

Certificate of Conformity

Certificate Number: CN-PV-210146

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 Co., Ltd 2F and 3F, Building 4, Jiayu Company Industrial Park, Xibianling, Shangyu Village, Shiyan Street, Bao'an District, Shenzhen, China
Product Description:	PV Grid inverter
Ratings & Principle Characteristics:	See Annex to Certificate of Conformity
Models/Type References:	MAX 100KTL3-X LV, MAX 110KTL3-X LV, MAX 120KTL3-X LV, MAX 125KTL3-X LV, MAX 133KTL3-X LV
Brand Name:	GROWATT
Specification/Standard:	EN 50549-1: February 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
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2 nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China
Test Report Number:	210223043GZU-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.

Additional information in Appendix.



Signature

Certification Manager: Grady Ye

Date: 09 June 2021

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-210146.

Model	MAX 100KTL3- X LV	MAX 110KTL3- X LV	MAX 120KTL3- X LV	MAX 125KTL3- X LV	MAX 133KTL3- X LV
Max.PV voltage	1100Vdc				
PV voltage range	180V – 1000Vdc				
Max.input current	32A*10				
PV Isc	40A*10				
Nominal output voltage	3W/N/PE, 230/400Vac				
Nominal output Frequency	50Hz				
Max.output current	167.1A	183.8A	200.5A	208.9A	222.3A
Max.output power	100KW	110KW	120KW	125KW	133KW
Max.apparent power	110KVA	121KVA	132KVA	137.5KVA	146.3KVA
Power factor range	0.8Leading – 0.8 lagging				
Safety level	Class I				
Ingress Protection	IP 66				
Operation Ambient Temperature	-30°C - +60°C				
Software version	TN1.0				

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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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