

Test Verification of Conformity

Verification Number: 240100596SHA-V1

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 directives listed on this verification at the time the tests were carried out. Other standards and Directives 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 mark directives 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: 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 Appendix

Characteristics:

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

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

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

Brand Name: Afore

Relevant Standards/Directives: IEC/EN 62109-1:2010

IEC/EN 62109-2:2011

the Low Voltage Directive 2014/35/EU
Intertek Testing Services Shanghai

Verification Issuing Office Intertek Testing Services Shanghai

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

Date of Tests: 2024-04-17 to 2024-05-14 Test Report Number(s): 240100596SHA-001/002

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Signature

Name: Max Jin

Position: General Manager

Date: 2024-05-14

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This is an Appendix to Test Verification of Conformity Number: 240100596SHA-V1

Ratings:

Model AF3K-ATH AF4K-ATH AF4.99K-ATH AF5K-ATH PV input 5 6 7.5 7.5 Vmax PV (Vdc) (absolute Max.) 1000 1000 1000 1000 Isc PV (absolute Max.) (A) 25*2 25*2 25*2 25*2 25*2 Number MPP trackers 2 2 2 2 2 2 2 2 2/2 18.5*2 18.5*2 18.5*2 18.5*2 18.5*2 150-850 150-850 150-850 150-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200	Specifications table				
P pv Max (kW) 5 6 7.5 7.5 Vmax PV (Vdc) (absolute Max.) 1000 1000 1000 1000 Isc PV (absolute Max.) (A) 25*2 25*2 25*2 25*2 25*2 Number MPP trackers 2 2 2 2 2 2 2 2 2 2 2 2 2 2/2 18.5*2 18.5*2 18.5*2 18.5*2 18.5*2 150-850 150-850 150-850 150-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 200-850 <td< th=""><th>Model</th><th></th><th></th><th>AF4.99K-ATH</th><th>AF5K-ATH</th></td<>	Model			AF4.99K-ATH	AF5K-ATH
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 2/2 2/2 2/2 2/2 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) Ei-ion/Lead-acid etc. Battery Normal Voltage Range (Vdc) 80-600(Field adapt battery voltage range) Max charge/discharge Current(A) 30 30 30 Max charge/discharge Power(kW) 3 4 4.99 5	PV input				
Isc PV (absolute Max.) (A) 25*2 25*2 25*2 25*2 Number MPP trackers 2 2 2 2 Number input strings 2/2 2/2 2/2 2/2 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) Ei-ion/Lead-acid etc. Battery Normal Voltage Range (Vdc) 80-600(Field adapt battery voltage range) Max charge/discharge Current(A) 30 30 30 Max charge/discharge Power(kW) 3 4 4.99 5		5	6	7.5	7.5
Number MPP trackers 2	Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000
Number input strings 2/2 2/2 2/2 2/2 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) Li-ion/Lead-acid etc. Battery Normal Voltage Range (Vdc) 80-600(Field adapt battery voltage range) Max charge/discharge Current(A) 30 30 30 Max charge/discharge Power(kW) 3 4 4.99 5	Isc PV (absolute Max.) (A)	25*2	25*2	25*2	25*2
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) Li-ion/Lead-acid etc. Battery Normal Voltage Range (Vdc) 80-600(Field adapt battery voltage range) Max charge/discharge Current(A) 30 30 30 Max charge/discharge Power(kW) 3 4 4.99 5		2			
MPPT voltage range (Vdc) 150-850 150-850 150-850 Vdc range @ full power (Vdc) 200-850 200-850 200-850 Battery (charge/discharge) Li-ion/Lead-acid etc. Battery Normal Voltage Range (Vdc) 80-600(Field adapt battery voltage range) Max charge/discharge Current(A) 30 30 30 Max charge/discharge Power(kW) 3 4 4.99 5					
Vdc range @ full power (Vdc)200-850200-850200-850Battery (charge/discharge)Li-ion/Lead-acid etc.Battery Normal Voltage Range (Vdc)80-600(Field adapt battery voltage range)Max charge/discharge Current(A)303030Max charge/discharge Power(kW)344.995	Max. PV input current (A)		18.5*2	18.5*2	
Battery (charge/discharge)Battery typeLi-ion/Lead-acid etc.Battery Normal Voltage Range (Vdc)80-600(Field adapt battery voltage range)Max charge/discharge Current(A)303030Max charge/discharge Power(kW)344.995	MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850
Battery type Battery Normal Voltage Range (Vdc) Max charge/discharge Current(A) Max charge/discharge Power(kW) Battery Normal Voltage Range (Vdc) 80-600(Field adapt battery voltage range) 30 30 30 4 4.99 5		200-850	200-850	200-850	200-850
Battery Normal Voltage Range (Vdc)80-600(Field adapt battery voltage range)Max charge/discharge Current(A)303030Max charge/discharge Power(kW)344.995					
Max charge/discharge Current(A)30303030Max charge/discharge Power(kW)344.995					
Max charge/discharge Power(kW) 3 4 4.99 5			-600(Field adapt I	oattery voltage rang	je)
	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/3P+PE 230/400	Normal AC Voltage (Vac)		3P+N+PE/3I	P+PE 230/400	
Frequency (Hz) 50	Frequency (Hz)	50			
Normal AC Current (A) 4.4 5.8 7.3 7.3	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	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 Power (kW)	3	4	4.99	
Rated Apparent Power (kVA) 3 4 4.99 5	Rated Apparent Power (kVA)	,			
Max. cont. input/output Power (kW) 4.5 / 3.3 6 / 4.4 7.5 / 4.99 7.5 / 5.5	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		4.5 / 3.3 6 / 4.4 7.5 / 4.99 7.5 / 5.5			
Power factor(adjustable) 1.0(-0.8~ +0.8)	Power factor(adjustable)	1.0(-0.8~ +0.8)			
AC Load output (stand-alone)	AC Load output (stand-alone)				
Normal Voltage (Vac) 3P+N+PE/3P+PE 230/400	Normal Voltage (Vac)	3P+N+PE/3P+PE 230/400			
Frequency (Hz) 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		3			5
Power factor 1.0			1	.0	
Others					
Ingress protection (IP)	. , ,	IP66			
Protective class I	Protective class	Class I			
Temperature ($^{\circ}$ C) -25 $^{\circ}$ C to +60 $^{\circ}$ C (Derating 45 $^{\circ}$ C)	Temperature (°C)		-25℃ to +60℃	(Derating 45°C)	
Inverter Isolation Non-isolated (PV - AC - BAT)	Inverter Isolation	Non-isolated (PV - AC - BAT)			
Overvoltage category OVC III (AC Main), OVC II (DC)	Overvoltage category	OVC III (AC Main), OVC II (DC)			
Firmware version 1.01	Firmware version				



