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Certificate of compliance

Applicant: **SUNGROW POWER SUPPLY CO., LTD.**
No,1699 Xiyou Rd, New & High Technology Industrial Development Zone, Hefei, 230088
P.R.China

Product: **Photovoltaic inverter**

Model: **SG2.0RS-S**
SG2.5RS-S
SG3.0RS-S
SG3.0RS
SG3.6RS
SG4.0RS
SG5.0RS
SG6.0RS
SG8.0RS
SG9.0RS
SG10RS

The device is designed to work as a generation unit of the type: A

Inverter for single-phase parallel connection to the public grid. The network monitoring and disconnection device is an integral part of the above-mentioned model.

Applied rules and standards:

EN 50549-1:2019

Requirements for parallel connection of installations with distribution networks - Part 1: Connection to an LV distribution network - Production of installations up to and including Type B

- 4.4 Normal operating range
- 4.5 Immunity to disturbances
- 4.6 Active response to frequency deviation
- 4.7 Power response to voltage variations and voltage changes
- 4.8 EMC and power quality
- 4.9 Interface protection
- 4.10 Connection and starting to generate electrical power
- 4.11 Ceasing and reduction of active power on set point
- 4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

EN 50549-10:2022

Requirements for generating plants to be connected in parallel with distribution networks - Part 10: Tests for conformity assessment of generating units

Commission Regulation (EU) 2016/631 of 14 April 2016

Establishing a network code on requirements for grid connection of generators (NC RFG).
Type approval for generation units to use in Type A plants.

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number: **SGR-ESH-P24060050** **Certification Program:** **NSOP-0032-DEU-ZE-V10**
Certificate number: **U24-0994** **Date of issue:** **2024-10-16**

Certification body

Accreditation



Domenik Kol
Head of Energy Systems Germany



Accredited certification body by Deutsche Akkreditierungsstelle GmbH (DAkkS) according to ISO/IEC 17065. The accreditation is valid only for the scope listed in the annex of the accreditation certificate D-ZE-12024-01-00. The Deutsche Akkreditierungsstelle GmbH (DAkkS) is signatory of the multilateral arrangements of EA, ILAC and IAF for mutual recognition.

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Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016				
Manufacturer	SUNGROW POWER SUPPLY CO., LTD. No,1699 Xiyou Rd, New & High Technology Industrial Development Zone, Hefei, 230088 P.R.China			
Product type	Photovoltaic inverter			
Static converter model	SG2.0RS-S	SG2.5RS-S	SG3.0RS-S	SG3.0RS
Input (PV DC)				
MPP voltage range [V]	40-560	40-560	40-560	40-560
Max. input voltage [V]	600	600	600	600
Max. input current per MPPT [A]	16	16	16	16
Output (AC)				
Rated AC voltage [V]	L/N/PE, 230, 50/60Hz	L/N/PE, 230, 50/60Hz	L/N/PE, 230, 50/60Hz	L/N/PE, 230, 50/60Hz
Rated output current [A]	8,7	10,9	13,1	13,1
Max. output current [A]	9,1	11,4	13,7	13,7
Nom. converter output (P _{NINV}) [W]	2000	2500	3000	3000
Rated apparent power [VA]	2000	2500	3000	3000
Static converter model	SG3.6RS	SG4.0RS	SG5.0RS	SG6.0RS
Input (PV DC)				
MPP voltage range [V]	40-560	40-560	40-560	40-560
Max. input voltage [V]	600	600	600	600
Max. input current per MPPT [A]	16	16	16	16
Output (AC)				
Rated AC voltage [V]	L/N/PE, 230, 50/60Hz	L/N/PE, 230, 50/60Hz	L/N/PE, 230, 50/60Hz	L/N/PE, 230, 50/60Hz
Rated output current [A]	16,0	17,4	21,8	26,1
Max. output current [A]	16,0	18,2	22,8	27,3
Nom. converter output (P _{NINV}) [W]	3680	4000	5000	6000
Rated apparent power [VA]	3680	4000	5000	6000
Static converter model	SG8.0RS	SG9.0RS	SG10RS	--
Input (PV DC)				
MPP voltage range [V]	40-560	40-560	40-560	--
Max. input voltage [V]	600	600	600	--
Max. input current per MPPT [A]	16	16	16	--
Output (AC)				
Rated AC voltage [V]	L/N/PE, 230, 50/60Hz	L/N/PE, 230, 50/60Hz	L/N/PE, 230, 50/60Hz	--
Rated output current [A]	34,8	39,2	43,5	--
Max. output current [A]	36,4	41,0	45,5	--
Nom. converter output (P _{NINV}) [W]	8000	9000	10000	--



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Annex certificate of conformity No. U24-0994

Extract from test report SGR-ESH-P24060050 issued by a testing laboratory accredited by “Deutsche Akkreditierungsstelle GmbH (DAkkS)” according to ISO/IEC 17025. The accreditation is only valid for the scope listed in the annex of the accreditation certificate “D-PL-12024-03-04”.

Rated apparent power [VA]	8000	9000	10000	--
Interface protection system and interface switch (Network and system protection “NS-protection”)				
Type of protection	Integrated NS-protection			
Assigned to generation unit type	SG2.0RS-S, SG2.5RS-S, SG3.0RS-S, SG3.0RS, SG3.6RS, SG4.0RS, SG5.0RS, SG6.0RS, SG8.0RS, SG9.0RS, SG10RS			
Integrated interface switch	Type of switching equipment 1: Relay (Model 510C)			
	Type of switching equipment 2: Relay (Model 510C)			
	Note: The output is switched off by the inverter bridge and two relays in series in each line and neutral.			
Firmware version	ARM_SUNSTONE-S_V11_V01_A, MDSP_SUNSTONE-S_V11_V01_A			
Note				
<p>The settings of the interface protection are password protected adjustable.</p> <p>In case the above stated generators are used with an external protection device, the protection settings of the inverters are to be adjusted according to the manufacturer's declaration.</p> <p>The above stated generators are tested according to the requirements in the EN 50549-1:2019 Commission Regulation (EU) 2016/631 of 14 April 2016. Any modification that affects the stated tests must be named by the manufacturer/supplier of the product to ensure that the product meets all requirements.</p>				