

Test Verification of Conformity

Verification Number: 2509B0708SHA-V1

On the basis of the tests undertaken, the sample<s> of the below product has been tested by an accredited 3rd party laboratory in accordance to the referenced specification<s>/standard<s> at the time the tests were carried out. This verification is part of the full test report<s> and should be read in conjunction with it <them>.

This document can be used in support of a claim in meeting relevant EU EMC Directive(2014/30/EU) and mandatory Conformity Marking. And in accordance with EU law, the claim is the sole obligation of the Manufacturer/ Importer.

Applicant Name & Address: Afore New Energy Technology (Shanghai) Co., Ltd.

Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China. 201112

Product Description: Hybrid inverter

Ratings & Principle See specifications table

Models/Type References: AF*-TH (*=3K, 4K, 5K, 6K, 8K, 9.99K, 10K, 12K, 14.99K, 15K, 17K, 20K, 24.99K, 25K,

29.99K, 30K)

AF*-THP (*=3K, 4K, 5K, 6K, 8K, 9.99K, 10K, 12K)

AF*-TH-0 (*=3K, 4K, 5K, 6K, 8K, 10K, 12K, 15K, 17K, 20K, 25K, 30K)

AF*-THP-0(*=3K, 4K, 5K, 6K, 8K, 10K, 12K)

AF*-THA (*=3K, 4K, 4.99K, 5K, 6K, 8K, 9.99K, 10K, 12K, 14.99K, 15K, 17K)

AF*-THC (*=3K, 4K, 4.99K, 5K, 6K)

AF*-THA-0 (*=3K, 4K, 5K, 6K, 8K, 10K, 12K, 15K, 17K)

AF*-THC-0 (*=3K, 4K, 5K, 6K)

Brand Name: Afore

Relevant Standards/Directives: EN IEC 61000-6-1:2019; EN IEC 61000-6-3:2021;

EN IEC 61000-6-2:2019; EN IEC 61000-6-4:2019;

EN IEC 61000-3-2:2019+A1:2021; EN 61000-3-3:2013+A1:2019+A2:2021; EN IEC 61000-3-11:2019; EN 61000-3-12:2011; EN 62920:2017+A1:2021;

Verification Issuing Office

Name & Address:

Characteristics:

Intertek Testing Services (Shanghai FTZ) Co., Ltd.

Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China

Date of Tests: 2023-06-30 to 2023-07-01, 2024-03-14 to 2024-03-16

Test Report Number(s): 2509B0708SHA-001

Signature

Name: Max Jin

Position: General Manager

Date: 2025-11-13

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.

Intertek Page 1 of 19 GFT-OP-11b (02-April-2020)



APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 2509B0708SHA-V1

	Specification	s table		
Model	AF3K-TH	AF4K-TH	AF5K-TH	AF6K-TH
PV input				
P pv Max (kW)	6	8	10	12
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30*2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current (A)	20*2	20*2	20*2	20*2
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850
Vdc range @ full power (Vdc)	200-850	200-850	200-850	250-850
Battery (charge/discharge)				
Battery type		Li-ion/Lea	d-acid etc.	
Battery Normal Voltage Range (Vdc)	150	-800(Field adapt b	oattery voltage rar	nge)
Max charge/discharge Current(A)	30	30	30	30
Max charge/discharge Power(kW)	3	4	5	6
AC Grid (input and output)				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE 230/400			
Frequency (Hz)	- 0	5	0	
Normal AC Current (A)	4.4	5.8	7.3	8.7
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	16 / 10.5
Rated Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. input/output Power (kW)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6
Max. cont. Apparent input/output	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6
Power factor(adjustable)		1.0(-0.8	8~ +0.8)	
AC Load output (stand-alone)				
Normal Voltage (VAC)	/ U	3P+N+PE/3P	+PE 230/400	
Frequency (Hz)		5	0	
Nominal Current (A)	4.4	5.8	7.3	8.7
Max. cont. current (A)	5.3	7	8.5	10.5
Max. cont. Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. Apparent Power (kVA)	3	4	5	6
Others				
Ingress protection (IP)		IP	66	
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation		Non-isolated ((PV - AC - BAT)	
Overvoltage category	OVC III (AC Main), OVC II (DC)			



