



# Certificate of compliance

**Applicant:** Zigong Xingchuan Photoelectric Co., Ltd  
No. 19, East Ring Road, Bancang Industrial Park, Yantan District, Zigong City, Sichuan Province, China

**Product:** Photovoltaic (PV) inverter

**Model:** Apollo 17K-T0, Apollo 20K-T0, Apollo 22K-T0, Apollo 25K-T0,  
Apollo 28K-T0, Apollo 30K-T0

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 50549-1:2019-02, NBN EN 50549-1:2019-02

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

### C10/11:2021-03

Specific technical requirements for generator in parallel operation with the distribution network

### 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 and Type B plants.

At the time of issue of this certificate, the representative product listed above corresponds to the stated rules and standards.

**Report number:** PVBE2208WDG0053-1 **Certification program:** NSOP-0032-DEU-ZE-V01  
**Certificate number:** U22-0610\_1 **Date of issue:** 2022-10-13

**Certification body**

Alf Assenkamp



Certification body of Bureau Veritas Consumer Products Services Germany GmbH accredited according to DIN EN ISO/IEC 17065

Testing laboratory accredited according to DIN EN ISO/IEC 17025

A partial representation of the certificate requires the written permission of Bureau Veritas Consumer Products Services Germany GmbH



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## Annex to the EN 50549-1 / C10/11 certificate of compliance No. U22-0610\_1

### Appendix

Extract from test report according to EN 50549-1 / C10/11

Nr. PVBE2208WDG0053-1

#### Type Approval and declaration of compliance with the requirements of EN 50549-1, Commission Regulation (EU) 2016/631 of 14 April 2016 and C10/11 for Belgium

Manufacturer / applicant	Zigong Xingchuan Photoelectric Co., Ltd No. 19, East Ring Road, Bancang Industrial Park, Yantan District, Zigong City, Sichuan Province, China
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Micro-generator Type	Photovoltaic inverter			
	Apollo 17K-T0	Apollo 20K-T0	Apollo 22K-T0	Apollo 25K-T0
MPP DC voltage range [V]	180-960	180-960	180-960	180-960
Max. Input DC voltage [V]	1000	1000	1000	1000
Max. Input DC current [A]	54 (2*27)	54 (2*27)	54 (2*27)	81 (2*40,5)
Output AC voltage [V]	400Vac, 3L/N/PE, 50Hz			
Max Output AC current [A]	28,3	33,5	35,0	40
Nominal Output Power [kW]	17,0	20,0	22,0	25,0
Max. Output power [kVA]	18,7	22,0	24,2	27,5

	Apollo 28K-T0	Apollo 30K-T0		
MPP DC voltage range [V]	180-960	180-960		
Input DC voltage range [V]	1000	1000		
Input DC current [A]	81 (2*40,5)	81 (2*40,5)		
Output AC voltage [V]	400Vac, 3L/N/PE, 50Hz			
Max Output AC current [A]	45,0	48,0		
Nominal Output Power [kW]	28,0	30,0		
Max. Output power [kVA]	30,8	33,0		

Firmware version	3001
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#### Description of the structure of the power generation unit:

The power generation unit is equipped with a PV and line-side EMC filter. The power generation unit has no galvanic isolation between DC input and AC output. Output switch-off is performed with single-fault tolerance based on the inverter bridge and two series-connected relays in (each) line and neutral. This enables a safe disconnection of the power generation unit from the network in case of error.

#### 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 and C10/11 for Belgium. 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.