

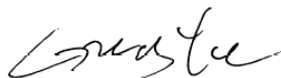
Certificate of Conformity

Certificate Number: CN-PV-200053

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:	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 Annex to Certificate 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:	
Specification/Standard:	See Appendix: Certificate of Conformity
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai 2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental Area, Shanghai, P. R. China
Test Report Number:	190829057GZU-001, 190829057GZU-001 Revision 1 190829057GZU-002, 190829057GZU-002 Revision 1

Additional information in Appendix.



Signature

Certification Manager: Grady Ye

Date: 19 June 2020

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-200053

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			

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-200053

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	<u>64.4A</u>	<u>80.5A</u>	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			

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APPENDIX: Certificate of Conformity

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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			

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-200053

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	

Specification/
Standard:

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