	Specification	s table		
Model	AF3K-TH	AF4K-TH	AF5K-TH	AF6K-TH
PV input				
P pv Max (kW)	6	8	10	12
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30*2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current (A)	20*2	20*2	20*2	20*2
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850
Vdc range @ full power (Vdc)	200-850	200-850	200-850	250-850
Battery (charge/discharge)				
Battery type	07	Li-ion/Lea	d-acid etc.	
Battery Normal Voltage Range (Vdc)	150	-800(Field adapt b	oattery voltage rar	nge)
Max charge/discharge Current(A)	30	30	30	30
Max charge/discharge Power(kW)	3	4	5	6
AC Grid (input and output)				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE 230/400			
Frequency (Hz)		5	0	
Normal AC Current (A)	4.4	5.8	7.3	8.7
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	16 / 10.5
Rated Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. input/output Power (kW)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6
Max. cont. Apparent input/output	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6
Power factor(adjustable)		1.0(-0.8	3~ +0.8)	
AC Load output (stand-alone)				
Normal Voltage (VAC)		3P+N+PE/3P	+PE 230/400	
Frequency (Hz)	0.0	5	0	
Nominal Current (A)	4.4	5.8	7.3	8.7
Max. cont. current (A)	5.3	7	8.5	10.5
Max. cont. Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. Apparent Power (kVA)	3	4	5	6
Others				
Ingress protection (IP)		IP	66	
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation			PV - AC - BAT)	
Overvoltage category		OVC III (AC Ma	in), OVC II (DC)	



	Specifications	s table		
Model	AF14.99K-TH	AF15K-TH	AF17K-TH	AF20K-TH
PV input				
P pv Max (kW)	30	30	34	40
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000
Isc PV (absolute Max.) (A)	30+48	30+48	48*2	48*2
Number MPP trackers	2	2	2	2
Number input strings	1/2	1/2	2/2	2/2
Max. PV input current (A)	20+32	20+32	32*2	32*2
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850
Vdc range @ full power (Vdc)	500-850	500-850	500-850	500-850
Battery (charge/discharge)				
Battery type	Li-ion/Lead-acid etc.			
Battery Normal Voltage Range (Vdc)	150	-800(Field adapt l	oattery voltage rar	nge)
Max charge/discharge Current(A)	50	50	50	50
Max charge/discharge Power(kW)	14.99	15	17	20
AC Grid (input and output)				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE 230/400			
Frequency (Hz)		5	0	
Normal AC Current (A)	21.8	21.8	24.7	29
Max. cont. input/output current (A)	40.5 / 27	40.5 / 27	45 / 30	48 / 32
Rated Power (kW)	14.99	15	17	20
Rated Apparent Power (kVA)	14.99	15	17	20
Max. cont. input/output Power (kW)	22.5 / 14.99	22.5 / 16.5	25.5 / 18.7	30 / 22
Max. cont. Apparent input/output	22.5 / 14.99	22.5 / 16.5	25.5 / 18.7	30 / 22
Power factor(adjustable)		1.0(-0.	8~ +0.8)	-
AC Load output (stand-alone)				
Normal Voltage (VAC)		3P+N+PE/3P	+PE 230/400	
Frequency (Hz)	No.	5	0	
Nominal Current (A)	21.8	21.8	24.7	29
Max. cont. current (A)	27	27	30	32
Max. cont. Power (kW)	14.99	15	17	20
Rated Apparent Power (kVA)	14.99	15	17	20
Max. cont. Apparent Power (kVA)	14.99	15	17	20
Others			l	I
Ingress protection (IP)		IP	66	
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation			(PV - AC - BAT)	
Overvoltage category		OVC III (AC Ma	in), OVC II (DC)	



	Specification	s table		
Model	AF24.99K-TH	AF25K-TH	AF29.99K-TH	AF30K-TH
PV input				
P pv Max (kW)	50	50	51	51
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000
Isc PV (absolute Max.) (A)	60*2	60*2	60*2	60*2
Number MPP trackers	2	2	2	2
Number input strings	2/2	2/2	2/2	2/2
Max. PV input current (A)	40*2	40*2	40*2	40*2
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850
Vdc range @ full power (Vdc)	500-850	500-850	500-850	500-850
Battery (charge/discharge)				
Battery type	07	Li-ion/Lea	nd-acid etc.	
Battery Normal Voltage Range (Vdc)	150	-800(Field adapt	battery voltage ran	ge)
Max charge/discharge Current(A)	60	60	60	60
Max charge/discharge Power(kW)	24.99	25	29.99	30
AC Grid (input and output)				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE 230/400			
Frequency (Hz)		Ç	50	
Normal AC Current (A)	36.3	36.3	43.5	43.5
Max. cont. input/output current (A)	60 / 40	60 / 40	72 / 48	72 / 48
Rated Power (kW)	24.99	25	29.99	30
Rated Apparent Power (kVA)	24.99	25	29.99	30
Max. cont. input/output Power (kW)	37.5 / 24.99	37.5 / 27.5	45 / 29.99	45 / 33
Max. cont. Apparent input/output	37.5 / 24.99	37.5 / 27.5	45 / 29.99	45 / 33
Power factor(adjustable)		1.0(-0.	8~ +0.8)	
AC Load output (stand-alone)				
Normal Voltage (VAC)		3P+N+PE/3F	P+PE 230/400	
Frequency (Hz)	(A)		50	
Nominal Current (A)	36.3	36.3	43.5	43.5
Max. cont. current (A)	40	40	48	48
Max. cont. Power (kW)	24.99	25	29.99	30
Rated Apparent Power (kVA)	24.99	25	29.99	30
Max. cont. Apparent Power (kVA)	24.99	25	29.99	30
Others			· '	
Ingress protection (IP)		IP	P66	
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation		Non-isolated	(PV - AC - BAT)	
Overvoltage category		OVC III (AC Ma	ain), OVC II (DC)	



