

Test Verification of Conformity

Verification Number: 240100597SHA-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 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 and AC Coupled inverter

Ratings & Principle Characteristics:

See specifications table

Models/Type References: Hybrid inverter:

AF*-ASL-1 (*= 1K, 1.5K, 2K, 2.5K, 3K, 3.6K) AF*-ASL (*= 3K, 3.6K, 4K, 4.6K, 5K, 5.5K, 6K)

AC Coupled inverter:

AF*-ASL-0 (*= 1K, 1.5K, 2K, 2.5K, 3K, 3.6K, 4K, 4.6K, 5K, 5.5K, 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; the EMC Directive 2014/30/EU

Verification Issuing Office

Intertek Testing Services Shanghai

Name & Address:

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

Date of Tests:

2024-01-07 to 2024-01-18

Test Report Number(s):

240100597SHA-001

Signature

Name: Max Jin

Position: General Manager

Date: 2024-05-15



APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 240100597SHA-V1

Specifications table						
Model	AF1K-ASL-1	AF1.5K-ASL-1	AF2K-ASL-1	AF2.5K-ASL-1	AF3K-ASL-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-aci	d		
Battery Normal Voltage (Range)			51.2V (40-60V)			
(Vdc)						
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)	10		L/N/PE, 230Va	С		
Frequency (Hz)	7		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 (stand alone)						
Normal Voltage (VAC)			L/N/PE, 230Va	С		
Frequency (Hz)	70.		50	97		
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					
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 Main), OVC II (PV)					



Specifications table					
Model	AF3.6K-ASL-1	AF3K-ASL	AF3.6K-ASL	AF4K-ASL	
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	700	Li-ion/l	_ead-acid		
Battery Normal Voltage (Range) (Vdc)	Ø 0	51.2V	(40-60V)		
Max charge/discharge Current(A)	80	80	80	120	
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	
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~ +0.8)				
AC Load output (stand alone)					
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	
Rated Apparent Power (VA)	3600	3000	3600	4000	
Max. cont. Apparent Power (VA)	3600	3000	3600	4000	
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 Main), OVC II (PV)				



Specifications table					
Model	AF4.6K-ASL	AF5K-ASL	AF5.5K-ASL	AF6K-ASL	
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	700	Li-ion/L	ead-acid		
Battery Normal Voltage (Range) (Vdc)	0 0	51.2V (40-60V)		
Max charge/discharge Current(A)	120	120	120	120	
Max charge/discharge Power(W)	4600	5000	5500	6000	
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	
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)	- 0	1.0(-0.	8~ +0.8)		
AC Load output (stand alone)					
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	
Rated Apparent Power (VA)	4600	5000	5500	6000	
Max. cont. Apparent Power (VA)	4600	5000	5500	6000	
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 Main), OVC II (PV)				



Specifications table					
Model	AF1K-ASL-0 AF1.5K-ASL-0 AF2K-ASL-0 AF2.5K-ASL-0				
Battery (charge/discharge)		•			
Battery type		Li-ion/L	ead-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)		5	0		
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	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	
Max. cont. Apparent Power (VA)	1000	1500	2000	2500	
Power factor	1.0				
Others	- 6				
Ingress protection (IP)	IP66				
Protective class	Class I				
Temperature ($^{\circ}$ C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated (AC-BAT)				
Overvoltage category	OVC III (AC Main)				



	Specification	ns table		
Model	AF3K-ASL-0	AF3.6K-ASL-0	AF4K-ASL-0	AF4.6K-ASL-0
Battery (charge/discharge)				
Battery type	Li-ion/Lead-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)		5	0	
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	3~ +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
Max. cont. Apparent Power (VA)	3000	3600	4000	4600
Power factor		1.	0	
Others	- 0	- 10	- 0	
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)			



Specifications table					
Model	AF5K-ASL-0 AF5.5K-ASL-0 AF6K-ASL-0				
Battery (charge/discharge)		•			
Battery type	Li-ion/Lead-acid				
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)		5	0		
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	8~ +0.8)		
AC Load output (stand alone)					
Normal Voltage (VAC)		L/N/PE,	230Vac		
Frequency (Hz)		5	0		
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	- 6				
Ingress protection (IP)	IP66				
Protective class	Class I				
Temperature ($^{\circ}$ C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated (AC-BAT)				
Overvoltage category	OVC III (AC Main)				