

Annex

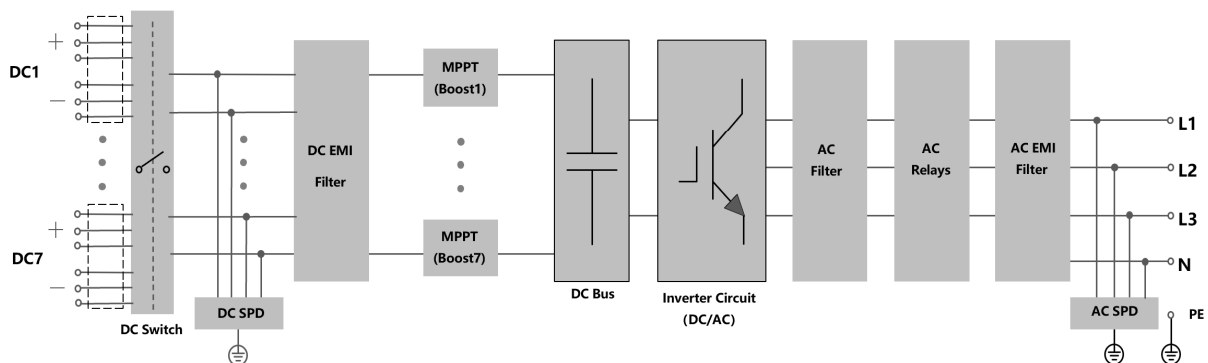
to Certificate Registration No. 44 798 23053449

VDE-AR-N 4105: 2018-11

DIN VDE V 0124-100: 2020-06

Sungrow Power Supply Co., Ltd.
No. 1699 Xiyou Rd., New & High Technology Industrial
Development Zone Hefei,
Anhui 230088, P. R. China

Schematic structure



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Technical Data

General information

General	
Type of EZE	Type 2 / GRID-CONNECTED PV INVERTER
Designation	SG150CX
On-grid variables	
Rated apparent power S_{rE}	150000 VA 165000VA (max)
Rated effective power P_{rE}	150000 W 165000W (max)
Max. effective power P_{Emax}	164598 W (0.998 P_{Emax})
Max. apparent power S_{Emax}	165038 VA (1.000 S_{Emax})
Rated voltage U_r	3L/N/PE, 220V/380V, 230V/400V
Rated current I_r	216.5 A
Initial short-circuit alternating current I''_k	259.8 A
Reactive power adjustment range $\cos \varphi$	0.8 leading...0.8 lagging
Rated frequency f_n	50/60Hz
PV – Input Variables	
Min. MPP voltage	180V
Max. MPP voltage	1000V
Max. DC input voltage	1100V
Number of MPPT	7
Max. input current	48.0 A
Isc PV	66.0 A
DC – Input variables	

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Type /IGBT module	HF5G060N120FT2& GD600TLA120L6L_B20
Quantity DC Link Capacitor	36
Clock frequency	100MHz
Type of power control	SVPWM, DPWM
Max. Output current (only for IGBT)	400A
Software versions	LCD_MARBLE-S_V11_V01_A MDSP_MARBLE-S_V11_V01_A
Generation unit Control	
Manufacturer	SUNGROW POWER SUPPLY CO., LTD.
Software version	LCD_MARBLE-S_V11_V01_A MDSP_MARBLE-S_V11_V01_A
Protection device	
Manufacturer	Churod Electronics Co., Ltd.
Type	Integrated guard
Switch-off unit (AC)	CHAR-112A270C
Software versions	LCD_MARBLE-S_V11_V01_A MDSP_MARBLE-S_V11_V01_A

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Notes

The manufacturer has proven for the manufacturing facility of the Unit a certification of its quality management system according to ISO 9001. The manufacturer confirmed in a manufacturer declaration that the certification of the management system will be valid parallel to the period of this unit certification.

Additional technical data, according to VDE-AR-N 4105, are given in the assessment report (appendix A1).

The use of other firmware and software version numbers is allowed if the differences are proved and confirmed by TÜV NORD CERT GmbH beforehand. Validity of a new software version is attested by written confirmation and becomes part of the certificate.

The inverter has an integrated tie breaker and no central tie breaker. The specifications of VDE-AR-N 4105 for central NA protection in combinations with central or integrated tie switches must be observed and implemented at the level of the generating plant.

Restrictions

Please note that the GRID-CONNECTED PV INVERTER does not have a display. As a result, the protection settings of the decoupling protection and the connection conditions cannot be read or set via a display on the component. As a result, a readout function must be implemented on the PGU.

PAVE monitoring function is not integrated in the unit. The function can be implemented according to the specifications of VDE-AR-N 4105 Chapter 5.5.2 in stand-alone equipment.

Appendix to the certificate

A1 Assessment report no. 35396173 version V1.0

A2 Extract from the test report (according to VDE-AR-N 4105 annex E.5)

Dongguan BALUN Testing Technology Co., Ltd., extract No. BL-DG2530180-201 A1 from May .12, 2025

A3 Extract from the test report (according to VDE-AR-N 4105 annex E.7)

Dongguan BALUN Testing Technology Co., Ltd., extract No. BL-DG2530180-201 A2 from Mary.12, 2025

A4 Manufacturer declaration for SG150CX from Apr.27.2025

End of the List

Essen, 2025-05-28


Certification Body at TÜV NORD CERT GmbH