

NO.: ENS2301280049E00301C

The following product has been tested by us with the listed standards and found in conformity with the council EMC directive 2014/30/EU. This is to certify that the specimen is in conformity with the assessment requirement mentioned follow. This certificate does not imply assessment to the production of the product.

Applicant : Shenzhen Growatt New Energy Co., Ltd.

Address : 4-13/F, Building A, Sino-German(Europe) Industrial Park,

Hangcheng Ave, Bao'an District, Shenzhen, China

Manufacturer : Shenzhen Growatt New Energy Co., Ltd.

Address : 4-13/F, Building A, Sino-German(Europe) Industrial Park,

Hangcheng Ave, Bao'an District, Shenzhen, China

Trade Mark : GROWATT

EUT : Grid-connected inverter

M/N : 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 22KTL3-X2, MID 25KTL3-X2, MID 30KTL3-X2, MID

40KTL3-X2, MID 50KTL3-X2

Test Standards : EN 62920:2017/A1:2021

EN 61000-3-12:2011

EN IEC 61000-3-11: 2019

Version : Ver.1.0





February 23, 2023

The certificate is based on a single evaluation of one sample of above-mentioned products, It does not imply an assessment of the whole production and does not permit the use of the test lab. logo .





Certificate Number: CN-PV-230076

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.

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

Bao'an District, Shenzhen, China

Product Description: PV Grid inverter

Ratings & Principle Characteristics:

See Annex to Certificate of Conformity

Models/Type References: 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: GROWATT

Specification/Standard: IEC/EN 62109-1:2010 (First Edition)

Safety of Power Converter for use in Photovoltaic Power Systems Part 1:

General requirements IEC/EN 62109-2:2011

Safety of Power Converter for use in Photovoltaic Power Systems Part 2:

Particular requirements for inverters

Certificate Issuing Office Intertek Testing Services Ltd. Shanghai Name & Address:

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

220908133GZU-001, 220908133GZU-002 Test Report Number:

Additional information in Appendix.

Signature

Certification Manager: Grady Ye

/ suste

Date: 06 March 2023

PRD N° 306B



This is an Appendix to Certificate of Conformity Number: CN-PV-230076

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	7	, ,,	71	7	•		7		, ,,	7	
voltage					11	L00V					
MPP voltage											
range					200	-850V					
Full-load											
voltage range					200	-650V					
No. of MPP				7777	- 1						
trackers			2			JU		4			
No. of PV											
strings per			2/2					2/2/2/2			
MPP trackers											
Max. input											
current per		32/36 32/32/32									
MPP trackers		3-7-7-7-7-7-									
Max. short-											
circuit current		40/40/40/40									
per MPP		40/40/40/40									
trackers											
AC rated	6000W	8000W	10000W	11000W	12000W	15000W	17000W	20000W	22000W	25000W	
power	600000	800000	100000	110000	1200000	150000	1700000	200000	22000VV	2500000	
Max. AC	6600V	8800V	11100V	12200V	13300V	16600V	18800V	22200V	24400V	27700V	
apparent	Α	A					A		A	27700V A	
power	A	А	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	A	<u>A</u>	A	A	
Nominal AC voltage				3W+PE,	3W/N/PE,1	27V/220V; 1	133V/230V				
AC grid frequency					50/	'60 Hz					
Rated AC											
output										a= a.	
current@127	15.7A	21.0A	26.2A	28.9A	31.5A	39.4A	44.6A	52.5A	57.7A	65.6A	
V											
Rated AC											
output	15.0A	20.1A	25.1A	27.6A	30.1A	37.6A	42.6A	50.1A	55.1A	62.7A	
current@133	15.UA	20.1A	25.1A	27.0A	30.1A	37.0A	42.0A	30.1A	33.1A	02.7A	
V											
Max. output	17.5A	23.3A	29.2A	32.1A	35.0A	43.7A	49.6A	58.3A	64.2A	72.9A	
current	17.34	23.3A	23.ZM	J2.1A	33.UA	43./A	49.UA	J0.3A	U4.ZA	12.3M	
Adjustable					0 81 pading	∩ SI aggin	ισ				
power factor		0.8Leading0.8Lagging									
Operating					_25°C	+60°C					
temperature						Derating)					
range					(/45 C	Deruting/					
Protection					1	P66					
degree					·						
Software		DM1.0									
Version						*.1.0					