Specifications table				
Model	AF3K-THP	AF4K-THP	AF5K-THP	AF6K-THP
PV input				
P pv Max (kW)	6	8	10	12
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30*2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current (A)	20*2	20*2	20*2	20*2
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850
Vdc range @ full power (Vdc)	200-850	200-850	200-850	250-850
Battery (charge/discharge)				
Battery type	07-	Li-ion/Lea	d-acid etc.	
Battery Normal Voltage Range (Vdc)	80	-600(Field adapt b	attery voltage rar	ige)
Max charge/discharge Current(A)	50	50	50	50
Max charge/discharge Power(kW)	3	4	5	6
AC Grid (input and output)				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE 230/400			
Frequency (Hz)		5	0	
Normal AC Current (A)	4.4	5.8	7.3	8.7
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	16 / 10.5
Rated Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. input/output Power (kW)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6
Max. cont. Apparent input/output	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6
Power factor(adjustable)		1.0(-0.3	8~ +0.8)	•
AC Load output (stand-alone)				
Normal Voltage (VAC)		3P+N+PE/3P	+PE 230/400	
Frequency (Hz)		5	0	
Nominal Current (A)	4.4	5.8	7.3	8.7
Max. cont. current (A)	5.3	7	8.5	10.5
Max. cont. Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. Apparent Power (kVA)	3	4	5	6
Others				•
Ingress protection (IP)		IP	66	
Protective class	Class I			
Temperature (°C)		-25°C to +60°C	(Derating 45°C)	
Inverter Isolation		Non-isolated	(PV - AC - BAT)	
Overvoltage category		OVC III (AC Ma	in), OVC II (DC)	



	Specification	ns table		
Model	AF8K-THP	AF9.99K-THP	AF10K-THP	AF12K-THP
PV input				
P pv Max (kW)	16	20	20	24
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30*2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current (A)	20*2	20*2	20*2	20*2
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850
Vdc range @ full power (Vdc)	300-850	500-850	500-850	500-850
Battery (charge/discharge)				
Battery type	111 0	Li-ion/Lead	d-acid etc.	
Battery Normal Voltage Range (Vdc)	80-600 120-650			
Max charge/discharge Current(A)	50	50	50	50
Max charge/discharge Power(kW)	8	9.99	10	12
AC Grid (input and output)				
Normal AC Voltage (VAC)	3P+N+PE/3P+PE 230/400			
Frequency (Hz)		50	0	
Normal AC Current (A)	11.6	14.5	14.5	17.4
Max. cont. input/output current (A)	20 / 13.5	26 / 17	26 / 17	32 / 21.5
Rated Power (kW)	8	9.99	10	12
Rated Apparent Power (kVA)	8	9.99	10	12
Max. cont. input/output Power (kW)	12 / 8.8	15 / 9.99	15 / 11	18 / 13.2
Max. cont. Apparent input/output	12 / 8.8	15 / 9.99	15 / 11	18 / 13.2
Power factor(adjustable)		1.0(-0.8	3~ +0.8)	
AC Load output (stand-alone)				
Normal Voltage (VAC)	-	3P+N+PE/3P-	+PE 230/400	
Frequency (Hz)		50	0	
Nominal Current (A)	11.6	14.5	14.5	17.4
Max. cont. current (A)	13.5	17	17	21.5
Max. cont. Power (kW)	8	9.99	10	12
Rated Apparent Power (kVA)	8	9.99	10	12
Max. cont. Apparent Power (kVA)	8	9.99	10	12
Others	- 0			
Ingress protection (IP)		IP6	56	
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation		Non-isolated (PV - AC - BAT)	
Overvoltage category		OVC III (AC Mai	n), OVC II (DC)	



