

# Test Verification of Conformity

Verification Number: 2509B0696SHA-V1

On the basis of the tests undertaken, the sample<s> of the below product has been tested by an a 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 Low Voltage Directive (LVD) (2014/35/EU)>legislation and mandatory Conformity Marking. And in accordance with EU / UK 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 & Principal See Appendix(Specifications table)

Characteristics:

Models/Type References: AF\*-MTH (\*=3K, 4K, 4.99K, 5K, 6K, 8K, 9.99K, 10K, 12K, 14.99K, 15K)

AF\*-MTH-0 (\*=3K, 4K, 4.99K, 5K, 6K, 8K, 9.99K, 10K, 12K, 14.99K, 15K)

AF\*-MTHA (\*=3K, 4K, 4.99K, 5K, 6K, 7K) AF\*-MTHA-0 (\*=3K, 4K, 4.99K, 5K, 6K, 7K)

Brand Names: Afore

Specification<s>/Standards: IEC/EN 62109-1:2010 IEC/EN 62109-2:2011

EN 62477-1:2012+A11:2014+A1:2017+A12:2021

Verification Issuing Office Name Intertek Testing Services (Shanghai FTZ) Co., Ltd.

interies resting of vices (Shanghai 172) Co., Etc.

& Address: Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China

Date of Tests: 2024-04-17 to 2024-05-14, 2025-09-03 to 2025-09-08

Test Report Number(s): 2509B0696SHA-001/002/003

Additional information in Appendix.

Signature

Name: Max Jin

**Position: General Manager** 

Date: 2025-09-08



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Manufacture Name & Address:

Same as applicant

Specifications table					
Model	AF3K-MTH AF4K-MTH AF4.99K-MTH AF5K-M				
PV input					
P pv Max (kW)	6	8	10	10	
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000	
Isc PV (absolute Max.) (A)	25*2	25*2	25*2	25*2	
Number MPP trackers	2	2	2	2	
Number input strings	1/1	1/1	1/1	1/1	
Max. PV input current (A)	18.5*2	18.5*2	18.5*2	18.5*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			ad-acid etc.		
Battery Normal Voltage Range (Vdc)	80-	600(Field adapt l	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+N+PE/3F	P+PE 230/400		
Frequency (Hz)	50				
Normal AC Current (A)	4.4	5.8	7.3	7.3	
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	13 / 8.5	
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 Power (kVA)	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)	W 1	3P+N+PE/3F	P+PE 230/400		
Frequency (Hz)	V		50		
Nominal Current (A)	4.4	5.8	7.3	7.3	
Max. cont. current (A)	5.3	7	8.5	8.5	
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				
Power factor	1.0				
Others					
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 Ma	ain), OVC II (DC)		
Firmware version		1	.01		



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

	Specifications table				
Model	AF6K-MTH AF8K-MTH AF9.99K-MTH AF10K-MTH				
PV input					
P pv Max (kW)	12	16	20	20	
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000	
Isc PV (absolute Max.) (A)	25*2	25*2	25*2	25*2	
Number MPP trackers	2	2	2	2	
Number input strings	1/1	1/1	1/1	1/1	
Max. PV input current (A)	18.5*2	18.5*2	18.5*2	18.5*2	
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850	
Vdc range @ full power (Vdc)	250-850	300-850	500-850	500-850	
Battery (charge/discharge)					
Battery type		Li-ion/Lea	ad-acid etc.		
Battery Normal Voltage Range (Vdc)	80-	600(Field adapt l	battery voltage ran	ge)	
Max charge/discharge Current(A)	30	30	30	30	
Max charge/discharge Power(kW)	6	8	9.99	10	
AC Grid (input and output)					
Normal AC Voltage (Vac)		3P+N+PE/3I	P+PE 230/400		
Frequency (Hz)			50		
Normal AC Current (A)	8.7	11.6	14.5	14.5	
Max. cont. input/output current (A)	16 / 10.5	20 / 13.5	26 / 17	26 / 17	
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 (kVA)					
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)			50		
Nominal Current (A)	8.7	11.6	14.5	14.5	
Max. cont. current (A)	10.5	13.5	17	17	
Max. cont. Power (kW)	6	8	9.99	10	
Rated Apparent Power (kVA)	6 6	8	9.99	10	
Max. cont. Apparent Power (kVA)  Power factor	6 8 9.99 10 1.0				
Others	1.0				
	IDEE				
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 Ma	ain), OVC II (DC)		
Firmware version	1.01				



