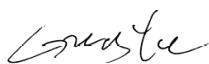


Certificate of Conformity

Certificate Number: CN-PV-230075

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:	PV Grid inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	MID 6KTL3-XL2, MID 8KTL3-XL2, MID 10KTL3-XL2, MID 11KTL3-XL2 MID 12KTL3-XL2, MID 15KTL3-XL2, MID 17KTL3-XL2, MID 20KTL3-XL2, MID 22KTL3-XL2, MID 25KTL3-XL2, MID 17KTL3-X2, MID 20KTL3-X2, MID 25KTL3-X2, MID 30KTL3-X2, MID 30KTL3-X2-1, MID 33KTL3-X2, MID 36KTL3-X2, MID 40KTL3-X2, MID 50KTL3-X2
Brand Name<s>:	GROWATT
Product Complies with:	EN 50549-1: 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 Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012
Test Report No.<s>:	220908147GZU-003
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: 06 March 2023



PRD N° 306B

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230075.

Model	MID 6KTL3-XL2	MID 8KTL3-XL2	MID 10KTL3-XL2	MID 11KTL3-XL2	MID 12KTL3-XL2	MID 15KTL3-XL2	MID 17KTL3-XL2	MID 20KTL3-XL2	MID 22KTL3-XL2	MID 25KTL3-XL2
Max. DC voltage	1100V									
MPP voltage range	200-850V									
Full-load voltage range	200-650V									
No. of MPP trackers	2					4				
No. of PV strings per MPP trackers	2/2					2/2/2/2				
Max. input current per MPP trackers	32/36					32/32/32/32				
Max. short-circuit current per MPP trackers	40/45					40/40/40/40				
AC rated power	6000W	8000W	10000W	11000W	12000W	15000W	17000W	20000W	22000W	25000W
Max. AC apparent power	6600V A	8800V A	<u>11100V</u> A	<u>12200V</u> A	<u>13300V</u> A	<u>16600V</u> A	18800V A	<u>22200V</u> A	24400V A	27700V A
Nominal AC voltage	3W+PE, 3W/N/PE,127V/220V; 133V/230V									
AC grid frequency	50/60 Hz									
Rated AC output current@127 V	15.7A	21.0A	26.2A	28.9A	31.5A	39.4A	44.6A	52.5A	57.7A	65.6A
Rated AC output current@133 V	15.0A	20.1A	25.1A	27.6A	30.1A	37.6A	42.6A	50.1A	55.1A	62.7A
Max. output current	17.5A	23.3A	29.2A	32.1A	35.0A	43.7A	49.6A	58.3A	64.2A	72.9A
Adjustable power factor	0.8Leading ...0.8Lagging									
Operating temperature range	-25°C ... +60°C (>45°C Derating)									
Protection degree	IP66									
Software Version	DM1.0									

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230075.

Model	MID 17KTL3- X2	MID 20KTL3- X2	MID 25KTL3- X2	MID 30KTL3- X2	MID 30KTL3- X2-1	MID 33KTL3- X2	MID 36KTL3- X2	MID 40KTL3- X2	MID 50KTL3- X2
Max. DC voltage	1100Vdc								
MPP voltage range	200-1000Vdc								
Full Load MPP voltage range	420-850Vdc		480-850Vdc		400-850Vdc			450-850Vdc	
No. of MPP trackers	2				3			4	
No. of PV strings per MPP trackers	2/2			2/3	2/2/2			2/2/2/2	
Max. input current per MPP trackers [A]	32/32		32/36	32/48	32/32/32			32/32/32/32	
Max. short-circuit current per MPP trackers [A]	40/40		40/45	40/60	40/40/40			40/40/40/40	
AC rated power [KW]	17	20	25	30	30	33	36	40	50
Max. AC apparent power [KVA]	18.8	22.2	27.7	33.3	30.0	36.6	40.0	44.4	55.5
Rated AC voltage	3W/N/PE, 230V/400V								
AC grid frequency	50/60Hz								
Rated AC output current [A]	24.6	29.0	36.2	43.5	43.5	47.8	52.2	58.0	72.5
Max. output current [A]	28.6	33.6	42.0	50.5	45.5	55.5	60.6	67.3	84.1
Adjustable power factor	0.8Leading ...0.8Lagging								
Operating temperature range	-25°C ... +60°C (>45°C Derating)								
Protection degree	IP66								
Software Version	DM1.0								

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APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230075.

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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