	Specification	s table		
Model	AF3K-TH-0	AF4K-TH-0	AF5K-TH-0	AF6K-TH-0
Battery (charge/discharge)				
Battery type		Li-ion/Lea	d-acid etc.	
Battery Normal Voltage Range (Vdc)	150	-800(Field adapt b	oattery voltage rai	nge)
Max charge/discharge Current(A)	30	30	30	30
Max charge/discharge Power(kW)	3 / 3.3	4 / 4.4	5 / 5.5	6 / 6.6
AC Grid (input and output)				
Normal AC Voltage (VAC)		3P+N+PE/3P	+PE 230/400	
Frequency (Hz)	4	5	0	
Normal AC Current (A)	4.4	5.8	7.3	8.7
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	16 / 10.5
Rated Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. input/output Power (kW)	4.5 / 3	6 / 4	7.5 / 5	9/6
Max. cont. Apparent input/output	4.5 / 3	6/4	7.5 / 5	9/6
Power factor(adjustable)		1.0(-0.8	3~ +0.8)	
AC Load output (stand-alone)				
Normal Voltage (VAC)		3P+N+PE/3P	+PE 230/400	
Frequency (Hz)		5	0	
Nominal Current (A)	4.4	5.8	7.3	8.7
Max. cont. current (A)	5.3	7	8.5	10.5
Max. cont. Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. Apparent Power (kVA)	3	4	5	6
Others			- ///	
Ingress protection (IP)		IP	66	
Protective class		Cla	ss I	
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	10	Non-isolate	d (AC - BAT)	
Overvoltage category	0 0	OVC III (AC Ma	in), OVC II (DC)	



Specifications table					
Model	AF8K-TH-0	AF10K-TH-0	AF12K-TH-0	AF15K-TH-0	
Battery (charge/discharge)					
Battery type		Li-ion/Lea	d-acid etc.		
Battery Normal Voltage Range (Vdc)	150	-800(Field adapt b	oattery voltage ra	nge)	
Max charge/discharge Current(A)	30	30	30	50	
Max charge/discharge Power(kW)	8 / 8.8	10 / 11	12 / 13.2	15 / 16.5	
AC Grid (input and output)					
Normal AC Voltage (VAC)		3P+N+PE/3P	+PE 230/400		
Frequency (Hz)		5	0		
Normal AC Current (A)	11.6	14.5	17.4	21.8	
Max. cont. input/output current (A)	20 / 13.5	26 / 17	32 / 21.5	40.5 / 27	
Rated Power (kW)	8	10	12	15	
Rated Apparent Power (kVA)	8	10	12	15	
Max. cont. input/output Power (kW)	12/8	15 / 10	18 / 12	22.5 / 15	
Max. cont. Apparent input/output	12/8	15 / 10	18 / 12	22.5 / 15	
Power factor(adjustable)		1.0(-0.8	3~ +0.8)		
AC Load output (stand-alone)					
Normal Voltage (VAC)		3P+N+PE/3P	+PE 230/400		
Frequency (Hz))	5	0		
Nominal Current (A)	11.6	14.5	17.4	21.8	
Max. cont. current (A)	13.5	17	21.5	27	
Max. cont. Power (kW)	8	10	12	15	
Rated Apparent Power (kVA)	8	10	12	15	
Max. cont. Apparent Power (kVA)	8	10	12	15	
Others			- 111		
Ingress protection (IP)		IP	66		
Protective class	Class I				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	90.	Non-isolate	d (AC - BAT)		
Overvoltage category	0	OVC III (AC Ma	in), OVC II (DC)		



Specifications table					
Model	AF17K-TH-0	AF20K-TH-0	AF25K-TH-0	AF30K-TH-0	
Battery (charge/discharge)					
Battery type		Li-ion/Lea	d-acid etc.		
Battery Normal Voltage Range (Vdc)	150-	-800(Field adapt k	oattery voltage ra	nge)	
Max charge/discharge Current(A)	50	50	60	60	
Max charge/discharge Power(kW)	17 / 18.7	20 / 22	25 / 27.5	30/33	
AC Grid (input and output)					
Normal AC Voltage (VAC)		3P+N+PE/3P	+PE 230/400		
Frequency (Hz)		5	0		
Normal AC Current (A)	24.7	29	36.3	43.5	
Max. cont. input/output current (A)	45 / 30	48 / 32	60 / 40	72 / 48	
Rated Power (kW)	17	20	25	30	
Rated Apparent Power (kVA)	17	20	25	30	
Max. cont. input/output Power (kW)	25.5 / 17	30 / 20	37.5 / 25	45 / 30	
Max. cont. Apparent input/output	25.5 / 17	30 / 20	37.5 / 25	45 / 30	
Power factor(adjustable)		1.0(-0.8	8~ +0.8)		
AC Load output (stand-alone)					
Normal Voltage (VAC)		3P+N+PE/3P	+PE 230/400		
Frequency (Hz)		5	0		
Nominal Current (A)	24.7	29	36.3	43.5	
Max. cont. current (A)	30	32	40	48	
Max. cont. Power (kW)	17	20	25	30	
Rated Apparent Power (kVA)	17	20	25	30	
Max. cont. Apparent Power (kVA)	17	20	25	30	
Others					
Ingress protection (IP)	111	IP	66		
Protective class	Class I				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	VA	Non-isolate	d (AC - BAT)		
Overvoltage category	8	OVC III (AC Ma	in), OVC II (DC)		



