



**BUREAU  
VERITAS**

# Certificate of compliance

**Applicant:** **ALTENERGY POWER SYSTEM INC.**  
No.1 Yatai Road,  
Jiaxing 314050 Zhejiang Province,  
P.R. China

**Product:** **Grid-tied photovoltaic (PV) inverter**

**Model:** **QS1  
YC600**

## Use in accordance with regulations:

Automatic disconnection device with single-phase mains surveillance in accordance with EN50549-1:2019 for photovoltaic systems with a single-phase parallel coupling via an inverter in the public mains supply. The automatic disconnection device is an integral part of the aforementioned inverter.

## 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
- 4.12 Remote information exchange
- 4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

### EN 50438:2013

Requirements for micro-generating plants to be connected in parallel with public low-voltage distribution networks

### DIN V VDE V 0126-1-1:2006 (4.1 Functional safety)

Automatic disconnection device between a generator and the public low-voltage grid

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:** **ZEK-ESH-P20021201-1** **Certification Program:** **NSOP-0032-DEU-ZE-V01**  
**ZEK-ESH-P20021201-2**

**Certificate number:** **U20-0290** **Date of issue:** **2020-04-23**

**Certification body**

Thomas Lammel



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

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