Certificate of Conformity

Certificate Number: CN-PVES-260337

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 Room 101, Building 1, Smart Green Energy Industrial Park, Buildings 1 to 7, No. 291 Yunchang Road, Sanwei Community, Hangcheng Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Product:	Hybrid Inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	MODA 4000TL3-HU-Y, MODA 5000TL3-HU-Y, MODA 6000TL3-HU-Y, MODA 8000TL3-HU-Y, MODA 10KTL3-HU-Y, MODA 12KTL3-HU-Y, MODA 15KTL3-HU-Y (Y is variable. Y=1, 2, 3, 4, 5, 6, 7)
Brand Name<s>:	GROWATT
Product Complies with:	EN 50549-1:2019+A1:2023 EN 50549-10:2022
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>:	260706132GZU-001, 13 Aug 2026

Additional information in Appendix.

Mira Xiao

Signature

Certification Manager: Mira Xiao
Date: 31 August 2026

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PVES-260337.

Model	MODA 4000TL3-HU-Y	MODA 5000TL3-HU-Y	MODA 6000TL3-HU-Y	MODA 8000TL3-HU-Y	MODA 10KTL3-HU-Y	MODA 12KTL3-HU-Y	MODA 15KTL3-HU-Y
PV Input							
$V_{MAX\ PV}$ [Vdc]	1000						
$I_{SC\ PV}$ [A]	25/25/25						
MPP Voltage Range V_{MPP} [Vdc]	140-1000						
Full load MPP Voltage Range V_{MPP} [Vdc]	400-800						
Max. Input Current I_{MAX} [A]	20/20/20						
Number of MPPT trackers	3						
Overvoltage Category (OVC)	II						
Battery Input							
Battery Type	Li-ion or Lead-acid						
Rated input voltage [V]	750						
Input voltage range [V]	660-980						
Max. charge/discharge current [A]	31.8 (For 7kwh pack) 22.7 (For 5kwh pack)						
Grid Input							
Rated Input Voltage [Vac]	220/230						
Rated Input Frequency F_n [Hz]	50/60						
Max. Input Current I_{max} [A]	63						
Power Factor Range cosϕ [λ]	0.80un…0.80ov						
Grid Output							
Rated Output Voltage [Vac]	220/230						
Rated Output Frequency F_n [Hz]	50/60						
Rated Active Power P_n [kW]	4	5	6	8	10	12	15
Max. Active Power P_{Emax} [kW]	4	5	6	8	10	12	15
Rated Apparent power S_n [kVA]	4	5	6	8	10	12	15
Max. Apparent power S_{Emax} [kVA]	4.4	5.5	6.6	8.8	11	13.2	16.5
Max. Output Current I_{max} [A]	6.7	8.3	10	13.3	16.7	20	25
Power Factor Range cosϕ [λ]	0.80un…0.80ov						
Overvoltage Category (OVC)	III						
System							
Hardware version	V1.0						
Software version	D01.0						
Type of inverter	Non-isolated						

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APPENDIX: Certificate of Conformity

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Type of NS Protection	Integrated	
Noise emission (dB)	≤29	
Protective Class	Class I	
Enclosure Protection (IP)	IP66	
Operating Temperature Range [ºC]	-25 to +55 (derating >45)	
Pollution degree (PD)	PD3(External), PD2(Internal)	
Altitude [m]	4000	
Size [mm] Width* Height*Depth	For 7kwh pack: Inverter:740*360*255Battery module:740*265*255 For 5kwh pack: Inverter:590*360*255 Battery module:590*265*255	
Weight [kg]	For 7kwh pack: Inverter: 35 Battery module: 56.8 For 5kwh pack: Inverter: 32 Battery module: 45	For 7kwh pack: Inverter: 35 Battery module: 56.8 For 5kwh pack: Inverter: 32 Battery module: 45
Note: Y is variable. Y=1, 2, 3, 4, 5, 6, 7		

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PVES-260337.

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 t0 EN 62116		Within 2s	

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.

Type approval for type A

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