This is an Appendix to Certificate of Conformity Number: CN-PV-230076

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					200-1000Vdd					
Full Load MPP voltage range	420-8	50Vdc	480-8	50Vdc		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				0.8Le	ading0.8La	igging				
Operating temperature range	−25°C +60°C (>45°C Derating)									
Protection degree		IP66								
Software Version		DM1.0								



Certificate Number: CN-PV-230161

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 See appendix of Certificate of Conformity

Characteristics:

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

Brand Name<s>: **GROWATT**

CEI 0-16:2022-03 + V1:2022-11: Reference technical rules for the connection **Product Complies with:**

of active and passive consumers to the HV and MV electrical networks of

distribution Company

Certificate Issuing Office Intertek Testing Services Ltd. Shanghai

Name & Address:

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>: 221226019GZU-002 Issued by Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch accredited by IAS (TL-395) in accordance with ISO/IEC

17025:2017

Additional information in Appendix.

Signature

Certification Manager: Grady Ye

/ suste

Date: 10 April 2023

PRD N° 306B



This is an Appendix to Certificate of Conformity Number: CN-PV-230161.

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				2	00-1000Vd	lc				
range				_				I		
Full Load MPP voltage range	420-8	50Vdc	480-8	50Vdc	4	100-850Vd	С	450-850Vdc		
No. of MPP trackers		2	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	I/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				0.8Lea	ding0.8L	agging		1	1	
Operating temperature range	−25°C +60°C (>45°C Derating)									
Protection degree	IP66									
Software Version					DM1.0					

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.

Intertek



This is an Appendix to Certificate of Conformity Number: CN-PV-230161.

TYPE OF APPARATUS: PV	Grid Inverter		
Number of phases: three	-phase		
DISCONNECTION DEVICE	INTERFACE PROTECTION DEVICE	DEVICE FOR CONVERSION	ROTATING GENERATOR DEVICE
524.02	THE TESTICITE SERVICE		521102

- 1, The static converters in systems with capacity more than 11.08 kW and less than or equal to 6 MW
- 2, Maximum power of the destination plant: ≥400KW
- 3, Having examined the ISO 9001 certificate of the manufacturer No: 02421Q32012223R0M issued by: UNIVERSAL CERTIFICATION CENTRE CO., LTD.



Certificate Number: CN-PV-230146

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 See appendix of Certificate of Conformity

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

Brand Name<s>: **GROWATT**

CEI 0-21:2022-03 + V1:2022-11: Reference technical rules for the connection **Product Complies with:**

of active and passive users to the LV electrical Utilities

Certificate Issuing Office

Name & Address:

Test Report No.<s>:

Characteristics:

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

221226019GZU-001 Issued by Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch accredited by IAS (TL-395) in accordance with ISO/IEC

17025:2017

Additional information in Appendix.

Signature

Certification Manager: Grady Ye

/ suntu

Date: 04 April 2023

PRD N° 306B



This is an Appendix to Certificate of Conformity Number: CN-PV-230146.

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				2	00-1000Vd	lc				
range				_				I		
Full Load MPP voltage range	420-8	50Vdc	480-8	50Vdc	4	100-850Vd	С	450-850Vdc		
No. of MPP trackers		2	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	I/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				0.8Lea	ding0.8L	agging		1	1	
Operating temperature range	−25°C +60°C (>45°C Derating)									
Protection degree	IP66									
Software Version					DM1.0					



This is an Appendix to Certificate of Conformity Number: CN-PV-230146.

TYPE OF APPARATUS: PV	Grid Inverter		
Number of phases: three	-phase		
DISCONNECTION DEVICE	INTERFACE PROTECTION DEVICE	DEVICE FOR CONVERSION	ROTATING GENERATOR DEVICE

The static converters in systems with capacity more than 11.08 kW

The devices are capable to limit Idc to 0.5% of the rated grid current

Having examined the ISO 9001 certificate of the manufacturer No: 02421Q32012223R0M, issued by:

UNIVERSAL CERTIFICATION CENTRE CO., LTD



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.