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Specifications table					
Model	AF12K-MTH AF14.99K-MTH AF15K-MTH				
PV input					
P pv Max (kW)	24	30	30		
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000		
Isc PV (absolute Max.) (A)	25*2	25*2	25*2		
Number MPP trackers	2	2	2		
Number input strings	1/1	1/1	1/1		
Max. PV input current (A)	18.5*2	18.5*2	18.5*2		
MPPT voltage range (Vdc)	150-850	150-850	150-850		
Vdc range @ full power (Vdc)	500-850	500-850	500-850		
Battery (charge/discharge)					
Battery type	/	Li-ion/Lead			
Battery Normal Voltage Range (Vdc)		-600(Field adapt ba		ge)	
Max charge/discharge Current(A)	30	30	30		
Max charge/discharge Power(kW)	12	14.99	15		
AC Grid (input and output)					
Normal AC Voltage (Vac)		3P+N+PE/3P+	-PE 230/400		
Frequency (Hz)		50	707		
Normal AC Current (A)	17.4	21.8	21.8		
Max. cont. input/output current (A)	32 / 21.5	40.5 / 27	40.5 / 27		
Rated Power (kW)	12	14.99	15		
Rated Apparent Power (kVA)	12	14.99	15	0	
Max. cont. input/output Power (kW)	18 / 13.2	22.5 / 14.99	22.5 / 16.5		
Max. cont. Apparent input/output Power (kVA)	18 / 13.2 22.5 / 14.99 22.5 / 16.5				
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)		50			
Nominal Current (A)	17.4	21.8	21.8		
Max. cont. current (A)	21.5	27	27		
Max. cont. Power (kW)	12	14.99	15		
Rated Apparent Power (kVA)	12	14.99	15		
Max. cont. Apparent Power (kVA)	12	14.99	15		
Power factor	1.0				
Others					
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 Mair	n), OVC II (DC)		
Firmware version	1.01				



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Specifications table						
Model	AF3K-MTH-0 AF4K-MTH-0 AF4.99K- MTH-0 AF5K-MTH-0					
Battery (charge/discharge)						
Battery type		Li-ion/Lead	d-acid etc.			
Battery Normal Voltage Range (Vdc)		80-800(Field adapt battery voltage range)				
Max charge/discharge Current(A)	30*2	30*2	30*2	30*2		
Max charge/discharge Power(kW)	3 / 3.3	4 / 4.4	4.99	5 / 5.5		
AC Grid (input and output)						
Normal AC Voltage (Vac)		3P+N+PE/3P	+PE 230/400			
Frequency (Hz)		5	0			
Normal AC Current (A)	4.4	5.8	7.3	7.3		
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	13 / 8.5		
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 Power (kVA)	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+N+PE/3P+PE 230/400					
Frequency (Hz)		5				
Nominal Current (A)	4.4	5.8	7.3	7.3		
Max. cont. current (A)	5.3	7	8.5	8.5		
Max. cont. Power (kW)	3 4 4.99					
Rated Apparent Power (kVA)	3	4	4.99	5		
Max. cont. Apparent Power (kVA)	3 4 4.99 5					
Power factor	1.0					
Others						
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)					
Firmware version		1.0	01			



