

**Certificate of compliance** 

Applicant:	Guangzhou Sanjing Electric Co., Ltd.		
	No.9, Lizhishan Road, Science City,		
	Guangzhou High-tech Zone, Guangdong,		
	P.R. China		
Product:	Photovoltaic (PV) inverter		
Model:	R6-25K-T2-32		
	R6-22K-T2-32		
	R6-20K-T2-32		
	R6-17K-T2-32		
	R6-15K-T2-32		

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

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

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

## 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.



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Appendix

Extract from test report according to EN 50549-1			No. BSWO-ESH-P2112348		
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	Guangzhou Sanjing Ele				
	No.9, Lizhishan Road, Science City,				
	Guangzhou High-tech Zone, Guangdong, P.R. China				
	P.R. China				
Micro-generator Type	Photovoltaic inverter				
	R6-15K-T2-32	R6-17K-T2-32	R6-20K-T2-32	R6-22K-T2-32	
MPP DC voltage range [V]	180-1000	180-1000	180-1000	180-1000	
Max. Input DC voltage [V]	1100	1100	1100	1100	
Input DC current [A]	32/32	32/32	32/32	32/32	
Output AC voltage [V]	3L/N/PE, 220/380, 230/400, 50/60 Hz	3L/N/PE, 220/380, 230/400, 50/60 Hz	3L/N/PE, 220/380, 230/400, 50/60 Hz	3L/N/PE, 220/380, 230/400, 50/60 Hz	
Output AC current [A]	21,7	24,6	29	31,9	
Output power [W]	15000	17000	20000	22000	
	R6-25K-T2-32				
MPP DC voltage range [V]	180-1000				
Max. Input DC voltage [V]	1100				
Input DC current [A]	32/32				
Output AC voltage [V]	3L/N/PE, 220/380, 230/400, 50/60 Hz				
Output AC current [A]	36,2				
Output power [W]	25000				
Firmware version	Beginning with V1.020				

# 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. 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.