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# Certificate of compliance

**Applicant:** UPOWER ELECTRIC CO., LTD  
4F-A Block, No.62, Yinhe Road, Longgang District, Shenzhen, Guangdong  
China

**Product:** Hybrid inverter

**Model:** UHome-3K0L  
UHome-3K6L  
UHome-4K0L  
UHome-4K6L  
UHome-5K0L  
UHome-6K0L  
UHome-8K0L

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**

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

**DIN VDE V 0124-100:2020 (5.5.2.1 Functional safety of network and system protection)**

Grid integration of generator plants - Low-voltage - Test requirements for generator units to be connected to and operated in parallel with low-voltage distribution networks

**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 safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

**Report number:** CIZC-ESH-P22120590

**Certificate number:** U23-0790

**Certification Program:** NSOP-0032-DEU-ZE-V01

**Date of issue:** 2023-09-12

**Certification body**

Alf Assenkamp



Certification body Bureau Veritas Consumer Products Services Germany GmbH accreditation 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 approval of Bureau Veritas Consumer Products Services Germany GmbH



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## Annex to the EN 50549-1 certificate of compliance No. U23-0790

### Appendix

Extract from test report according to EN 50549-1

No.CIZC-ESH-P22120590

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

Manufacturer / applicant		UPOWER ELECTRIC CO., LTD 4F-A Block, No.62, Yinhe Road, Longgang District, Shenzhen, Guangdong, China		
Micro-generator Type	Hybrid inverter			
	UHome-3K0L	UHome-3K6L	UHome-4K0L	UHome-4K6L
MPP DC voltage range [V]	80-500			
Max. input DC voltage [V]	550			
Max. input DC current [A]	14/14			
Output AC voltage [V]	230 50/60Hz			
Max AC current [A]	14,3	16,0	19,1	20,0
Apparent power [VA]	3300	3680	4400	4600
	UHome-5K0L	UHome-6K0L	UHome-8K0L	--
MPP DC voltage range [V]	80-500			--
Max. input DC voltage [V]	550			--
Max. input DC current [A]	14/14		14/28	--
Output AC voltage [V]	230 50/60Hz			--
Max AC current [A]	21,7	28,7	38,3	--
Apparent power [VA]	5000	6600	8800	--
Firmware version	DSP: V1.05.07, ARM: V1.04.15			
Description of the structure of the power generation unit:				
The power generation unit is equipped with a PV/DC 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.				