	Specification	s table		
Model	AF3K-THP-0	AF4K-THP-0	AF5K-THP-0	AF6K-THP-0
Battery (charge/discharge)				
Battery type		Li-ion/Lea	d-acid etc.	
Battery Normal Voltage Range (Vdc)	80-	-600(Field adapt b	attery voltage ran	ge)
Max charge/discharge Current(A)	50	50	50	50
Max charge/discharge Power(kW)	3 / 3.3	4 / 4.4	5 / 5.5	6 / 6.6
AC Grid (input and output)				
Normal AC Voltage (VAC)		3P+N+PE/3P	+PE 230/400	
Frequency (Hz)		5	0	
Normal AC Current (A)	4.4	5.8	7.3	8.7
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	16 / 10.5
Rated Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. input/output Power (kW)	4.5 / 3	6/4	7.5 / 5	9/6
Max. cont. Apparent input/output	4.5 / 3	6/4	7.5 / 5	9/6
Power factor(adjustable)	- 10	1.0(-0.3	8~ +0.8)	
AC Load output (stand-alone)				
Normal Voltage (VAC)		3P+N+PE/3P	+PE 230/400	
Frequency (Hz)		5	0	
Nominal Current (A)	4.4	5.8	7.3	8.7
Max. cont. current (A)	5.3	7	8.5	10.5
Max. cont. Power (kW)	3	4	5	6
Rated Apparent Power (kVA)	3	4	5	6
Max. cont. Apparent Power (kVA)	3	4	5	6
Others			- ///	
Ingress protection (IP)		IP	66	
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation		Non-isolate	d (AC - BAT)	
Overvoltage category	/ B	OVC III (AC Ma	in), OVC II (DC)	



Specifications table						
Model	AF8K-THP-0	AF10K-THP-0	AF12K-THP-0			
Battery (charge/discharge)						
Battery type	Li-ion/Lead-acid etc.					
Battery Normal Voltage Range (Vdc)	80-600	120-650				
Max charge/discharge Current(A)	50	50	50			
Max charge/discharge Power(kW)	8 / 8.8	10 / 11	12 / 13.2			
AC Grid (input and output)						
Normal AC Voltage (VAC)	3	3P+N+PE/3P+PE 230/40	00			
Frequency (Hz)		50				
Normal AC Current (A)	11.6	14.5	17.4			
Max. cont. input/output current (A)	20 / 13.5	26 / 17	32 / 21.5			
Rated Power (kW)	8	10	12			
Rated Apparent Power (kVA)	8	10	12			
Max. cont. input/output Power (kW)	12/8	15 / 10	18 / 12			
Max. cont. Apparent input/output	12/8	15 / 10	18 / 12			
Power factor(adjustable)		1.0(-0.8~ +0.8)				
AC Load output (stand-alone)						
Normal Voltage (VAC)	3	3P+N+PE/3P+PE 230/40	00			
Frequency (Hz)		50				
Nominal Current (A)	11.6	14.5	17.4			
Max. cont. current (A)	13.5	17	21.5			
Max. cont. Power (kW)	8	10	12			
Rated Apparent Power (kVA)	8	10	12			
Max. cont. Apparent Power (kVA)	8	10	12			
Others			III			
Ingress protection (IP)		IP66	W -			
Protective class	Class I					
Temperature (°C)	-25°C to +60°C (Derating 45°C)					
Inverter Isolation	Non-isolated (AC - BAT)					
Overvoltage category	OV	C III (AC Main), OVC II (DC)			



Specifications table					
Model	AF3K-THA	AF4K-THA	AF4.99K-THA	AF5K-THA	
PV input					
P pv Max(kW)	6	8	10	10	
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000	
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30*2	
Number MPP trackers	2	2	2	2	
Number input strings	1/1	1/1	1/1	1/1	
Max. PV input current (A)	20*2	20*2	20*2	20*2	
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850	
Vdc range @ full power (Vdc)	200-850	200-850	200-850	200-850	
Battery (charge/discharge)					
Battery type	111 0	Li-ion/Lea	ad-acid etc.		
Battery Normal Voltage Range (Vdc)	150	-600(Field adapt	battery voltage ran	ge)	
Max charge/discharge Current(A)	30	30	30	30	
Max charge/discharge Power(kW)	3	4	4.99	5	
AC Grid (input and output)					
Normal AC Voltage (VAC)	3P+PE/3P 133/230				
Frequency (Hz)		10.	50		
Normal AC Current (A)	7.6	10.1	12.6	12.6	
Max. cont. input/output current (A)	16 / 10.5	20 / 13.5	26 / 17	26 / 17	
Rated Power (kW)	3	4	4.99	5	
Rated Apparent Power (kVA)	3	4	4.99	5	
Max. cont. input/output Power (kW)	4.5 / 3.3	6 / 4.4	7.5 / 4.99	7.5 / 5.5	
Max. cont. Apparent input/output	4.5 / 3.3	6 / 4.4	7.5 / 4.99	7.5 / 5.5	
Power factor(adjustable)		1.0(-0	.8~ +0.8)		
AC Load output (stand-alone)					
Normal Voltage (VAC)	-	3P+PE/3	P 133/230		
Frequency (Hz)		719	50		
Nominal Current (A)	7.6	10.1	12.6	12.6	
Max. cont. current (A)	10.5	13.5	17	17	
Max. cont. Power (kW)	3	4	4.99	5	
Rated Apparent Power (kVA)	3	4	4.99	5	
Max. cont. Apparent Power (kVA)	3	4	4.99	5	
Others	- 0	4			
Ingress protection (IP)			P66		
Protective class	Class I				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation		Non-isolated	(PV - AC - BAT)		
Overvoltage category		OVC III (AC M	ain), OVC II (DC)		



