# Certificate of compliance

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|---|---|---|
| **Applicant:** | **Zigong Xingchuan Photoelectric Co., Ltd**<br>No. 19, East Ring Road, Bancang Industrial Park, Yantan District, Zigong City, Sichuan Province,<br>China | |
| **Product:** | **Grid-tied Photovoltaic (PV) inverter** | |
| **Model:** | **Apollo 50K-T0** | **Apollo 60K-T0** |

**Use in accordance with regulations:**

Automatic disconnection device with three-phase mains surveillance in accordance with Engineering Recommendation G99/1 for photovoltaic systems with a three-phase parallel coupling via an inverter in the public mains supply. The automatic disconnection device is an integral part of the aforementioned inverter. This serves as a replacement for the disconnection device with isolating function that can access the distribution network provider at any time.

**Applied rules and standards:**

**Engineering Recommendation G99 / Issue 1 Amendment 6, 09 March 2020**

Requirements for the connection of generation equipment in parallel with public distribution networks on or after 27 April 2019 for Type B Power Generating Modules

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.

A simulation study is not included.

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| **Report number:** | **PVGB2208WDG0054-1** | **Certification scheme:** | **NSOP-0032-DEU-ZE-V01** |
| **Certificate number:** | **U22-0615** | **Date of issue:** | **2020-10-11** |

**Certification body**

Alf Assenkamp

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

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

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

## Annex to the G99/1 certificate of compliance No. U22-0615

| Extract from test report according to the Engineering Recommendation G99 | Nr. PVGB2208WDG0054-1 |
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| Type Approval and declaration of compliance with the requirements of Engineering Recommendation G99 | |
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| **Details of Power Generating Modules** | |
| **Manufacturer / Reference:** | Zigong Xingchuan Photoelectric Co., Ltd<br>No. 19, East Ring Road, Bancang Industrial Park, Yantan District, Zigong City, Sichuan Province,<br>China |
| **Technology Type:** | Photovoltaic inverter |
| **Firmware version:** | FW: 3001 |
| **Measurement period:** | 2020-03-02 - 2021-01-11 |

| **Unit / Type:** | **Apollo 50K-T0** | **Apollo 60K-T0** | **-** |
|---|---|---|---|
| Max. DC Input voltage [V] | 1100 | 1100 | - |
| Input voltage range [V] | 200-1100 | 200-1100 | - |
| Full-Load MPP DC voltage range [V] | 540-800 | 540-800 | - |
| Max. Input DC current [A] | 39/39/26/26 | 39/39/39/39 | - |
| Output AC voltage [V] | 3L/N/PE, 230/400, 50Hz | | - |
| Max. Output AC current [A] | 3*83,0 | 3*92,0 | - |
| Nominal Output power [kW] | 50,0 | 60,0 | - |
| Max. Output power [kVA] | 55,0 | 66,0 | - |

**Description of the structure of the power generation unit:**

The inverters convert DC voltage, generated by photovoltaic modules, into AC voltage.

The units are three-phases inverter.

The input and output are protected by Varistors to Earth. The unit is providing EMC filtering at the output toward mains. The unit does not provide galvanic separation from input to output (transformer). The output is switched off redundant by the high-power switching bridge and two relays. This assures that the opening of the output circuit will also operate in case of one error.

The above stated Generating Units are tested according to the requirements in the Engineering Recommendation G99/1. 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 of the Engineering Recommendation G99/1.