Shenzhen Growatt New Energy Co., Ltd. Applicant:

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

District, Shenzhen, China

Product: PV Grid inverter

Ratings & Principle See appendix of Certificate of Conformity **Characteristics:**

MID 6KTL3-XL2, MID 8KTL3-XL2, MID 10KTL3-XL2, MID 11KTL3-XL2 Model:

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

Intertek Testing Services Ltd. Shanghai

Name & Address: 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

220908147GZU-003 Test Report No.<s>:

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

/ suste

Date: 06 March 2023

PRD Nº 306B



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		I.		I.	ı	1001/		I				
voltage					1:	100V						
MPP voltage					200	0501						
range					200	-850V						
Full-load		ALI I		- 307	200	CEOV						
voltage range					200	-650V						
No. of MPP		- 40	2	AT .		10	100	4				
trackers			2			7//		4				
No. of PV												
strings per			2/2					2/2/2/2				
MPP trackers												
Max. input												
current per		32/36 32/32/32										
MPP trackers												
Max. short-												
circuit current		40/45										
per MPP		40/45 40/40/40										
trackers												
AC rated	5000111		40000111	44000111	40000111	45000111	4=000111	2222211		0=00011		
power	6000W	8000W	10000W	11000W	12000W	15000W	17000W	20000W	22000W	25000W		
Max. AC							0					
apparent	6600V	8800V	<u>11100V</u>	<u>12200V</u>	13300V	<u>16600V</u>	18800V	<u>22200V</u>	24400V	27700V		
power	Α	Α	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	Α	<u>A</u>	Α	Α		
Nominal AC				3W+PE,	3W/N/PE,1	27V/220V; :	L33V/230V					
voltage												
AC grid frequency					50/	'60 Hz						
Rated AC												
output												
current@127	15.7A	21.0A	26.2A	28.9A	31.5A	39.4A	44.6A	52.5A	57.7A	65.6A		
V												
Rated AC												
output												
current@133	15.0A	20.1A	25.1A	27.6A	30.1A	37.6A	42.6A	50.1A	55.1A	62.7A		
V												
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					U.8Leading	0.8Laggir	ng					
Operating	İ	3590										
temperature						+60°C						
range					(>45°C	Derating)						
Protection	1											
degree					I	P66						
Software												
Version					DI	M1.0						



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	420-8	50Vdc	480-8	50Vdc		400-850Vdc		450-850Vdc			
No. of MPP trackers		2	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					
Max. short- circuit current per MPP trackers [A]	40,	/40	40/45	40/60		40/40/40	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/4	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				0.8Le	ading0.8La	ngging		•			
Operating temperature range		−25°C +60°C (>45°C Derating)									
Protection degree		IP66									
Software Version		DM1.0									



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

Interface protection setting	ngs according to EN 50549	-1:2019				
Parameter	Max. disconnection time	Min. operate time	Trip value			
Undervoltage threshold	100s	0.1s	Trip value Config. from			
stage 1 [27 <]		(0.1 s steps)	0.2 to 1 Un			
			(0.01 Un steps)			
Undervoltage threshold	5s	0.1s	Trip value Config. from			
stage 2 [27 <<]	// //	(0.05 s steps)	0.2 to 1 Un			
			(0.01 Un steps)			
Overvoltage threshold	100s	0.1s	Trip value Config. from			
stage 1 [59 >]		(0.1 s steps)	1.0 to 1.2 Un			
			(0.01 Un steps)			
Overvoltage threshold	5s	0.1s	Trip value Config. from			
stage 2 [59>>]		(0.05 s steps)	1.0 to 1.3 Un			
			(0.01 Un steps)			
Overvoltage 10 min		≤ 3s not adjustable	Trip value Config. from			
mean protection	Time delay	setting = 0 ms	1.0 to 1.15Un			
			(0.01 Un steps)			
Underfrequency	100s	0.1s	Trip value Config. from			
threshold stage 1 [81 <]		(0.1s steps)	47.0 to 50.0Hz			
			(0.1Hz steps)			
Underfrequency	5s	0.1s	Trip value Config. from			
threshold stage 2 [81		(0.05 s steps)	47.0 to 50.0Hz			
<<]		1	(0.1Hz steps)			
Overfrequency	100s	0.1s	Trip value Config. from			
threshold stage 1 [81 >]	. N	(0.1s steps)	50.0 to 52.0Hz			
0 (W - W		(0.1Hz steps)			
Overfrequency	5s	0.1s	Trip value Config. from			
threshold stage 2		(0.05 s steps)	50.0 to 52.0Hz			
[81 >>]		500/ 1000/ Ji . I I .	(0.1Hz steps)			
Starting to and reconnect			85%Un≤ U≤1.10Un default			
Starting to generate elect			. 49.5Hz≤ U≤50.1Hz default			
Reconnection settings for	trequency	47Hz – 52Hz adjustable, 49.5Hz≤ U≤50.2Hz default				
Observation time	P. A	10s-60s adjustable, 60s default				
Active power increase gra	idient	6%-3000%/min adjustable, 10%/min default				
Permanent DC injection	2 = 11	0.5% of rated inverter output				
Loss of mains according to) EN 62116	Within 2s				