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Specifications table						
Model	AF6K-MTH-0 AF8K-MTH-0 AF9.99K- AF10K-MTH-					
Battery (charge/discharge)						
Battery type		Li-ion/Lead	d-acid etc.			
Battery Normal Voltage Range (Vdc)		80-800(Field adapt battery voltage range)				
Max charge/discharge Current(A)	30*2 30*2 30*2 30*2					
Max charge/discharge Power(kW)	6 / 6.6	8 / 8.8	9.99	10 / 11		
AC Grid (input and output)						
Normal AC Voltage (Vac)	7.	3P+N+PE/3P	+PE 230/400			
Frequency (Hz)	/	50	0			
Normal AC Current (A)	8.7	11.6	14.5	14.5		
Max. cont. input/output current (A)	16 / 10.5	20 / 13.5	26 / 17	26 / 17		
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 Power (kVA)	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+N+PE/3P+PE 230/400					
Frequency (Hz)	50					
Nominal Current (A)	8.7	11.6	14.5	14.5		
Max. cont. current (A)	10.5	13.5	17	17		
Max. cont. Power (kW)	6 8 9.99 1					
Rated Apparent Power (kVA)	6	8	9.99	10		
Max. cont. Apparent Power (kVA)	6 8 9.99 10					
Power factor	1.0					
Others						
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)					
Firmware version	1.01					



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Specifications table					
AF12K MTH 0 AF14.99K- AF15K-MTH-					
	Li-ion/Lead	d-acid etc.			
12 / 13.2 14.99 15 / 16.5					
AF 0	3P+N+PE/3P	+PE 230/400			
//	5	0			
17.4		21.8			
18 / 13.2	22.5 / 14.99	22.5 / 16.5			
18 / 13.2	22.5 / 14.99	22.5 / 16.5			
1.0( -0.8~ +0.8)					
50					
1.0					
IP66					
Class I					
-25°C to +60°C (Derating 45°C)					
Non-isolated (AC - BAT)					
OVC III (AC Main), OVC II (DC)					
1.01					
	80-8 30*2 12 / 13.2 17.4 32 / 21.5 12 12 18 / 13.2	AF12K-MTH-0  Li-ion/Leac 80-800(Field adapt be 30*2 12 / 13.2 14.99  3P+N+PE/3P  50 17.4 21.8 32 / 21.5 40.5 / 27 12 14.99 12 14.99 18 / 13.2 22.5 / 14.99 18 / 13.2 22.5 / 14.99 17.4 21.8 21.5 27 12 14.99 17.4 21.8 21.5 27 12 14.99 15 17.4 21.8 21.5 27 12 14.99 15 16 Class -25°C to +60°C of Non-isolated OVC III (AC Mai	AF12K-MTH-0  AF14.99K- MTH-0  Li-ion/Lead-acid etc.  80-800(Field adapt battery voltage range)  30*2  30*2  12 / 13.2  14.99  15 / 16.5   3P+N+PE/3P+PE 230/400  50  17.4  21.8  21.8  32 / 21.5  40.5 / 27  40.5 / 27  12  14.99  15  18 / 13.2  22.5 / 14.99  22.5 / 16.5  18 / 13.2  22.5 / 14.99  22.5 / 16.5  10(-0.8~+0.8)  3P+N+PE/3P+PE 230/400  50  17.4  21.8  21.8  21.5  27  27  12  14.99  15  12  14.99  15  12  14.99  15  12  14.99  15  10  17.4  21.8  21.8  21.5  27  27  12  14.99  15  10  10  IP66  Class I  -25°C to +60°C (Derating 45°C)  Non-isolated (AC - BAT)  OVC III (AC Main), OVC II (DC)		