	Specification	s table				
Model	AF6K-THA	AF8K-THA	AF9.99K- THA	AF10K-THA		
PV input						
P pv Max(kW)	12	16	20	20		
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000		
Isc PV (absolute Max.) (A)	30*2	30+48	48*2	48*2		
Number MPP trackers	2	2	2	2		
Number input strings	1/1	1/2	2/2	2/2		
Max. PV input current (A)	20*2	20+32	32*2	32*2		
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850		
Vdc range @ full power (Vdc)	200-850	200-850	200-850	200-850		
Battery (charge/discharge)						
Battery type	///	Li-ion/Lead	d-acid etc.			
Battery Normal Voltage Range (Vdc)	150	0-600(Field adapt b	attery voltage rar	nge)		
Max charge/discharge Current(A)	30	50	50			
Max charge/discharge Power(kW)	6	8	9.99	10		
AC Grid (input and output)						
Normal AC Voltage (VAC)	3P+PE/3P 133/230					
Frequency (Hz)		5(
Normal AC Current (A)	15.1	20.1	25.1	25.1		
Max. cont. input/output current (A)	32 / 21.5	40.5 / 27	45 / 30	45 / 30		
Rated Power (kW)	6	8	9.99	10		
Rated Apparent Power (kVA)	6	8	9.99	10		
Max. cont. input/output Power (kW)	9 / 6.6	12 / 8.8	15 / 9.99	15 / 11		
Max. cont. Apparent input/output	9 / 6.6	12 / 8.8	15 / 9.99	15 / 11		
Power factor(adjustable)	1.0(-0.8~ +0.8)					
AC Load output (stand-alone)						
Normal Voltage (VAC)	3P+PE/3P 133/230					
Frequency (Hz)	50					
Nominal Current (A)	15.1	20.1	25.1	25.1		
Max. cont. current (A)	21.5	27	30	30		
Max. cont. Power (kW)	6	8	9.99	10		
Rated Apparent Power (kVA)	6	8	9.99	10		
Max. cont. Apparent Power (kVA)	6	8	9.99	10		
Others				•		
Ingress protection (IP)	IP66					
Protective class		Clas	ss I			
Temperature (°C)		-25°C to +60°C (
Inverter Isolation		Non-isolated (PV - AC - BAT)			
Overvoltage category		OVC III (AC Mai	in), OVC II (DC)			



	Specification	ns table				
Model	AF12K-THA AF14.99K-THA AF15K-THA					
PV input						
P pv Max(kW)	24	30	30	34		
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000		
Isc PV (absolute Max.) (A)	48*2	60*2	60*2	60*2		
Number MPP trackers	2	2	2	2		
Number input strings	2/2	2/2	2/2	2/2		
Max. PV input current (A)	32*2	40*2	40*2	40*2		
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850		
Vdc range @ full power (Vdc)	250-850	300-850	300-850	300-850		
Battery (charge/discharge)						
Battery type	111 0	Li-ion/Lead	d-acid etc.			
Battery Normal Voltage Range (Vdc)	15	0-600(Field adapt b	attery voltage rai	nge)		
Max charge/discharge Current(A)	50	60	60	60		
Max charge/discharge Power(kW)	12	14.99	15	17		
AC Grid (input and output)						
Normal AC Voltage (VAC)		3P+PE/3P	133/230			
Frequency (Hz)		50	0			
Normal AC Current (A)	30.1	37.6	37.6	42.7		
Max. cont. input/output current (A)	48 / 32	60 / 40	60 / 40	72 / 48		
Rated Power (kW)	12	14.99	15	17		
Rated Apparent Power (kVA)	12	14.99	15	17		
Max. cont. input/output Power (kW)	18 / 13.2	22.5 / 14.99	22.5 / 16.5	25.5 / 18.7		
Max. cont. Apparent input/output	18 / 13.2 22.5 / 14.99 22.5 / 16.5 25.5 / 18.					
Power factor(adjustable)	1.0(-0.8~ +0.8)					
AC Load output (stand-alone)						
Normal Voltage (VAC)	3P+PE/3P 133/230					
Frequency (Hz)	50					
Nominal Current (A)	30.1	37.6	37.6	42.7		
Max. cont. current (A)	32	40	40	48		
Max. cont. Power (kW)	12	14.99	15	17		
Rated Apparent Power (kVA)	12	14.99	15	17		
Max. cont. Apparent Power (kVA)	12	14.99	15	17		
Others	- 0	The second secon				
Ingress protection (IP)	IP66					
Protective class	Class I					
Temperature (°C)		-25°C to +60°C (Derating 45°C)			
Inverter Isolation		Non-isolated (PV - AC - BAT)			
Overvoltage category		OVC III (AC Mai	n), OVC II (DC)			



