

## **Test Verification of Conformity**

## Verification Number: 240300430SHA-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>.



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 Characteristics:	See Appendix
Models/Type References:	See Appendix
Brand Name:	Afore
Relevant Standards/Directives:	IEC/EN 62109-1:2010
	IEC/EN 62109-2:2011
	EN 62477-1:2012+A11:2014+A1:2017+A12:2021 the Low Voltage Directive 2014/35/EU
Verification Issuing Office	Intertek Testing Services Shanghai
Name & Address:	Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
Date of Tests:	2023-06-11 to 2023-11-08 & 2024-03-10 to 2024-03-18
Test Report Number(s):	230601215SHA-001/002 & 230601216SHA-001/002 & 240300431SHA-001

Leon. Signature

Name: Max Jin Position: General Manager Date: 2024-03-18



## APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 240300430SHA-V1

Model/Type reference:	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)
Rating	IP65, Class I, -25°C to +60°C (Derating 45°C) OVC III (AC Main), OVC II (PV) Non-isolated (PV-AC-BAT)
Model/Type reference:	AF*-SL-0 (*= 1K, 1.5K, 2K, 2.5K, 3K, 3.6K, 4K, 4.6K, 5K, 5.5K, 6K)
Rating	IP65, Class I, -25°C to +60°C (Derating 45°C) OVC III (AC Main), OVC II (BAT) Non-isolated (AC-BAT)

## **Other Ratings:**

	Specifications table						
Model	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							
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		L	i-ion/Lead-aci	d			
Battery Normal Voltage (Range) (Vdc)		Ę	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, 230Va	с			
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		



	Specifications table							
Model	AF1K-SL-1	AF1.5K- SL-1	AF2K-SL-1	AF2.5K- SL-1	AF3K-SL-1			
Max. cont. Power (W)	1000	1500	2000	2500	3000			
Max. cont. Apparent Power (VA)	1000	1500	2000	2500	3000			
Power factor (adjustable)		1	1.0( -0.8~ +0.8	)				
AC Load output (stand alone)								
Normal Voltage (VAC)		L	/N/PE, 230Va	С				
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			
Rated Apparent Power (VA)	1000 1500 2000 2500 3000							
Max. cont. Apparent Power (VA)	1000	1500	2000	2500	3000			
Power factor			1.0					

	Specifications table						
Model	AF3.6K-SL-1	AF3K-SL	AF3.6K-SL	AF4K-SL			
PV input							
P pv Max(W)	5400	4500	5400	6000			
Vmax PV (Vdc) (absolute Max.)	550	550	550	550			
Isc 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/Le	ead-acid				
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)		5	60				
Normal AC Current (A)	15.7	13.1	15.7	17.4			
Max. cont. input/output current (A)	17	14	17	19			
Normal Power (W)	3600	3000	3600	4000			
Rated Apparent Power (VA)	3600	3000	3600	4000			
Max. cont. input/output Power (W)	3600	3000	3600	4000			
Max. cont. Apparent Power (VA)	3600	3000	3600	4000			
Power factor(adjustable)		1.0( -0.8	8~ +0.8)				
AC Load output (stand alone)							
Normal Voltage (VAC)		L/N/PE,	230Vac				
Frequency (Hz)		5	60				
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			
Rated Apparent Power (VA)	3600	3000	3600	4000			
Max. cont. Apparent Power (VA)	3600	3000	3600	4000			
Power factor		1	.0				



	Specification	is table				
Model	AF4.6K-SL	AF5K-SL	AF5.5K-SL	AF6K-SL		
PV input		•				
P pv Max(W)	6900	7500	8300	9000		
Vmax PV (Vdc) (absolute Max.)	550	550	550	550		
Isc 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					
Battery Normal Voltage (Range) (Vdc)						
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)		5	0			
Normal AC Current (A)	20	21.8	24	26.1		
Max. cont. input/output current (A)	22	23	26	28		
Normal Power (W)	4600	5000	5500	6000		
Rated Apparent Power (VA)	4600	5000	5500	6000		
Max. cont. input/output Power (W)	4600	5000	5500	6000		
Max. cont. Apparent Power (VA)	4600	5000	5500	6000		
Power factor(adjustable)		1.0( -0.8	8~ +0.8)			
AC Load output (stand alone)						
Normal Voltage (VAC)		L/N/PE,	230Vac			
Frequency (Hz)		-	0			
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		
Rated Apparent Power (VA)	4600	5000	5500	6000		
Max. cont. Apparent Power (VA)	4600	5000	5500	6000		
Power factor		1	.0			

	Specificat	ions 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
Vmax PV (Vdc) (absolute Max.)	550	550	550	550	550
Isc 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)		Ę	51.2V (40-60V	)	



	Specifications table					
Model	AF4K-SLP	AF4.6K- SLP	AF5K-SLP	AF5.5K- SLP	AF6K-SLP	
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, 230Va	С		
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	1.0( -0.8~ +0.8	)		
AC Load output (stand alone)						
Normal Voltage (VAC)		L	./N/PE, 230Va	С		
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			

	Specifications table						
Model	AF1K-SL-0	AF1.5K-SL-0	AF2K-SL-0	AF2.5K-SL-0			
Battery (charge/discharge)							
Battery type		Li-ion/Le	ad-acid				
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			
Rated Power(W)	1000	1500	2000	2500			
Rated Apparent Power (VA)	1000	1500	2000	2500			
Max. cont. Power (W)	1000	1500	2000	2500			
Max. cont. Apparent Power (VA)	1000	1500	2000	2500			
Power factor (adjustable)		1.0( -0.8	8~ +0.8)				
AC Load output (stand alone)							
Normal Voltage (VAC)		L/N/PE,	230Vac				
Frequency (Hz)		5	0				
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			
Rated Apparent Power (VA)	1000	1500	2000	2500			
Max. cont. Apparent Power (VA)	1000	1500	2000	2500			
Power factor		1.	0				



	Specifications table						
Model	AF3K-SL-0	AF3.6K-SL-0	AF4K-SL-0	AF4.6K-SL-0			
Battery (charge/discharge)							
Battery type		Li-ion/Le	ad-acid				
Battery Normal Voltage (Range) (Vdc)		51.2V (4	10-60V)				
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	s∼ +0.8)				
AC Load output (stand alone)							
Normal Voltage (VAC)		L/N/PE,	230Vac				
Frequency (Hz)		5	0				
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			
Rated Apparent Power (VA)	3000	3600	4000	4600			
Max. cont. Apparent Power (VA)	3000	3600	4000	4600			
Power factor		1.	0				

	Specifications table						
Model	AF5K-SL-0	AF5.5K-SL-0	AF6K-SL-0				
Battery (charge/discharge)							
Battery type		Li-ion/Le	ead-acid				
Battery Normal Voltage (Range) (Vdc)		51.2V (4	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	3~ +0.8)				
AC Load output (stand alone)							
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				



Specifications table						
Model AF5K-SL-0 AF5.5K-SL-0 AF6K-SL-0						
Rated Apparent Power (VA)	5000	5500	6000			
Max. cont. Apparent Power (VA)	5000	5500	6000			
Power factor	1.0					

Ceran, Signature

Name: Max Jin Position: General Manager Date: 2024-03-18