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Specifications table					
Model	AF3K-MTHA	AF4K-MTHA	AF4.99K- MTHA	AF5K-MTHA	
PV input		<u> </u>			
P pv Max (kW)	6	8	10	10	
Vmax PV (Vdc) (absolute Max.)	600	600	600	600	
Isc PV (absolute Max.) (A)	25*2	25*2	25*2	25*2	
Number MPP trackers	2	2	2	2	
Number input strings	1/1	1/1	1/1	1/1	
Max. PV input current (A)	18.5*2	18.5*2	18.5*2	18.5*2	
MPPT voltage range (Vdc)	100-550	100-550	100-550	100-550	
Vdc range @ full power (Vdc)	120-550	150-550	200-550	200-550	
Battery (charge/discharge)					
Battery type		Li-ion/Lead			
Battery Normal Voltage Range (Vdc)	80-	450(Field adapt ba	attery voltage rar	nge)	
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)		50	0		
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 Power (kVA)	4.5 / 3.3 6 / 4.4 7.5 / 4.99 7.5 / 5.5				
Power factor(adjustable)		1.0( -0.8	S~ +0.8)		
AC Load output (stand-alone)		•	•		
Normal Voltage (VAC)		3P+PE/3F	133/230		
Frequency (Hz)	(A)	50	0		
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	
Power factor	1.0				
Others					
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)		
Firmware version		1.0	)1		