	Specificat	tions table						
Model	AF3K-THC	AF4K-THC	AF4.99K- THC	AF5K-THC	AF6K-THC			
PV input			IIIC					
P pv Max(kW)	6	8	10	10	12			
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000	1000			
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30*2	30*2			
Number MPP trackers	2	2	2	2	2			
Number input strings	1/1	1/1	1/1	1/1	1/1			
Max. PV input current (A)	20*2	20*2	20*2	20*2	20*2			
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850	150-850			
Vdc range @ full power (Vdc)	200-850	200-850	200-850	200-850	200-850			
Battery (charge/discharge)	225 111							
Battery type	07	Li-i	on/Lead-acid	etc.				
Battery Normal Voltage Range (Vdc)	7			voltage range)				
Max charge/discharge Current(A)	50 50 50 50 50							
Max charge/discharge Power(kW)	3	4	4.99	5	6			
AC Grid (input and output)								
Normal AC Voltage (VAC)		3F	P+PE/3P 133/2	30				
Frequency (Hz)			50					
Normal AC Current (A)	7.6	10.1	12.6	12.6	15.1			
Max. cont. input/output current (A)	16 / 10.5	20 / 13.5	26 / 17	26 / 17	32 / 21.5			
Rated Power (kW)	3	4	4.99	5	6			
Rated Apparent Power (kVA)	3	4	4.99	5	6			
Max. cont. input/output Power (kW)	4.5 / 3.3	6 / 4.4	7.5 / 4.99	7.5 / 5.5	9 / 6.6			
Max. cont. Apparent input/output	4.5 / 3.3	6 / 4.4	7.5 / 4.99	7.5 / 5.5	9 / 6.6			
Power factor(adjustable)	1.0(-0.8~ +0.8)							
AC Load output (stand-alone)								
Normal Voltage (VAC)	3P+PE/3P 133/230							
Frequency (Hz)	50							
Nominal Current (A)	7.6	10.1	12.6	12.6	15.1			
Max. cont. current (A)	10.5	13.5	17	17	21.5			
Max. cont. Power (kW)	3	4	4.99	5	6			
Rated Apparent Power (kVA)	3	4	4.99	5	6			
Max. cont. Apparent Power (kVA)	3	4	4.99	5	6			
Others								
Ingress protection (IP)			IP66					
Protective class			Class I					
Temperature (°C)		-25°C to	+60°C (Derati	ng 45°C)				
Inverter Isolation		Non-is	olated (PV - AC	C - BAT)				
Overvoltage category		OVC III	(AC Main), OV	C II (DC)	OVC III (AC Main), OVC II (DC)			



	Specification	s table					
Model	AF3K-THA-0 AF4K-THA-0 AF5K-THA-0 AF6K-THA-0						
Battery (charge/discharge)							
Battery type	Li-ion/Lead-acid etc.						
Battery Normal Voltage Range (Vdc)	150-	-600(Field adapt b	oattery voltage ra	nge)			
Max charge/discharge Current(A)	30	30	30	30			
Max charge/discharge Power(kW)	3 / 3.3	4 / 4.4	5 / 5.5	6 / 6.6			
AC Grid (input and output)							
Normal AC Voltage (VAC)		3P+PE/3F	133/230				
Frequency (Hz)		5	0				
Normal AC Current (A)	7.6	10.1	12.6	15.1			
Max. cont. input/output current (A)	16 / 10.5	20 / 13.5	26 / 17	32 / 21.5			
Rated Power (kW)	3	4	5	6			
Rated Apparent Power (kVA)	3	4	5	6			
Max. cont. input/output Power (kW)	4.5 / 3	6/4	7.5 / 5	9/6			
Max. cont. Apparent input/output	4.5 / 3	6/4	7.5 / 5	9/6			
Power factor(adjustable)	1.0(-0.8~ +0.8)						
AC Load output (stand-alone)							
Normal Voltage (VAC)	3P+PE/3P 133/230						
Frequency (Hz)	50						
Nominal Current (A)	7.6	10.1	12.6	15.1			
Max. cont. current (A)	10.5	13.5	17	21.5			
Max. cont. Power (kW)	3	4	5	6			
Rated Apparent Power (kVA)	3	4	5	6			
Max. cont. Apparent Power (kVA)	3	4	5	6			
Others							
Ingress protection (IP)	IP66						
Protective class	Class I						
Temperature (°C)		-25°C to +60°C	(Derating 45°C)				
Inverter Isolation		Non-isolate	d (AC - BAT)				
Overvoltage category), III	OVC III (AC Ma	in), OVC II (DC)				