Certificate Number: CN-PV-220286

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.

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

Bao'an District, Shenzhen, China

Product Description: PV Grid inverter

Ratings & Principle Characteristics:

See Annex to Certificate of Conformity

Models/Type References: 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 25KTL3-XL2, MID 17KTL3-X2, MID 20KTL3-X2, MID 25KTL3-X2, MID 30KTL3-X2-1,

MID 33KTL3-X2, MID 36KTL3-X2, MID 40KTL3-X2, MID 50KTL3-X2

Brand Name: GROWATT

Specification/Standard: IEC 61727:2004 Photovoltaic (PV) systems – Characteristics of the utility

interface

IEC 62116:2014 Test procedure of islanding prevention measures for utility-

interconnected photovoltaic inverters

Certificate Issuing Office

Name & Address:

Test Report Number:

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

220908147GZU-001, 220908147GZU-002

Additional information in Appendix.

Signature

Certification Manager: Grady Ye

/ susta

Date: 15 December 2022

ACCREDIA 5.

PRD N° 306B



This is an Appendix to Certificate of Conformity Number: CN-PV-220286

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	7122		7122	71						7122	
voltage					11	L00V					
MPP voltage					200	050)/					
range					200	-850V					
Full-load					250	CEOV					
voltage range					250	-650V					
No. of MPP			2		. 1	200		4			
trackers			2	100	0.			4			
No. of PV											
strings per			2/2					2/2/2/2			
MPP trackers											
Max. input		22/22/22/22									
current per		32/36 32/32/32									
MPP trackers											
Max. short- circuit current											
per MPP			40/45				•	40/40/40/40)		
trackers											
AC rated				(1)							
power	6000W	8000W	10000W	11000W	12000W	15000W	17000W	20000W	22000W	25000W	
Max. AC					TQ1						
apparent	6600V	8800V	<u>11100V</u>	<u>12200V</u>	<u>13300V</u>	<u>16600V</u>	18800V	22200V	24400V	27700V	
power	Α	Α	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	Α	<u>A</u>	Α	Α	
Nominal AC				2)A/ - DE	2V4/NJ/DE 4	27//220//	221/2201				
voltage				3W+PE,	3W/N/PE,1	2/V/22UV; 1	133V/23UV				
AC grid					50/	'60 Hz					
frequency					30/	00 112					
Rated AC											
output	15.7A	21.0A	26.2A	28.9A	31.5A	39.4A	44.6A	52.5A	57.7A	65.6A	
current@127	15.77	21.0/1	20.27	20.571	31.37	33.471	44.071	32.37	37.77	03.07	
V											
Rated AC											
output current@133	15.0A	20.1A	25.1A	27.6A	30.1A	37.6A	42.6A	50.1A	55.1A	62.7A	
V											
Max. output											
current	17.5A	23.3A	29.2A	32.1A	35.0A	43.7A	49.6A	58.3A	64.2A	72.9A	
Adjustable							<u> </u>	<u> </u>	<u> </u>		
power factor					0.8Leading	0.8Laggin	g				
Operating		−25°C +60°C									
temperature											
range		(>45°C Derating)									
Protection						P66					
degree		11 00									
Software					וח	M1.0					
Version											



This is an Appendix to Certificate of Conformity Number: CN-PV-220286

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	420-8	50Vdc	480-8	50Vdc		400-850Vdc		450-850Vdc		
No. of MPP trackers		2	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			
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/	100V				
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				0.8Le	ading0.8La	gging				
Operating temperature range	−25°C +60°C (>45°C Derating)									
Protection degree	IP66									
Software Version		DM1.0								



Test Verification of Conformity

Verification Number: 220908133GZU-VOC001

On the basis of the referenced test report(s), sample(s) tested of the below product have been found to comply with the standards harmonized with the regulation(s) listed on this verification at the time the tests were carried out. Other standards and Regulations may be relevant to the product. This verification is part of the full test report(s) and should be read in conjunction with it <them>.