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Model	Specifications table					
PV input	Model					
P pv Max (kW)			•			
Vmax PV (Vdc) (absolute Max.)   600   600     lsc PV (absolute Max.) (A)   25°2   25°2     Number MPP trackers   2   2     Number input strings   1/1   1/1     Max. PV input current (A)   18.5°2   18.5°2     MPPT voltage range (Vdc)   100-550   100-550     Vdc range @ full power (Vdc)   250-550   300-550     Battery (charge/discharge)     Battery type   Li-ion/Lead-acid etc.     Battery type   Li-ion/Lead-acid etc.     Battery type   AC Grid (Input and output)     Max charge/discharge Power(kW)   6   7     AC Grid (Input and output)     Normal AC Voltage (VAC)   3P+PE/3P 133/230     Frequency (Hz)   50     Nax cont. input/output current (A)   32 / 21.5   32 / 25     Rated Apparent Power (kVA)   9 / 6.6   10.5 / 7.7     Max. cont. Apparent input/output Power (kW)   9 / 6.6   10.5 / 7.7     Power factor (A)   15.1   17.6     Max. cont. current (A)   10.5 / 7.7     Max. cont. Apparent input/output Power (kW)   9 / 6.6   10.5 / 7.7     Max. cont. apparent input/output Power (kW)   10.5 / 7.7     Max. cont. current (A)   15.1   17.6     Max. cont. current (A)   15.1   17.6     Max. cont. Apparent input/output Power (kW)   9 / 6.6   10.5 / 7.7     Max. cont. Apparent input/output Power (kW)   10.5 / 7.7     Max. cont. current (A)   15.1   17.6     Max. cont. current (A)   6   7     Rated Apparent Power (kVA)   6   7     Max. cont. Apparent Power (kVA)		12	14			
Isc PV (absolute Max.) (A)		600	600			
Number input strings	Isc PV (absolute Max.) (A)	25*2	25*2			
Max. PV input current (A)         18.5*2         18.5*2           MPPT voltage range (Vdc)         100-550         100-550           Vdc range @ full power (Vdc)         250-550         300-550           Battery (charge/discharge)         Li-ion/Lead-acid etc.           Battery Normal Voltage Range (Vdc)         80-450(Field adapt battery voltage range)           Max charge/discharge Current(A)         30         30           Max charge/discharge Power(kW)         6         7           AC Grid (input and output)         Normal AC Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal AC Current (A)         15.1         17.6           Max. cont. input/output current (A)         32 / 21.5         32 / 25           Rated Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output power (kW)         9 / 6.6         10.5 / 7.7           Power factor(adjustable)         1.0( -0.8~ +0.8)           AC Load output (stand-alone)         Normal Voltage (VAC)         3P+PE/3P 133/230           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50<	Number MPP trackers	2	2			
MPPT voltage range (Vdc)         100-550         100-550           Vdc range @ full power (Vdc)         250-550         300-550           Battery (charge/discharge)         Li-ion/Lead-acid etc.           Battery Normal Voltage Range (Vdc)         80-450(Field adapt battery voltage range)           Max charge/discharge Power(kW)         6         7           AC Grid (input and output)         Normal AC Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal AC Current (A)         15.1         17.6           Max. cont. input/output current (A)         32 / 21.5         32 / 25           Rated Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output power (kVA)         9 / 6.6         10.5 / 7.7           Power factor (adjustable)         AC Load output (stand-alone)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6 <td>Number input strings</td> <td>1/1</td> <td>1/1</td> <td></td> <td></td>	Number input strings	1/1	1/1			
Vdc range @ full power (Vdc)         250-550         300-550           Battery (charge/discharge)           Battery type         Li-ion/Lead-acid etc.           Battery Normal Voltage Range (Vdc)         80-450(Field adapt battery voltage range)           Max charge/discharge Power(kW)         6         7           AC Grid (input and output)         7           Normal AC Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal AC Current (A)         15.1         17.6           Max. cont. input/output current (A)         32 / 21.5         32 / 25           Rated Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output Power (kVA)         9 / 6.6         10.5 / 7.7           Power factor(adjustable)         3P+PE/3P 133/230           AC Load output (stand-alone)         3P+PE/3P 133/230           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6 <t< td=""><td></td><td>18.5*2</td><td></td><td></td><td></td></t<>		18.5*2				
Battery (charge/discharge)         Li-ion/Lead-acid etc.           Battery type         80-450(Field adapt battery voltage range)           Max charge/discharge Current(A)         30         30           Max charge/discharge Power(kW)         6         7           AC Grid (input and output)         Normal AC Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal AC Current (A)         15.1         17.6           Max. cont. input/output current (A)         32 / 21.5         32 / 25           Rated Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output Power (kW)         9 / 6.6         10.5 / 7.7           Power factor(adjustable)         1.0(-0.8~ +0.8)           AC Load output (stand-alone)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7	MPPT voltage range (Vdc)					
Battery type	Vdc range @ full power (Vdc)	250-550	300-550			
Battery Normal Voltage Range (Vdc)   80-450(Field adapt battery voltage range)						
Max charge/discharge Power(kW)         30         30           AC Grid (input and output)         Normal AC Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal AC Current (A)         15.1         17.6         32 / 25           Rated Power (kW)         6         7         7           Max. cont. input/output Power (kW)         9 / 6.6         7         10.5 / 7.7           Max. cont. Apparent input/output Power (kW)         9 / 6.6         10.5 / 7.7           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         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Max. cont. Apparent Power (kVA)         6         7         1.0           Others         1.0		7				
