



Test Verification of Conformity

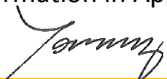
Verification Number: 191023153GZU-VOC001

On the basis of the referenced test report(s), sample(s) tested of the below product have been found to comply with the standards harmonized with the directives listed on this verification at the time the tests were carried out. Other standards and Directives may be relevant to the product. This verification is part of the full test report(s) and should be read in conjunction with it.

Once compliance with all product relevant  mark directives are verified, including any relevant e.g. risk assessment and production control, the manufacturer may indicate compliance by signing a Declaration of Conformity themselves and applying the mark to products identical to the tested sample(s).

Applicant Name & Address:	SHENZHEN GROWATT NEW ENERGY TECHNOLOGY CO., LTD 1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District, Shenzhen, P.R.China
Product Description:	PV Grid inverter
Ratings & Principle Characteristics:	See Appendix: Test Verification of Conformity
Models/Type References:	MAC 15KTL3-XL, MAC 20KTL3-XL, MAC 22KTL3-XL, MAC 25KTL3-XL, MAC 30KTL3-XL, MAC 36KTL3-XL, MAC 30KTL3-X LV, MAC 40KTL3-X LV, MAC 50KTL3-X LV, MAC 60KTL3-X LV, MAC 50KTL3-X MV, MAC 60KTL3-X MV, MAC 66KTL3-X MV, MAC 70KTL3-X MV
Brand Name(s):	
Standard(s)/Directive(s):	See Appendix: Test Verification of Conformity
Verification Issuing Office Name & Address:	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China
Test Report Number(s):	190829057GZU-001, 190829057GZU-001 Revision 1 190829057GZU-002, 190829057GZU-002 Revision 1

Additional information in Appendix



Signature

Name: Tommy Zhong

Position: Technical Manager

Date: 28 November 2019

This Verification is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to permit copying or distribution of this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 191023153GZU-VOC001.

Ratings & Principle Characteristics:

Model	MAC 50KTL3-X MV	MAC 60KTL3-X MV	MAC 66KTL3-X MV	MAC 70KTL3-X MV
Max.PV voltage	1100Vdc			
PV voltage range	200V – 1000Vdc			
Max.input current	52A/39A /39A	52A*3		
PV Isc	55A*3			
Nominal output voltage	3W/PE, 277/480Vac			
Nominal output Frequency	50/60Hz			
Max.output current	66.9A	80.2A	88.2A	93.6A
Max.output power	50.0KW	60.0KW	66.0KW	70.0KW
Max.apparent power	55.5KVA	66.6KVA	73.3KVA	77.7KVA
Power factor range	0.8Leading – 0.8 lagging			
Safety level	Class I			
Ingress Protection	IP 65			
Operation Ambient Temperature	-25°C - +60°C			
Software version	TK1.0			

This Verification is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to permit copying or distribution of this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 191023153GZU-VOC001

Ratings & Principle Characteristics:

Model	MAC 30KTL3-X LV	MAC 40KTL3-X LV	MAC 50KTL3-X LV	MAC 60KTL3-X LV
Max.PV voltage	1100Vdc			
PV voltage range	200V – 1000Vdc			
Max.input current	39A*2 /26A	39A*3	52/39/39A	52A*3
PV Isc	45A*3		55A*3	
Nominal output voltage	3W/N/PE, 230/400Vac			
Nominal output Frequency	50/60Hz			
Max.output current	48.3A	64.4A	80.5A	96.6A
Max.output power	30.0KW	40.0KW	50.0KW	60.0KW
Max.apparent power	33.3KVA	44.4KVA	55.5KVA	66.6KVA
Power factor range	0.8Leading – 0.8 lagging			
Safety level	Class I			
Ingress Protection	IP 65			
Operation Ambient Temperature	-25°C - +60°C			
Software version	TK1.0			

This Verification is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to permit copying or distribution of this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 191023153GZU-VOC001

Ratings & Principle Characteristics:

Model	MAC 15KTL3-XL	MAC 20KTL3-XL	MAC 22KTL3- X L	MAC 25KTL3- XL
Max.PV voltage	1100Vdc			
PV voltage range	200V – 1000Vdc			
Max.input current	52A*3			
PV Isc	55A*3			
Nominal output voltage	3W/N/PE, 127/220Vac			
Nominal output Frequency	50/60Hz			
Max.output current	43.6A	58.3A	64.0A	73.0A
Max.output power	15.0KW	20.0KW	22.0KW	25.0KW
Max.apparent power	16.6KVA	22.2KVA	24.4KVA	27.8KVA
Power factor range	0.8Leading – 0.8 lagging			
Safety level	Class I			
Ingress Protection	IP 65			
Operation Ambient Temperature	-25°C - +60°C			
Software version	TK1.0			

This Verification is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to permit copying or distribution of this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 191023153GZU-VOC001

Ratings & Principle Characteristics:

Model	MAC 30KTL3-XL	MAC 36KTL3-XL
Max.PV voltage	1100Vdc	
PV voltage range	200V – 1000Vdc	
Max.input current	52A/52A/52A	
PV Isc	55A*3	
Nominal output voltage	3W/N/PE, 127/220Vac	
Nominal output Frequency	50/60Hz	
Max.output current	87.4A	94.5A
Max.output power	30.0KW	36.0KW
Max.apparent power	33.3KVA	36.0KVA
Power factor range	0.8Leading – 0.8 lagging	
Safety level	Class I	
Ingress Protection	IP 65	
Operation Ambient Temperature	-25°C - +60°C	
Software version	TK1.0	

Standard(s)/Directive(s):

IEC/EN 62109-1: 2010 Safety of power converters for use in photovoltaic power systems – Part 1: General requirements
 IEC/EN 62109-2: 2011 Safety of power converters for use in photovoltaic power systems – Part 2: Particular requirements for inverters
 Low Voltage Directive 2014/35/EU

This Verification is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to permit copying or distribution of this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.