This is an Appendix to Test Verification of Conformity Number: 240100596SHA-V1

Model AF6K-ATH AF8K-ATH AF9.99K-ATH AF10K-ATH PV input 9 12 15 15 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 2/2 2/2 2/2 2/2 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) 500-850 500-850 500-850 500-850
P pv Max (kW) 9 12 15 15 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 2 Number input strings 2/2 2/2 2/2 2/2 2/2 2/2 Max. PV input current (A) 18.5*2 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) 500-850 500-850 500-850 500-850
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 2 Number input strings 2/2 2/2 2/2 2/2 2/2 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) 500-850 500-850 500-850
Isc PV (absolute Max.) (A) 25*2 25*2 25*2 25*2 Number MPP trackers 2 2 2 2 Number input strings 2/2 2/2 2/2 2/2 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) 500-850 500-850 500-850 500-850
Number MPP trackers 2 2 2 2 2 2 2 2 2 2/2
Number input strings 2/2 2/2 2/2 2/2 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) 250-850 300-850 500-850 Battery (charge/discharge) 500-850
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) 250-850 300-850 500-850 Battery (charge/discharge)
MPPT voltage range (Vdc) 150-850 150-850 150-850 Vdc range @ full power (Vdc) 250-850 300-850 500-850 Battery (charge/discharge)
Vdc range @ full power (Vdc) 250-850 300-850 500-850 500-850 Battery (charge/discharge)
Battery (charge/discharge)
Battery type Li-ion/Lead-acid etc.
Battery Normal Voltage Range (Vdc) 80-600(Field adapt battery voltage range)
Max charge/discharge Current(A) 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/3P+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 / 1
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 / 1
Max. cont. Apparent input/output Power 9 / 6.6 12 / 8.8 15 / 9.99 15 / 1
(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 8 9.99 10 Max, cont. 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)
Protective 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)
Firmware version 1.01



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Specifications table				
Model	AF12K-ATH	AF14.99K-ATH	AF15K-ATH	
PV input	70 1210 70111	711 14.551(7(111	711 1017 71111	
P pv Max (kW)	18	22.5	22.5	
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	2/2	2/2	2/2	
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)		0-600(Field adapt ba	ttery voltage range)	
Max charge/discharge Current(A)	30	50	50	
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		
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	
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)		IP6	6	
Protective class		Clas	s I	
Temperature (°C)		-25℃ to +60℃ (Derating 45°C)	
Inverter Isolation		Non-isolated (P	V - AC - BAT)	
Overvoltage category		OVC III (AC Mair	n), OVC II (DC)	
Firmware version	1.01			



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Specifications table					
Model	AF3K-ATH-0	AF4K-ATH-0	AF4.99K-ATH- 0	AF5K-ATH-0	
Battery (charge/discharge)					
Battery type	Li-ion/Lead-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/3F	P+PE 230/400		
Frequency (Hz)	/ 1	5	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)	3P+N+PE/3P+PE 230/400				
Frequency (Hz)			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)		IF	² 66		
Protective class		Cla	ass I		
Temperature (°C)	- 1	-25℃ to +60℃	(Derating 45°C)		
Inverter Isolation	0	Non-isolate	d (AC - BAT)		
Overvoltage category		OVC III (AC Ma	ain), OVC II (DC)		
Firmware version	1.01				