Max charge/discharge Power(kW)         6         7           AC Grid (input and output)         3P+PE/3P 133/230           Normal AC Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal AC Current (A)         15.1         17.6           Max. cont. input/output current (A)         32 / 21.5         32 / 25           Rated Power (kW)         6         7         7           Rated Apparent Power (kVA)         6         7         7           Max. cont. input/output Power (kW)         9 / 6.6         10.5 / 7.7         10.5 / 7.7           Max. cont. Apparent input/output Power (kVA)         9 / 6.6         10.5 / 7.7         10.5 / 7.7           Max. cont. Act Load output (stand-alone)         1.0( -0.8~ +0.8)         10.5 / 7.7	Battery Normal Voltage Range (Vdc)		450(Field adapt b	oattery voltage range)		
AC Grid (input and output)           Normal AC Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Normal AC Current (A)         15.1         17.6           Max. cont. input/output current (A)         32 / 21.5         32 / 25           Rated Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output Power (kVA)         9 / 6.6         10.5 / 7.7           Power factor(adjustable)         1.0( -0.8~ +0.8)           AC Load output (stand-alone)         1.0( -0.8~ +0.8)           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6           Max. cont. Current (A)         21.5         25           Max. cont. Power (kVA)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0						
Normal AC Voltage (VAC)   3P+PE/3P 133/230	0 0	6	7			
Sociation   Soci						
Normal AC Current (A)	Normal AC Voltage (VAC)		3P+PE/3	P 133/230		
Max. cont. input/output current (A)       32 / 21.5       32 / 25         Rated Power (kW)       6       7         Rated Apparent Power (kVA)       6       7         Max. cont. input/output Power (kW)       9 / 6.6       10.5 / 7.7         Max. cont. Apparent input/output Power (kVA)       9 / 6.6       10.5 / 7.7         Power factor(adjustable)       1.0( -0.8~ +0.8)         AC Load output (stand-alone)       3P+PE/3P 133/230         Frequency (Hz)       50         Nominal Current (A)       15.1       17.6         Max. cont. current (A)       21.5       25         Max. cont. Power (kW)       6       7         Rated Apparent Power (kVA)       6       7         Max. cont. Apparent Power (kVA)       6       7         Power factor       1.0         Others	,		Ę	50		
Rated Power (kW)       6       7         Rated Apparent Power (kVA)       6       7         Max. cont. input/output Power (kW)       9 / 6.6       10.5 / 7.7         Max. cont. Apparent input/output Power (kVA)       9 / 6.6       10.5 / 7.7         Power factor(adjustable)       1.0( -0.8~ +0.8)         AC Load output (stand-alone)       3P+PE/3P 133/230         Normal Voltage (VAC)       3P+PE/3P 133/230         Frequency (Hz)       50         Nominal Current (A)       15.1       17.6         Max. cont. current (A)       21.5       25         Max. cont. Power (kW)       6       7         Rated Apparent Power (kVA)       6       7         Max. cont. Apparent Power (kVA)       6       7         Power factor       1.0						
Rated Apparent Power (kVA)       6       7         Max. cont. input/output Power (kW)       9 / 6.6       10.5 / 7.7         Max. cont. Apparent input/output Power (kVA)       9 / 6.6       10.5 / 7.7         Power factor(adjustable)       1.0( -0.8~ +0.8)         AC Load output (stand-alone)       3P+PE/3P 133/230         Normal Voltage (VAC)       3P+PE/3P 133/230         Frequency (Hz)       50         Nominal Current (A)       15.1       17.6         Max. cont. current (A)       21.5       25         Max. cont. Power (kW)       6       7         Rated Apparent Power (kVA)       6       7         Max. cont. Apparent Power (kVA)       6       7         Power factor       1.0         Others			32 / 25			
Max. cont. input/output Power (kW)         9 / 6.6         10.5 / 7.7           Max. cont. Apparent input/output Power (kVA)         9 / 6.6         10.5 / 7.7           Power (kVA)         1.0( -0.8~ +0.8)           AC Load output (stand-alone)         3P+PE/3P 133/230           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0           Others	\ /					
Max. cont. Apparent input/output Power (kVA)         9 / 6.6         10.5 / 7.7           Power factor(adjustable)         1.0(-0.8~ +0.8)           AC Load output (stand-alone)         3P+PE/3P 133/230           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0			The second secon			
Power (kVA)         976.0         10.577.7           Power factor(adjustable)         1.0(-0.8~ +0.8)           AC Load output (stand-alone)         3P+PE/3P 133/230           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0		9 / 6.6	10.5 / 7.7	All I		
Normal Voltage (VAC)   3P+PE/3P 133/230	• • • • • • • • • • • • • • • • • • • •	9 / 6.6	10.5 / 7.7			
AC Load output (stand-alone)           Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0	\ /		1.0/_0	8~ +0.8)		
Normal Voltage (VAC)         3P+PE/3P 133/230           Frequency (Hz)         50           Nominal Current (A)         15.1         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0		1.0(-0.8~ +0.0)				
Frequency (Hz)         50           Nominal Current (A)         15.1         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0           Others	• ` ` '	3P+PE/3P 133/230				
Nominal Current (A)         15.1         17.6           Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0           Others						
Max. cont. current (A)         21.5         25           Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0           Others		15.1				
Max. cont. Power (kW)         6         7           Rated Apparent Power (kVA)         6         7           Max. cont. Apparent Power (kVA)         6         7           Power factor         1.0           Others         1.0						
Max. cont. Apparent Power (kVA) 6 7 Power factor 1.0 Others				la constant		
Max. cont. Apparent Power (kVA) 6 7  Power factor 1.0  Others	Rated Apparent Power (kVA)	6	7			
Others		6	7			
	Power factor	1.0				
Ingress protection (IP)	Others					
	Ingress protection (IP)	IP66				
Protective class Class I	Protective class					
Temperature (°C) -25°C to +60°C (Derating 45°C)	Temperature (°C)					
Inverter Isolation Non-isolated (PV - AC - BAT)	Inverter Isolation					
Overvoltage category OVC III (AC Main), OVC II (DC)	Overvoltage category		OVC III (AC Ma	nin), OVC II (DC)		
Firmware version 1.01	Firmware version		1.	.01		



