPP inputs	10
No. of PV strings per MPPT	2
Max. PV input current	400 A (40 A * 10)
Max. DC short-circuit current	500 A (50 A * 10)
Max. current for DC connector	30 A
Battery data	
Battery type	Lithium-ion battery
Battery voltage range	270 V - 935 V
Max. charge / discharge current ***	200 A / 200 A
Max. charge / discharge power	125 kW / 125 kW
Input and output (AC)	
Max. AC power from grid	160 kVA @ 230 V
Rated AC output power	125 kW
Max. AC output apparent power	125 kVA
Max. AC output current ****	189.4 A
Rated AC output current ****	181.2 A
Rated AC voltage	3 / N / PE, 220 V / 380 V, 230 V / 400 V
AC voltage range	270 V - 480 V
Rated grid frequency	50 Hz / 60 Hz
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz
Harmonic (THD)	≤ 2 % (at 400 V AC voltage and rated power)
Power factor at rated power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / AC connection	3 / 3 - N - PE
Backup data	
Rated voltage	3 / N / PE, 220 V / 380 V, 230 V / 400 V
Rated frequency	50 Hz / 60 Hz
THDV (@Linear load)	0.02
Backup switch time	≤ 10 ms
Rated output power	125 kW / 125 kVA
Peak load power *****	1.5 times of rated power, 10 s
Efficiency	
Max. efficiency / European efficiency	98.6 % / 98.3 %
Protection & function	
Grid monitoring	Yes
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
DC switch	Yes
Intelligent DC arc interrupter	Yes
Ground fault monitoring	Yes
PV string current monitoring	Yes
Arc fault circuit interrupter (AFCI)	Yes
Surge protection	DC Type I+II / AC Type II
PID zero	Yes
Battery input reverse polarity protection	Yes
General data	
Topology	Transformerless
Degree of protection	IP66
Dimensions (W * H * D)	1150 mm * 795 mm * 360 mm
Weight	≤ 128 kg
Mounting method	Wall-mounting bracket
Operating ambient temperature range	-30 ℃ – 60 ℃
Allowable relative humidity range (non-condensing)	0 – 100 %
Corrosion	C5

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