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	Specifications table			
Model	AF6K-ATH-0	AF8K-ATH-0	AF9.99K-ATH- 0	AF10K-ATH-0
Battery (charge/discharge)				
Battery type			ıd-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)	// 1		P+PE 230/400	
Frequency (Hz)		5	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 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 9.99	10
Rated Apparent Power (kVA) Max. cont. Apparent Power (kVA)	<u>6</u> 6	8	9.99	10 10
Power factor	0			10
Others	1.0			
	W	I.E.	200	
Ingress protection (IP)			² 66	
Protective class	- 0		ass I	
Temperature (°C)		-25°C to +60°C	(Derating 45°C)	
Inverter Isolation		Non-isolate	d (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: 240100596SHA-V1

Specifications table				
Model	AF12K-ATH-0	AF14.99K-ATH- 0	AF15K-ATH-0	
Battery (charge/discharge)				
Battery type	Li-ion/Lead-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	
Max charge/discharge Power(kW)	12 / 13.2	14.99	15 / 16.5	
AC Grid (input and output)				
Normal AC Voltage (Vac)	//	3P+N+PE/3P+	-PE 230/400	
Frequency (Hz)	/ 1	50		
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	
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)	47.4	50		
Nominal Current (A)	17.4	21.8 27	21.8	
Max. cont. current (A)	21.5 12	14.99	27 15	
Max. cont. Power (kW) Rated Apparent Power (kVA)	12	14.99	15	
Max. cont. Apparent Power (kVA)	12	14.99	15	
Power factor	12	1.0		
Others		1.0	,	
Ingress protection (IP)	W. II	IP6	66	
Protective class		Clas		
Temperature (°C)		-25°C to +60°C (
Inverter Isolation	- 0	Non-isolated	<u> </u>	
Overvoltage category		OVC III (AC Mair	,	
Firmware version	1.01			



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	Specifications table			
Model				AF5K-ATHA
PV input	7.1. 61.1.71.1.11.	7.11.11.71.1.17.1	7	7.1. 6.1. 7.1.1.1.7.
P pv Max (kW)	5	6	7.5	7.5
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	2/2	2/2	2/2	2/2
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	/ 11		nd-acid etc.	
Battery Normal Voltage Range (Vdc)	80	-450(Field adapt b	oattery voltage rang	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)	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)	\	Į	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)		IF	² 66	
Protective class		Cla	ass I	
Temperature (°C)		-25℃ to +60℃	(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: 240100596SHA-V1

Specifications table			
Model	AF6K-ATHA AF7K-ATHA		
PV input			
P pv Max (kW)	9	10.5	
Vmax PV (Vdc) (absolute Max.)	600	600	
Isc PV (absolute Max.) (A)	25*2	25*2	
Number MPP trackers	2	2	
Number input strings	2/2	2/2	
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)			
Battery type	/		id-acid etc.
Battery Normal Voltage Range (Vdc)		-450(Field adapt b	pattery 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/3	P 133/230
Frequency (Hz)		5	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)	0 / 0.0		
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 50		
Frequency (Hz) Nominal Current (A)	15.1	17.6	1 I
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	<u> </u>	-	.0
Others		•	
Ingress protection (IP)		ID	266
Protective class			ass I
Temperature (°C)			(Derating 45°C)
Inverter Isolation		,	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: 240100596SHA-V1

Specifications table					
Model	AF3K-ATHA-0	AF4K-ATHA-0	AF4.99K- ATHA-0	AF5K-ATHA-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	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+PE/3F	P 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~ +0.8)				
AC Load output (stand-alone)					
Normal Voltage (VAC)	3P+PE/3P 133/230			7	
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)		IP6	66		
Protective class	W 0	Clas	ss I		
Temperature (°C)	- 8	-25°C to +60°C ((Derating 45°C)		
Inverter Isolation	Non-isolated (AC - BAT)				
Overvoltage category		OVC III (AC Mai	n), OVC II (DC)		
Firmware version	1.01				

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Specifications table				
Model	AF6K-ATHA-0 AF7K-ATHA-0			
Battery (charge/discharge)				
Battery type	Li-ion/Lead-acid etc.			
Battery Normal Voltage Range (Vdc)	8	30-450(Field adap	t 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)	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 (kVA)	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		
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°	℃ (Derating 45℃)	
Inverter Isolation		Non-isola	ted (AC - BAT)	
Overvoltage category		OVC III (AC N	Main), OVC II (DC)	
Firmware version	- 0		1.01	

Signature

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Position: General Manager

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Date: 2024-05-14