

Certificate of compliance

Applicant: Jiangsu Skyworth New Energy Technology Co., Ltd.
3F South, Plant 4, No.599 Taishan Road, High-tech Zone, Suzhou City, Jiangsu Province
China

Product: Photovoltaic and battery inverter (Hybrid-Inverter)

Model: SWH005KH-T1, SWH008KH-T1, SWH010KH-T1, SWH012KH-T1, SWH015KH-T1
SWH005KH-T1-Pro, SWH008KH-T1-Pro, SWH010KH-T1-Pro, SWH012KH-T1-Pro,
SWH015KH-T1-Pro

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

Inverter for three-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/A1:2023

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: CPXU-ESH-P24100534

Certificate number: U24-1241

Certification Program: NSOP-0032-DEU-ZE-V10

Date of issue: 2025-01-09

Accreditation



Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016

Manufacturer	Jiangsu Skyworth New Energy Technology Co., Ltd. 3F South, Plant 4, No.599 Taishan Road, High-tech Zone, Suzhou City, Jiangsu Province China			
Product type	Photovoltaic and battery inverter (Hybrid-Inverter)			
Static converter model	SWH005KH-T1 SWH005KH-T1-Pro	SWH008KH-T1 SWH008KH-T1-Pro	SWH010KH-T1 SWH010KH-T1-Pro	SWH012KH-T1 SWH012KH-T1-Pro
Input DC (photovoltaic)				
MPP voltage range [V]	180-950	180-950	180-950	180-950
Max. input voltage [V]	1000	1000	1000	1000
Max. input current per MPPT [A]	15/15	15/15	30/15	30/15
Input DC (battery)				
DC voltage range [V]	150-600	150-600	150-600	150-600
Max. DC voltage [V]	600	600	600	600
Max. DC current per DC input [A]	25	25	25	25
Output AC				
Rated AC voltage [V]	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz
Rated output current [A]	7,2	11,6	14,5	17,4
Max. output current [A]	7,9	12,7	15,9	19,1
Nom. converter output (P _{INV}) [W]	5000	8000	10000	12000
Rated apparent power [VA]	5500	8800	11000	13200
In on-grid battery mode AC				
P _{sn} (nom. discharge power) [W]	6500	6500	6500	6500
P _{cn} (nom. charging power) [W]	6500	6500	6500	6500
Type	Bidirectional	Bidirectional	Bidirectional	Bidirectional
Static converter model	SWH015KH-T1 SWH015KH-T1-Pro	--	--	--
Input DC (photovoltaic)				
MPP voltage range [V]	180-950	--	--	--
Max. input voltage [V]	1000	--	--	--
Max. input current per MPPT [A]	30/15	--	--	--
Input DC (battery)				
DC voltage range [V]	150-600	--	--	--
Max. DC voltage [V]	600	--	--	--
Max. DC current per DC input [A]	25	--	--	--
Output AC				
Rated AC voltage [V]	3L/N/PE, 230/400, 50/60Hz	--	--	--
Rated output current [A]	21,7	--	--	--

Max. output current [A]	23,8	--	--	--
Nom. converter output (P _{NINV}) [W]	15000	--	--	--
Rated apparent power [VA]	16500	--	--	--
In on-grid battery mode AC				
P _{sn} (nom. discharge power) [W]	6500	--	--	--
P _{cn} (nom. charging power) [W]	6500	--	--	--
Type	Bidirectional	--	--	--
Interface protection system and interface switch (Network and system protection “NS-protection”)				
Type of protection	Integrated NS-protection			
Assigned to generation unit type	SWH005KH-T1, SWH008KH-T1, SWH010KH-T1, SWH012KH-T1, SWH015KH-T1 SWH005KH-T1-Pro, SWH008KH-T1-Pro, SWH010KH-T1-Pro, SWH012KH-T1-Pro, SWH015KH-T1-Pro			
Integrated interface switch	Type of switching equipment 1: Relay (Model AZSR143) Type of switching equipment 2: Relay (Model AZSR143)			
	Note: The output is switched off by the inverter bridge and two relay in series in each line and neutral.			
Firmware version	V01.00			
Note				
The settings of the interface protection are password protected adjustable.				
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.				
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.				