	Specificat	ions table			
Model	AF8K-THA-	AF10K-	AF12K-	AF15K-	AF17K-
	0	THA-0	THA-0	THA-0	THA-0
Battery (charge/discharge)					
Battery type		Li-i	ion/Lead-acid	etc.	
Battery Normal Voltage Range (Vdc)	1	.50-600(Field	adapt battery	voltage range)
Max charge/discharge Current(A)	50	50	50	60	60
Max charge/discharge Power(kW)	8 / 8.8	10 / 11	12 / 13.2	15 / 16.5	17 / 18.7
AC Grid (input and output)			•		
Normal AC Voltage (VAC)		31	P+PE/3P 133/2	30	
Frequency (Hz)			50		
Normal AC Current (A)	20.1	25.1	30.1	37.6	42.7
Max. cont. input/output current (A)	40.5 / 27	45 / 30	48 / 32	60 / 40	72 / 48
Rated Power (kW)	8	10	12	15	17
Rated Apparent Power (kVA)	8	10	12	15	17
Max. cont. input/output Power (kW)	12/8	15 / 10	18 / 12	22.5 / 15	25.5 / 17
Max. cont. Apparent input/output	12/8	15 / 10	18 / 12	22.5 / 15	25.5 / 17
Power factor(adjustable)	1.0(-0.8~ +0.8)				
AC Load output (stand-alone)					
Normal Voltage (VAC)	3P+PE/3P 133/230				
Frequency (Hz)	50				
Nominal Current (A)	20.1	25.1	30.1	37.6	42.7
Max. cont. current (A)	27	30	32	40	48
Max. cont. Power (kW)	8	10	12	15	17
Rated Apparent Power (kVA)	8	10	12	15	17
Max. cont. Apparent Power (kVA)	8	10	12	15	17
Others			III .	M	
Ingress protection (IP)	IP66				
Protective class	Class I				
Temperature (°C)		-25°C to	+60°C (Derati	ng 45°C)	
Inverter Isolation	(A. 1	Non	-isolated (AC -	BAT)	
Overvoltage category	/ I	OVC III	(AC Main), OV	C II (DC)	



	Specification	s table					
Model	AF3K-THC-0	AF4K-THC-0	AF5K-THC-0	AF6K-THC-0			
Battery (charge/discharge)							
Battery type		Li-ion/Lea	d-acid etc.				
Battery Normal Voltage Range (Vdc)	150-600(Field adapt battery voltage range)						
Max charge/discharge Current(A)	50 50 50 5						
Max charge/discharge Power(kW)	3 / 3.3	4 / 4.4	5 / 5.5	6 / 6.6			
AC Grid (input and output)							
Normal AC Voltage (VAC)		3P+PE/3P	133/230				
Frequency (Hz)		5	0				
Normal AC Current (A)	7.6	10.1	12.6	15.1			
Max. cont. input/output current (A)	16 / 10.5	20 / 13.5	26 / 17	32 / 21.5			
Rated Power (kW)	3	4	5	6			
Rated Apparent Power (kVA)	3	4	5	6			
Max. cont. input/output Power (kW)	4.5 / 3	6/4	7.5 / 5	9/6			
Max. cont. Apparent input/output	4.5 / 3	6/4	7.5 / 5	9/6			
Power factor(adjustable)		1.0(-0.8	3~ +0.8)				
AC Load output (stand-alone)							
Normal Voltage (VAC)		3P+PE/3F	133/230				
Frequency (Hz)		5	0	la i			
Nominal Current (A)	7.6	10.1	12.6	15.1			
Max. cont. current (A)	10.5	13.5	17	21.5			
Max. cont. Power (kW)	3	4	5	6			
Rated Apparent Power (kVA)	3	4	5	6			
Max. cont. Apparent Power (kVA)	3	4	5	6			
Others			- 10				
Ingress protection (IP)	IP66						
Protective class	Class I						
Temperature (°C)	-25°C to +60°C (Derating 45°C)						
Inverter Isolation	Non-isolated (AC - BAT)						
Overvoltage category	OVC III (AC Main), OVC II (DC)						