Certificate of compliance

Applicant:	**Zhejiang Chisage New Energy Technology Co., Ltd.** No. 1828,Fuqing South Road,Panhuo Street,Yinzhou District, Ningbo City, Zhejiang Province, 315000 **China**
Product:	**Photovoltaic and battery inverter (Hybrid-Inverter)**
Model:	**Jup-10G2-LE, Jup-8G2-LE, Jup-6G2-LE, Jup-5G2-LE**

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/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: **CQDL-ESH-P24070577-3**
Certificate number: **U24-1057**
Certification Program: **NSOP-0032-DEU-ZE-V10**
Date of issue: **2024-11-08**

Certification body

Domenik Koll
Head of Energy Systems Germany

Accreditation

DAkkS Deutsche Akkreditierungsstelle D-ZE-12024-01-00

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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Annex certificate of conformity No. U24-1057

Extract from test report CQDL-ESH-P24070577-3 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".

Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016				
Manufacturer	**Zhejiang Chisage New Energy Technology Co., Ltd.** No. 1828,Fuqing South Road,Panhuo Street,Yinzhou District, Ningbo City, Zhejiang Province, 315000 **China**			
Product type	Photovoltaic and battery inverter (Hybrid-Inverter)			
Static converter model	**Jup-5G2-LE**	**Jup-6G2-LE**	**Jup-8G2-LE**	**Jup-10G2-LE**
Input (DC photovoltaic)				
MPP voltage range [V]	150-425	150-425	150-425	150-425
Max. input voltage [V]	500	500	500	500
Max. input current per MPPT [A]	17+17	17+17	26+26	26+26
Input (DC battery)				
DC voltage range [V]	40-60	40-60	40-60	40-60
Max. DC voltage [V]	60	60	60	60
Max. DC current per DC input [A]	120	140	190	210
Output (AC)				
Rated AC voltage [V]	L/N/PE,230V, 50Hz	L/N/PE,230V, 50Hz	L/N/PE,230V, 50Hz	L/N/PE,230V, 50Hz
Rated output current [A]	21,7	26,1	33,0	43,5
Max. output current [A]	23,9	28,7	38,3	47,8
Nom. converter output (P_{NINV}) [W]	5000	6000	8000	10000
Rated apparent power [VA]	6000	7200	9600	12000
In on-grid battery mode				
P_{sn} (nom. discharge power) [W]	5000	6000	8000	10000
P_{cn} (nom. charging power) [W]	5000	6000	8000	10000
P_{smax} (max. discharge power) [W]	6000	7200	9600	12000
P_{cmax} (max. charging power) [W]	6000	7200	9600	12000
Type	Bidirectional	Bidirectional	Bidirectional	Bidirectional
In off-grid battery mode				
P_{sn} (nom. discharge power) [W]	5000	6000	8000	10000
P_{smax} (max. discharge power) [W]	6000	7200	9600	12000

Interface protection system and interface switch (Network and system protection "NS-protection")	
Type of protection	integrated NS-protection
Assigned to generation unit type	**Jup-10G2-LE, Jup-8G2-LE, Jup-6G2-LE, Jup-5G2-LE**
Integrated interface switch	Type of switching equipment 1: Relay (Model AZSR250) Type of switching equipment 2: Relay (Model AZSR250)
	Note: The output is switched off by the inverter bridge and two relay in series in each line and neutral.

Firmware version	1.0

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/A1:2023 and the 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.