


# Certificate of Conformity

Certificate Number: CN-PV-210233

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specifications /standards 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.

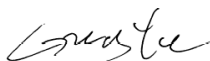
Applicant Name & Address:	Zucchetti Centro Sistemi SpA Via Lungarno 305/A 52028 Terranuova Bracciolini (AR) Italy
Product Description:	Solar Grid-tied Inverter
Ratings & Principle Characteristics:	See Annex to Certificate of Conformity
Models/Type References:	AZZURRO 3PH 3.3KTL-V3, AZZURRO 3PH 4.4KTL-V3, AZZURRO 3PH 5.5KTL-V3, AZZURRO 3PH 6.6KTL-V3, AZZURRO 3PH 8.8KTL-V3, AZZURRO 3PH 11KTL-V3, AZZURRO 3PH 12KTL-V3, AZZURRO 3PH 5KTL-V3-A, AZZURRO 3PH 8.8KTL-V3-A, AZZURRO 3PH 10KTL-V3-A, AZZURRO 3PH 11KTL-V3-A
Brand Name:	
Specification/Standard:	EN 50549-1: 2019, Requirements for generating plants to be connected in parallel with distribution networks Part 1: Connection to a LV distribution network - Generating plants up to and including Type B Type approval for type B and with deviations according to the national network and interface protection for Portugal, Netherlands, Poland, Turkey and Finland
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 China National Accreditation Service for Conformity Assessment (CNAS C058-P) in accordance with ISO/IEC 17065:2012
Test Report Number:	210727048GZU-001

According to Annex H of the standard EN 50549-1:2019, generating plants compliant with the clauses of this European Standard are considered to be compliant with the relevant Article of COMMISSION REGULATION (EU) 2016/631, provided, that all settings as provided by the DSO and the responsible party are complied with.

Certification procedure: SMS-PV-OP-19

Product certification scheme type: Type test

Additional information in Appendix.



Signature

Certification Manager: Grady Ye

Date: 21 Oct. 2021



中国认可  
国际互认  
产品  
PRODUCT  
CNAS C058-P

## APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-210233

MODEL	AZZURRO 3PH 3.3KTL-V3	AZZURRO 3PH 4.4KTL-V3	AZZURRO 3PH 5KTL-V3-A	AZZURRO 3PH 5.5KTL-V3
Max PV voltage	1100Vdc			
MPPT Voltage range	140-1000Vdc			
Max. input current	15/15A			
PV Isc	22.5/22.5A			
Rated power(W)	3000	4000	5000	5000
Max.apparent power (VA)	3300	4400	5000	5500
Max output current	3×5.0 A	3×6.7 A	3×7.6 A	3×8.3 A
Output voltage	3W/N/PE 230Vac/400Vac			
Nominal Frequency	50 Hz			
Power Factor	1 default (adjustable+/-0.8)			
Ambient Temperature	-30°C - +60°C			
Protection Degree	IP65			
Protection Class	Class I			
Software Version	V000001			

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MODEL	AZZURRO 3PH 6.6KTL-V3	AZZURRO 3PH 8.8KTL-V3	AZZURRO 3PH 8.8KTL-V3-A	AZZURRO 3PH 10KTL-V3-A
Max PV voltage	1100Vdc			
MPPT Voltage range	140-1000Vdc			
Max. input current	15/15A		15/30A	
PV Isc	22.5/22.5A		22.5A/45A	
Rated power(W)	6000	8000	8000	10000
Max.apparent power (VA)	6600	8800	8800	10000
Max output current	3×10.0 A	3×13.3 A	3×13.3 A	3×15.2 A
Output voltage	3W/N/PE 230Vac/400Vac			
Nominal Frequency	50 Hz			
Power Factor	1 default (adjustable+/-0.8)			
Ambient Temperature	-30°C - +60°C			
Protection Degree	IP65			
Protection Class	Class I			
Software Version	V000001			

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MODEL	AZZURRO 3PH 11KTL-V3	AZZURRO 3PH 11KTL-V3-A	AZZURRO 3PH 12KTL-V3
Max PV voltage	1100Vdc		
MPPT Voltage range	140-1000Vdc		
Max. input current	15A/15A	15A/30A	
PV Isc	22.5/22.5A	22.5A/45A	
Rated power(W)	10000	10000	12000
Max.apparent power (VA)	11000	11000	13200
Max output current	3×16.7 A	3×16.7 A	3×20.0 A
Output voltage	3W/N/PE 230Vac/400Vac		
Nominal Frequency	50 Hz		
Power Factor	1 default (adjustable+/-0.8)		
Ambient Temperature	-30°C - +60°C		
Protection Degree	IP65		
Protection Class	Class I		
Software Version	V000001		

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Interface protection settings according to EN 50549-1:2019			
Parameter	Max. disconnection time	Min. operate time	Trip value
Undervoltage threshold stage 1 [27 < ]	100s	0.1s (0.1 s steps)	Trip value Config. from 0.2 to 1 Un (0.01 Un steps)
Undervoltage threshold stage 2 [27 << ]	5s	0.1s (0.05 s steps)	Trip value Config. from 0.2 to 1 Un (0.01 Un steps)
Overvoltage threshold stage 1 [59 > ]	100s	0.1s (0.1 s steps)	Trip value Config. from 1.0 to 1.2 Un (0.01 Un steps)
Overvoltage threshold stage 2 [59 >> ]	5s	0.1s (0.05 s steps)	Trip value Config. from 1.0 to 1.3 Un (0.01 Un steps)
Overvoltage 10 min mean protection	Trip time Config ≤ 3s not adjustable Time delay setting = 0 ms		Trip value Config. from 1.0 to 1.15Un (0.01 Un steps)
Underfrequency threshold stage 1 [81 < ]	100s	0.1s (0.1s steps)	Trip value Config. from 47.0 to 50.0Hz (0.1Hz steps)
Underfrequency threshold stage 2 [81 << ]	5s	0.1s (0.05 s steps)	Trip value Config. from 47.0 to 50.0Hz (0.1Hz steps)
Overfrequency threshold stage 1 [81 > ]	100s	0.1s (0.1s steps)	Trip value Config. from 50.0 to 52.0Hz (0.1Hz steps)
Overfrequency threshold stage 2 [81 >> ]	5s	0.1s (0.05 s steps)	Trip value Config. from 50.0 to 52.0Hz (0.1Hz steps)
Starting to and reconnection settings for voltage	50%-120% adjustable, 85%Un ≤ U ≤ 1.10Un default		
Starting to generate electrical power	47Hz – 52Hz adjustable, 49.5Hz ≤ U ≤ 50.1Hz default		
Reconnection settings for frequency	47Hz – 52Hz adjustable, 49.5Hz ≤ U ≤ 50.2Hz default		
Observation time	10s-60s adjustable, 60s default		
Active power increase gradient	6%-3000%/min adjustable, 10%/min default		
Permanent DC injection	0.5% of rated inverter output		
Loss of mains according to EN 62116	Within 2s		

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