

Certificate of Conformity

Certificate Number: CN-PV-230037

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(s). The manufacturer(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant: Shenzhen Growatt New Energy Co., Ltd

4-13/F, Building A, Sino German (Europe) Industrial Park, Hangcheng Ave,

Bao'an District, Shenzhen.

Product: PV Grid Inverter

Ratings & Principle Characteristics:

See appendix of Certificate of Conformity

MAC 10KTL3-XL, MAC 12KTL3-XL, MAC 15KTL3-XL, MAC 20KTL3-XL, MAC

22KTL3-XL, MAC 25KTL3-XL, MAC 30KTL3-XL, MAC 36KTL3-XL

Brand Name: GROWATT

Tested according to: UL 1741:2021 Ed.3 Inverters, Converters, Controllers and Interconnection

System Equipment for Use with Distributed Energy Resources

IEEE 1547:2018 IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems

Interfaces (Excluding interoperability, section 10)

IEEE 1547.1:2020IEEE Standard Conformance Test Procedures for Equipment

Interconnecting Distributed Energy Resources with Electric Power

Systems and Associated Interfaces (Excluding interoperability test, section 6)

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

Test Report No.<s>: 200903131GZU-001

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Additional information in Appendix.

Signature

Certification Manager: Grady Ye

Date: 18 January 2023

This Certificate 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 Certificate. Only the Client is authorized to permit copying or distribution of this Certificate. 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.



APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230037

Model:	MAC 15KTL3-XL	MAC 20KTL3-XL	MAC 22KTL3-XL	MAC 25KTL3-XL			
DC input:							
Range of input voltage:	200-1000Vdc						
Max. input voltage:	1100Vdc						
Max. input current of the MPP tracker:	54A*3						
Max. input short circuit current:	67.5A*3						
Max backfeed current	0A						
AC output:							
Max. output power	15.0KW	20.0KW	22.0KW	25.0KW			
Max. apparent power	16.6KVA	22.2KVA	24.4KVA	27.8KVA			
Default grid voltage setting	3W/N/PE, 127/220Vac						
Nominal grid frequency	60Hz						
Range of grid frequency	59.5-60.5Hz						
Max. output current	43.6A	58.3A	64.0A	73.0A			
Max. output overcurrent protection	180A						
Output power factor	> 0.99 (adj.+/-0.8)						
operation ambient temperature	-25 to +60 $^{\circ}$ C (power deration above 45 $^{\circ}$ C)						
Software Version	TK1.0						

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APPENDIX: Certificate of Conformity

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	T		T				
Model	MAC 10KTL3-XL	MAC 12KTL3-XL	MAC 30KTL3-XL	MAC 36KTL3-XL			
DC input:							
Range of input voltage	200-1000Vdc						
Max. input voltage	1100Vdc						
Max. input current of the MPP tracker	54A*3						
Max. input short circuit current	67.5A*3						
Max backfeed current	0A						
AC output:							
Max.output power	10.0KW	12.0KW	30.0KW	36.0KW			
Max.apparent power	11.1KVA	13.3KVA	33.3KVA	36.0KVA			
Default grid voltage setting:	3W/N/PE, 127/220Vac						
Nominal grid frequency:	60Hz						
Range of grid frequency:	59.5-60.5Hz						
Max.output current:	29.2A	34.9A	87.4A	94.5A			
Max. output overcurrent protection:	180A						
Output power factor:	> 0.99 (adj.+/-0.8)						
operation ambient temperature:	-25 to +60°C (power deration above 45°C)						
Software Version	TK1.0						
Max output fault current and duration (ac)	180Arms@ 1 cycle						
Sychronization in-rush current	<10A						
Trip limit and trip time accuracy	Voltage:1%; Frequency:0.01Hz Time:1%						
Output pwr temp derate/ max pwr ambient	60° $^{\circ}$ (power deration above 45° $^{\circ}$ C)						

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