

Test Verification of Conformity

Verification Number: 230900428SHA-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 **CE** 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: Ratings & Principle Characteristics:	Hybrid inverter See Appendix
Models/Type References:	AF*-SL-0 (*= 1K, 1.5K, 2K, 2.5K, 3K, 3.6K, 4K, 4.6K, 5K, 5.5K, 6K) AF*-SL-1 (*=1K, 1.5K, 2K, 2.5K, 3K, 3.6K) AF*-SL (*=3K, 3.6K, 4K, 4.6K, 5K, 5.5K, 6K) AF*-SLP (*=4K, 4.6K, 5K, 5.5K, 6K)
Brand Name:	Afore
Relevant Standards/Directives:	IEC 60068-2-1: 2007 IEC 60068-2-2: 2007 IEC 60068-2-14:2009 IEC60068-2-30: 2005
Verification Issuing Office Name & Address:	Intertek Testing Services Shanghai Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
Date of Tests:	2023-09-13 to 2024-03-25
Test Report Number(s):	230900428SHA-001

Signature



Name: Max Jin

Position: General Manager

Date: 2024-03-25

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 230900428SHA-V1

Ratings:

Model	Specifications table			
	AF1K-SL-0	AF1.5K-SL-0	AF2K-SL-0	AF2.5K-SL-0
Battery (charge/discharge)				
Battery type	Li-ion/Lead-acid etc.			
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)			
Max charge/discharge Current(A)	25	40	50	63
Max charge/discharge Power(W)	1000	1500	2000	2500
AC Grid (input and output)				
Normal AC Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Normal AC Current (A)	4.4	6.6	8.7	10.9
Max. cont. input/output current (A)	5	7	10	12
Normal Power (W)	1000	1500	2000	2500
Rated Apparent Power (VA)	1000	1500	2000	2500
Max. cont. input/output Power (W)	1000	1500	2000	2500
Max. cont. Apparent Power (VA)	1000	1500	2000	2500
Power factor(adjustable)	1.0(-0.8~ +0.8)			
AC Load output				
Normal Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Nominal Current (A)	4.4	6.6	8.7	10.9
Max. cont. current (A)	5	7	10	12
Max. cont. Power (W)	1000	1500	2000	2500
Max. cont. Apparent Power (VA)	1000	1500	2000	2500
Power factor	1.0			
Others				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C			
Inverter Isolation	Non-isolated (AC-BAT)			
Overvoltage category	OVC III (AC Main)			

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 230900428SHA-V1

Ratings:

Specifications table				
Model	AF3K-SL-0	AF3.6K-SL-0	AF4K-SL-0	AF4.6K-SL-0
Battery (charge/discharge)				
Battery type	Li-ion/Lead-acid etc.			
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)			
Max charge/discharge Current(A)	80	80	120	120
Max charge/discharge Power(W)	3000	3600	4000	4600
AC Grid (input and output)				
Normal AC Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Normal AC Current (A)	13.1	15.7	17.4	20
Max. cont. input/output current (A)	14	17	19	22
Normal Power (W)	3000	3600	4000	4600
Rated Apparent Power (VA)	3000	3600	4000	4600
Max. cont. input/output Power (W)	3000	3600	4000	4600
Max. cont. Apparent Power (VA)	3000	3600	4000	4600
Power factor (adjustable)	1.0(-0.8~ +0.8)			
AC Load output				
Normal Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Nominal Current (A)	13.1	15.7	17.4	20
Max. cont. current (A)	14	17	19	22
Max. cont. Power (W)	3000	3600	4000	4600
Max. cont. Apparent Power (VA)	3000	3600	4000	4600
Power factor	1.0			
Others				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C			
Inverter Isolation	Non-isolated (AC-BAT)			
Overvoltage category	OVC III (AC Main)			

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APPENDIX: Test Verification of Conformity

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Ratings:

Specifications table				
Model	AF5K-SL-0	AF5.5K-SL-0	AF6K-SL-0	
Battery (charge/discharge)				
Battery type	Li-ion/Lead-acid etc.			
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)			
Max charge/discharge Current(A)	120	120	120	
Max charge/discharge Power(W)	5000	5500	6000	
AC Grid (input and output)				
Normal AC Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Normal AC Current (A)	21.8	24	26.1	
Max. cont. input/output current (A)	23	26	28	
Normal Power (W)	5000	5500	6000	
Rated Apparent Power (VA)	5000	5500	6000	
Max. cont. input/output Power (W)	5000	5500	6000	
Max. cont. Apparent Power (VA)	5000	5500	6000	
Power factor (adjustable)	1.0(-0.8~ +0.8)			
AC Load output				
Normal Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Nominal Current (A)	21.8	24	26.1	
Max. cont. current (A)	23	26	28	
Max. cont. Power (W)	5000	5500	6000	
Max. cont. Apparent Power (VA)	5000	5500	6000	
Power factor	1.0			
Others				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C			
Inverter Isolation	Non-isolated (AC-BAT)			
Overvoltage category	OVC III (AC Main)			