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Specifications table						
Model	AF3K-MTHA-0 AF4K-MTHA-0 AF4.99K-MTHA-0 AF5K-MTHA-0					
Battery (charge/discharge)						
Battery type		Li-ion/Lead	l-acid etc.			
Battery Normal Voltage Range (Vdc)		80-450(Field adapt battery voltage range)				
Max charge/discharge Current(A)	30*2	30*2	30*2	30*2		
Max charge/discharge Power(kW)	3 / 3.3	4 / 4.4	4.99	5 / 5.5		
AC Grid (input and output)						
Normal AC Voltage (VAC)	07:1	3P+PE/3P	133/230			
Frequency (Hz)	/	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 Power (kVA)	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/3P 133/230					
Frequency (Hz)		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					
Power factor	1.0					
Others						
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)					
Firmware version	1.01					



This is an Appendix to Test Verification of Conformity Number: 2509B0696SHA-V1

Specifications table					
Model	AF6K-MTHA-0				
Battery (charge/discharge)					
Battery type		Li-ion/Lead-	acid etc.		
Battery Normal Voltage Range (Vdc)		80-450(Field adapt battery voltage range)			
Max charge/discharge Current(A)	30*2	30*2			
Max charge/discharge Power(kW)	6 / 6.6	7 / 7.7			
AC Grid (input and output)					
Normal AC Voltage (VAC)	100	3P+PE/3P <sup>2</sup>	133/230		
Frequency (Hz)	// 0	50			
Normal AC Current (A)	15.1	17.6			
Max. cont. input/output current (A)	32 / 21.5	32 / 25			
Rated Power (kW)	6	7			
Rated Apparent Power (kVA)	6	7			
Max. cont. input/output Power (kW)	9 / 6.6	10.5 / 7.7			
Max. cont. Apparent input/output Power	9 / 6.6	10.5 / 7.7			
(kVA)	07 0.0		100		
Power factor(adjustable)	1.0( -0.8~ +0.8)				
AC Load output (stand-alone)			100/000		
Normal Voltage (VAC)	3P+PE/3P 133/230				
Frequency (Hz)	50				
Nominal Current (A)	15.1	17.6			
Max. cont. current (A)	21.5	25 7			
Max. cont. Power (kW)  Rated Apparent Power (kVA)	6	7			
Max. cont. Apparent Power (kVA)	6	7			
	+				
Power factor	1.0				
Others					
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)				
Firmware version	1.01				

Signature

Name: Max Jin

**Position: General Manager** 

Date: 2025-09-08