

Certificate of Conformity

Certificate Number: CN-PV-230088R1

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specification/standard at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture. The manufacturer shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant:

Zucchetti Centro Sistemi SpA
Via Lungarno 305/A 52028 Terranuova Bracciolini (AR), Italy

Product:

Intelligent Residential Energy Storage System

Ratings & Principle

See appendix of Certificate of Conformity

Characteristics:

Model:

Inverter conversion device:
AZZURRO 1PH HYD3000 ZP1, AZZURRO 1PH HYD3680 ZP1,
AZZURRO 1PH HYD4000 ZP1, AZZURRO 1PH HYD4600 ZP1,
AZZURRO 1PH HYD5000 ZP1, AZZURRO 1PH HYD6000 ZP1
Batteries and BMS - Battery Management System
Battery module model: 1* AZZURRO HV ZBT 5K, 2* AZZURRO HV ZBT 5K,
3* AZZURRO HV ZBT 5K, 4* AZZURRO HV ZBT 5K, 5* AZZURRO HV ZBT 5K,
6* AZZURRO HV ZBT 5K
Battery pack: AZZURRO HV ZBT 5K
High voltage control model: AZZURRO BDU ZBT 5K

Brand Name:



Product Complies with:

CEI 0-21:2022-03 + V1:2022-11: Reference technical rules for the connection of active and passive users to the LV electrical Utilities

Certificate Issuing Office

Name & Address:

Intertek Testing Services Ltd. Shanghai
West Area, 2nd Floor, No. 707, Zhangyang Road
China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China
Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012

Test Report Number:

221116037GZU-007 Revision1: 19 August 2023 Issued by Intertek Testing Services Shenzhen Ltd. Guangzhou Branch accredited by IAS (TL-395) in accordance with ISO/IEC 17025:2017

Replaces certificate CN-PV-230088 dated 13 March 2023

Additional information in Appendix

Signature

Certification Manager: Grady Ye

Date: 25 August 2023






PRD N° 306B

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230088R1

Test item description	Intelligent Residential Energy Storage System
Trade Mark	
Manufacturer	Same as applicant
Model/Type reference	Inverter conversion device: AZZURRO 1PH HYD3000 ZP1, AZZURRO 1PH HYD3680 ZP1, AZZURRO 1PH HYD4000 ZP1, AZZURRO 1PH HYD4600 ZP1, AZZURRO 1PH HYD5000 ZP1, AZZURRO 1PH HYD6000 ZP1
	 Brands: Batteries and BMS - Battery Management System Battery module model: 1* AZZURRO HV ZBT 5K, 2* AZZURRO HV ZBT 5K, 3* AZZURRO HV ZBT 5K, 4* AZZURRO HV ZBT 5K, 5* AZZURRO HV ZBT 5K, 6* AZZURRO HV ZBT 5K Battery pack: AZZURRO HV ZBT 5K High voltage control model: AZZURRO BDU ZBT 5K
	 Brands:
Inverter Firmware Version	V000001
Number of phases	Single-phase
Nominal Power	3000W (AZZURRO 1PH HYD3000 ZP1), 3680W (AZZURRO 1PH HYD3680 ZP1), 4000W (AZZURRO 1PH HYD4000 ZP1), 4600W (AZZURRO 1PH HYD4600 ZP1), 5000W (AZZURRO 1PH HYD5000 ZP1), 6000W (AZZURRO 1PH HYD6000 ZP1)
Type	Bidirectional
CUS (useful capacity of the storage system)	4.75kWh ~ 28.5kWh
Psn (nominal discharge power)*1	2500W (1* AZZURRO HV ZBT 5K), 5000W (2* AZZURRO HV ZBT 5K), 7500W (3* AZZURRO HV ZBT 5K), 10000W (4* AZZURRO HV ZBT 5K), 12500W (5* AZZURRO HV ZBT 5K), 15000W (6* AZZURRO HV ZBT 5K)
Pcn (nominal charge power)*1	2500W (1* AZZURRO HV ZBT 5K), 5000W (2* AZZURRO HV ZBT 5K), 7500W (3* AZZURRO HV ZBT 5K), 10000W (4* AZZURRO HV ZBT 5K), 12500W (5* AZZURRO HV ZBT 5K), 15000W (6* AZZURRO HV ZBT 5K)
Psmax (maximum discharge power)*1	Same as above
Pcmx (maximum charge power)*1	Same as above
BMS Firmware Version	V010001
Remark: *1 Psn/Pcn/Psmax/Pcmx could be limited by the Nominal power of the inverter.	

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Battery		Total energy (kWh)	CUS (useful capacity of the storage system)	
Basic Model	Manufacturer		Capacity of per battery module (kWh)	Number of Battery pack
1* AZZURRO HV ZBT 5K	Zucchetti Centro Sistemi SpA	5.12	4.75	1
2* AZZURRO HV ZBT 5K		10.24	9.5	2
3* AZZURRO HV ZBT 5K		15.36	14.25	3
4* AZZURRO HV ZBT 5K		20.48	19	4
5* AZZURRO HV ZBT 5K		25.60	23.75	5
6* AZZURRO HV ZBT 5K		30.72	28.5	6

Note:
1. Batteries are not integrated within the inverter and shall be installed according to local regulation.

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MODEL	AZZURRO 1PH HYD3000 ZP1	AZZURRO 1PH HYD3680 ZP1	AZZURRO 1PH HYD4000 ZP1	AZZURRO 1PH HYD4600 ZP1	AZZURRO 1PH HYD5000 ZP1	AZZURRO 1PH HYD6000 ZP1
Max.DC input voltage	550Vdc					
MPPT voltage range	85~520Vdc					
Max.PV Isc	2*22.5A					
Rated battery voltage	400V					
Max.charging/discharging current	20A					
Max.charging/discharging power	3000W	3680W	4000W	4600W	5000W	6000W
Rated grid voltage	230V,50Hz					
Rated output current	13.0A	16.0A	17.4A	20.0A	21.7A	26.1A
Max.output current	15A	16A	20A	20.9A	25A	30A
Power Factor	1 default (adjustable+/-0.8)					
Rated output power	3000W	3680W	4000W	4600W	5000W	6000W
Rated Apparent Power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Backup Rated Current	13A	16A	17.4A	20A	21.7A	26A
Backup Rated Apparent Power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Ambient Temperature	-10~ +50°C					
Protection Degree	IP65					
Protection Class	Class I					
Inverter topology	Non-Isolated					
Overvoltage Category	AC III, DC II					
Firmware version:	V000001					

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TYPE OF APPARATUS: Intelligent Residential Energy Storage System			
Number of phases: single-phase			
DISCONNECTION DEVICE	INTERFACE PROTECTION DEVICE	DEVICE FOR CONVERSION	ROTATING GENERATOR DEVICE
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Static converters in systems with capacity up to 11.08 kW The devices are capable to limit I_{dc} to 0.5% of the rated grid current Having examined the ISO 9001 certificate of the manufacturer No: 9151.CNS0, issued by:IMQ S.p.A.			