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 230900428SHA-V1

Ratings:

Model	Specifications table				
	AF1K-SL-1	AF1.5K-SL-1	AF2K-SL-1	AF2.5K-SL-1	AF3K-SL-1
PV input					
P pv Max(W)	1500	2300	3000	3800	4500
Vmax PV (Vdc) (absolute Max.)	550	550	550	550	550
Isc PV (absolute Max.) (A)	26	26	26	26	26
Number MPP trackers	1	1	1	1	1
Number input strings	1	1	1	1	1
Max. PV input current / strings (A)	18.5	18.5	18.5	18.5	18.5
MPPT voltage range (Vdc)	80-500	80-500	80-500	80-500	80-500
Vdc range @ full power (Vdc)	80-500	90-500	120-500	150-500	170-500
Battery (charge/discharge)					
Battery type	Li-ion/Lead-acid etc.				
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)				
Max charge/discharge Current(A)	25	40	50	63	80
Max charge/discharge Power(W)	1000	1500	2000	2500	3000
AC Grid (input and output)					
Normal AC Voltage (VAC)	L/N/PE, 230Vac				
Frequency (Hz)	50				
Normal AC Current (A)	4.4	6.6	8.7	10.9	13.1
Max. cont. input/output current (A)	5	7	10	12	14
Rated Power(W)	1000	1500	2000	2500	3000
Rated Apparent Power (VA)	1000	1500	2000	2500	3000
Max. cont. Power (W)	1000	1500	2000	2500	3000
Max. cont. Apparent Power (VA)	1000	1500	2000	2500	3000
Power factor (adjustable)	1.0(-0.8~ +0.8)				
AC Load output					
Normal Voltage (VAC)	L/N/PE, 230Vac				
Frequency (Hz)	50				
Nominal Current(A)	4.4	6.6	8.7	10.9	13.1
Max. cont. current (A)	5	7	10	12	14
Max. cont. Power (W)	1000	1500	2000	2500	3000
Max. cont. Apparent Power (VA)	1000	1500	2000	2500	3000
Power factor	1.0				
Others					
Ingress protection (IP)	IP65				
Protective class	Class I				
Temperature (°C)	-25°C to +60°C				
Inverter Isolation	Non-isolated (PV - AC - BAT)				
Oversvoltage category	OVC III (AC Main), OVC II (PV)				

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 230900428SHA-V1

Ratings:

Specifications table				
Model	AF3.6K-SL-1	AF3K-SL	AF3.6K-SL	AF4K-SL
PV input				
P _{pv} Max(W)	5400	4500	5400	6000
V _{max} PV (Vdc) (absolute Max.)	550	550	550	550
I _{sc} PV (absolute Max.) (A)	26	26 x 2	26 x 2	26 x 2
Number MPP trackers	1	2	2	2
Number input strings	1	1/1	1/1	1/1
Max. PV input current / strings (A)	18.5	18.5 x 2	18.5 x 2	18.5 x 2
MPPT voltage range (Vdc)	80-500	80-500	80-500	80-500
Vdc range @ full power (Vdc)	210-500	90-500	110-500	120-500
Battery (charge/discharge)				
Battery type	Li-ion/Lead-acid etc.			
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)			
Max charge/discharge Current(A)	80	80	80	80
Max charge/discharge Power(W)	3600	3000	3600	4000
AC Grid (input and output)				
Normal AC Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Normal AC Current (A)	15.7	13.1	15.7	17.4
Max. cont. input/output current (A)	17	14	17	19
Rated Power(W)	3600	3000	3600	4000
Rated Apparent Power (VA)	3600	3000	3600	4000
Max. cont. Power (W)	3600	3000	3600	4000
Max. cont. Apparent Power (VA)	3600	3000	3600	4000
Power factor (adjustable)	1.0(-0.8~ +0.8)			
AC Load output				
Normal Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Nominal Current(A)	15.7	13.1	15.7	17.4
Max. cont. current (A)	17	14	17	19
Max. cont. Power (W)	3600	3000	3600	4000
Max. cont. Apparent Power (VA)	3600	3000	3600	4000
Power factor	1.0			
Others				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C			
Inverter Isolation	Non-isolated (PV - AC - BAT)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 230900428SHA-V1