Once compliance with all product relevant \square mark regulations are verified, including any relevant e.g. risk assessment and production control, the manufacturer may indicate compliance by signing a Declaration of Conformity themselves and applying the mark to products identical to the tested sample(s).

Applicant Name & Address: Shenzhen Growatt New Energy Co., Ltd.

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

District, Shenzhen, China

Product Description: PV Grid inverter

Ratings & Principle See Annex to Certificate of Conformity

Characteristics:

Models/Type References: 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: GROWATT

Relevant IEC/EN 62109-1: 2010 Safety of power converters for use in photovoltaic power systems

Standards/Regulations: – Part 1: General requirements

IEC/EN 62109-2: 2011 Safety of power converters for use in photovoltaic power systems

Part 2: Particular requirements for inverters
Electrical Equipment (Safety) Regulations 2016

Verification Issuing Office

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Name & Address:

Room 02, & 101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2.

Caipin Road, Science City, GETDD, Guangzhou, Guangdong, China

Date of Tests: 10 Sep 2022 to 25 Feb 2023

Test Report Number(s): 220908133GZU-001, 220908133GZU-002

Additional information in Appendix.

Signature

Name: Tommy Zhong

Position: Technical Manager

Date: 11 April 2023

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 220908133GZU-VOC001.

Ratings & Principle Characteristics:

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					11	100V				
Max.										
input current per MPP trackers			32/36			32/32/32				
Max. short- circuit current per MPP trackers		40/45 40/40/40								
AC rated power	6000 W	8000 W	10000 W	11000 W	12000 W	15000 W	17000 W	20000 W	22000 W	25000 W
Max. AC apparent power	6600 VA	8800 VA	11100 VA	12200 VA	13300 VA	16600 VA	18800 VA	22200 VA	24400 VA	27700 VA
Nominal AC voltage				3W+PE, 3	W/N/PE,1	27V/220V;	133V/230	V		
AC grid frequency					50/	60 Hz				
Max. output current	17.5A	23.3A	29.2A	32.1A	35.0A	43.7A	49.6A	58.3A	64.2A	72.9A
Adjustabl e power factor		1			0.8Leading	0.8Laggi	ing			
Operating temperat ure range		−25°C +60°C (>45°C Derating)								
Protectio n degree	IP66									
Software Version					DI	M1.0				

Signature

Name: Tommy Zhong

Position: Technical Manager

Date: 11 April 2023

This Verification 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 Verification. Only the Client is authorized to permit copying or distribution of this Verification. 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. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.



APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 220908133GZU-VOC001.

Ratings & Principle Characteristics:

	MID	MID	MID	MID	MID	MID	MID	MID	MID
Model	17KTL3-	20KTL3-	25KTL3-	30KTL3-	30KTL3-	33KTL3-	36KTL3-	40KTL3-	50KTL3-
	X2	X2	X2	X2	X2-1	X2	X2	X2	X2
Max. DC	1100Vdc								
voltage									
Max. input									
current per	32/32		32/36	32/48	32/32/32			32/32/32/32	
MPP									
trackers									
[A]									
Max. short-									
circuit	40/40		40/45	40/60	40/40/40			40/40/40/40	
current per MPP									
trackers [A]									
AC rated									
power	17	20	25	30	30	33	36	40	50
[KW]	17	20	23	30	30	33	30	40	30
Max. AC									
apparent									
power	18.8	22.2	27.7	33.3	30.0	36.6	40.0	44.4	55.5
[KVA]									
Rated AC	and high constants								
voltage	3W/N/PE, 230V/400V								
AC grid	FO/COLL-								
frequency	50/60Hz								
Max.									
output	28.6	33.6	42.0	50.5	45.5	55.5	60.6	67.3	84.1
current [A]									
Adjustable									
power	0.8Leading0.8Lagging								
factor									
Operating	−25°C +60°C								
temperatur	(>45°C Derating)								
e range	(· 10 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
Protection	IP66								
degree									
Software	DM1.0								
Version									

Signature

Name: Tommy Zhong

Position: Technical Manager

Date: 11 April 2023

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