Certificate of Conformity

Certificate Number: CN-PV-230216

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> 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, China
Product:	Hybrid Inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	MID 11KTL3-XH, MID 12KTL3-XH, MID 13KTL3-XH, MID 15KTL3-XH, MID 17KTL3-XH, MID 20KTL3-XH, MID 25KTL3-XH, MID 30KTL3-XH MID 11KTL3-XA, MID 12KTL3-XA, MID 13KTL3-XA, MID 15KTL3-XA, MID 17KTL3-XA, MID 20KTL3-XA, MID 25KTL3-XA, MID 30KTL3-XA
Brand Name<s>:	GROWATT
Product Complies with:	Commission Regulation (EU) 2016/631 of 14 April 2016 (NC RfG) establishing a network code on the requirements for connecting generating units to the network (Journal of Laws UE L 112/1 of 27 April 2016); PSE:18 December 2018: General Application Requirements resulting from the Regulation of the EU Commission 2016/631 of April 14, 2016 establishing the network code on the requirements for connecting generating units to the grid - approved by the Decision of the President of the Energy Regulatory Office DRE.WOSE.7128.550.2.2018.ZJ of January 2, 2019; PTPiREE, 2021-04: Conditions and procedures for the use of certificates in the process of connecting power generation modules to power grids. Type approval for Type A and B PPMs
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 ACCREDIA in accordance with ISO/IEC 17065:2012
Test Report No.<s>:	230315056GZU-001

Additional information in Appendix.

Signature

Certification Manager: Grady Ye
Date: 04 May 2023
Valid until: 03 May 2028

PRD N° 306B

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-230216

The following functionalities have been assessed based on the rules for the use of certificate for Power Park Modules (PPMs), as specified in chapter 7 and 9 of the PTPIREE 2021-04. The functions denoted “Not Applicable” in the table of chapter 7 has not been included.

Capability	NC RfG	PSE 2018-12	Type A	Type B	Assessment result
Frequency range	13.1(a)	13.1(a)(i)	x	x	Compliant
Rate of Change of Frequency (ROCOF) Withstand capability, df/dt	13.1(b)	13.1(b)	x	x	Compliant
Remote cessation of active power	13.6	13.6	x	x	Compliant
Remote control of active power	14.2	14.2(b)		x	Compliant
Limited Frequency Sensitive Mode – Over frequency (LFSM-O)	13.2	13.2(a).(b).(f)	x	x	Compliant
Capability to withstand voltage dips for connection below 110kV	14.3	14.3(a(i).(b)		x	Compliant
Fast fault current Injection, symmetric and asymmetric faults	20.2(b).(c)	20.2(b).(c)		x	Compliant
Active power recovery after fault clearance	20.3	20.3(a)		x	Compliant

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APPENDIX: Certificate of Conformity

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Model	MID 11KTL3-XH/XA	MID 12KTL3-XH/XA	MID 13KTL3-XH/XA	MID 15KTL3-XH/XA	MID 17KTL3-XH/XA	MID 20KTL3-XH/XA	MID 25KTL3-XH/XA	MID 30KTL3-XH/XA
PV data (NA for MID 11-30KTL3-XA series)								
Max. DC voltage	1100Vdc							
MPP voltage range	160-1000Vdc							
Full Load MPP voltage range	335V-825Vdc							
No. of MPP trackers	2/2						2/2/2	
Max. input current per MPP trackers [A]	32A/32A						32A/32A/32A	
Max. short-circuit current per MPP trackers [A]	40A/40A						40A/40A/40A	
DC data								
Max. DC Voltage	1100Vdc							
DC voltage range	600-980Vdc							
Max. DC current	25A*2							
Max.input/output power	30kW/ 11kW	30kW/ 12kW	30kW/ 13kW	30kW/ 15kW	30kW/ 17kW	30kW/ 20kW	30kW/ 25kW	30kW/ 30kW
AC rated power [kW]	11	12	13	15	17	20	25	30
Max. AC apparent power [kVA] for “-XH” series	12.1	13.2	14.3	16.5	18.7	22.0	27.5	30.0
Max. AC apparent power [kVA] for “-XA” series	11	12	13	15	17	20	25	30
Rated AC voltage	3W/N/PE, 230V/400V							
AC grid frequency	50Hz							
Max. output current [A] for “-XH” series	18.3	20.0	21.7	25.0	28.3	33.3	41.6	45.5
Max. output current [A] for “-XA” series	16.7	18.2	19.7	22.7	25.8	30.3	37.9	45.5
Adjustable power factor	0.8Leading ...0.8Lagging							
Operating temperature range	–25°C ... +60°C (>45°C Derating)							
Protection degree	IP66							
Software Version	DN1.0							

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