Ratings:

Model	Specifications table			
	AF4.6K-SL	AF5K-SL	AF5.5K-SL	AF6K-SL
PV input				
P _{pv} Max(W)	6900	7500	8300	9000
V _{max} PV (Vdc) (absolute Max.)	550	550	550	550
I _{sc} PV (absolute Max.) (A)	26 x 2	26 x 2	26 x 2	26 x 2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current / strings (A)	18.5 x 2	18.5 x 2	18.5 x 2	18.5 x 2
MPPT voltage range (Vdc)	80-500	80-500	80-500	80-500
Vdc range @ full power (Vdc)	130-500	150-500	160-500	170-500
Battery (charge/discharge)				
Battery type	Li-ion/Lead-acid etc.			
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)			
Max charge/discharge Current(A)	80	80	80	80
Max charge/discharge Power(W)	4600	4800	4800	4800
AC Grid (input and output)				
Normal AC Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Normal AC Current (A)	20	21.8	24	26.1
Max. cont. input/output current (A)	22	23	26	28
Rated Power(W)	4600	5000	5500	6000
Rated Apparent Power (VA)	4600	5000	5500	6000
Max. cont. Power (W)	4600	5000	5500	6000
Max. cont. Apparent Power (VA)	4600	5000	5500	6000
Power factor (adjustable)	1.0(-0.8~ +0.8)			
AC Load output				
Normal Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Nominal Current(A)	20	21.8	24	26.1
Max. cont. current (A)	22	23	26	28
Max. cont. Power (W)	4600	5000	5500	6000
Max. cont. Apparent Power (VA)	4600	5000	5500	6000
Power factor	1.0			
Others				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C			
Inverter Isolation	Non-isolated (PV - AC - BAT)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 230900428SHA-V1

Ratings:

Specifications table					
Model	AF4K-SLP	AF4.6K-SLP	AF5K-SLP	AF5.5K-SLP	AF6K-SLP
PV input					
P _{pv} Max(W)	6000	6900	7500	8300	9000
V _{max} PV (Vdc) (absolute Max.)	550	550	550	550	550
I _{sc} PV (absolute Max.) (A)	26 x 2	26 x 2	26 x 2	26 x 2	26 x 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 / strings (A)	18.5 x 2	18.5 x 2	18.5 x 2	18.5 x 2	18.5 x 2
MPPT voltage range (Vdc)	80-500	80-500	80-500	80-500	80-500
Vdc range @ full power (Vdc)	120-500	130-500	150-500	160-500	170-500
Battery (charge/discharge)					
Battery type	Li-ion/Lead-acid etc.				
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)				
Max charge/discharge Current(A)	120	120	120	120	120
Max charge/discharge Power(W)	4000	4600	5000	5500	6000
AC Grid (input and output)					
Normal AC Voltage (VAC)	L/N/PE, 230Vac				
Frequency (Hz)	50				
Normal AC Current (A)	17.4	20	21.8	24	26.1
Max. cont. input/output current (A)	19	22	23	26	28
Rated Power(W)	4000	4600	5000	5500	6000
Rated Apparent Power (VA)	4000	4600	5000	5500	6000
Max. cont. Power (W)	4000	4600	5000	5500	6000
Max. cont. Apparent Power (VA)	4000	4600	5000	5500	6000
Power factor (adjustable)	1.0(-0.8~ +0.8)				
AC Load output					
Normal Voltage (VAC)	L/N/PE, 230Vac				
Frequency (Hz)	50				
Nominal Current(A)	17.4	20	21.8	24	26.1
Max. cont. current (A)	19	22	23	26	28
Max. cont. Power (W)	4000	4600	5000	5500	6000
Max. cont. Apparent Power (VA)	4000	4600	5000	5500	6000
Power factor	1.0				

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Ratings:

Specifications table					
Model	AF4K-SLP	AF4.6K-SLP	AF5K-SLP	AF5.5K-SLP	AF6K-SLP
Others					
Ingress protection (IP)	IP65				
Protective class	Class I				
Temperature (°C)	-25°C to +60°C				
Inverter Isolation	Non-isolated (PV - AC - BAT)				
Overvoltage category	OVC III (AC Main), OVC II (PV)				

Signature



Name: Max Jin

Position: General Manager

Date: 2024-03-25

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