

Test Verification of Conformity

Verification Number: 220700013SHA-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 formula 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.

Build No.7, 333 Wanfang Road, Minhang District, Shanghai. China. 201112

Product Description: Hybrid Inverter Ratings & Principle See Appendix Characteristics:

Models/Type References: AF*-SL-1 (*= 1K, 1.5K, 2K, 2.5K, 3K, 3.6K)

AF*-SL (*= 3K, 3.6K, 4K, 4.6K, 5K, 5.5K, 6K)

Brand Name: Afore

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

IEC/EN 62109-2:2011

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: 2022-07-15 to 2022-09-27 Test Report Number(s): 220700013SHA-001/002

Signature

Name: Max Jin Position: Manager Date: 2022-11-08



APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 220700013SHA -V1

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	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		L	i-ion/Lead-aci	d	
Battery Normal Voltage (Range) (Vdc)		Ţ.	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)	7.7	1	/N/PE, 230Va	c	
Frequency (Hz)	l		50	97	
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, 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
Rated Apparent Power (VA)	1000	1500	2000	2500	3000
Max. cont. 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	
Power factor	1.0					
Others						
Ingress protection (IP)	IP65					
Protective class	Class I					
Temperature ($^{\circ}$ C)	-25 $^{\circ}$ C to +60 $^{\circ}$ C (Derating 45 $^{\circ}$ C)					
Inverter Isolation	Non-isolated (PV-AC-BAT)					
Overvoltage category	OVC III (AC Main), OVC II (PV)					
Firmware	V06					

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	- 4	Li-ion/Lo	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	0		
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	



Specifications table						
Model	AF3.6K-SL-1	AF3K-SL	AF3.6K-SL	AF4K-SL		
Power factor	1.0					
Others						
Ingress protection (IP)	IP65					
Protective class	Class I					
Temperature ($^{\circ}$ C)	-25 $^{\circ}$ C to +60 $^{\circ}$ C (Derating 45 $^{\circ}$ C)					
Inverter Isolation	Non-isolated (PV-AC-BAT)					
Overvoltage category	OVC III (AC Main), OVC II (PV)					
Firmware	V06					

Specifications 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/L	ead-acid		
Battery Normal Voltage (Range) (Vdc)	- 10	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)		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~ +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	



Specifications table						
Model	AF4.6K-SL AF5K-SL AF5.5K-SL AF6K-S					
Power factor	1.0					
Others						
Ingress protection (IP)	IP65					
Protective class	Class I					
Temperature ($^{\circ}\mathbb{C}$)	$-25^{\circ}\mathbb{C}$ to $+60^{\circ}\mathbb{C}$ (Derating $45^{\circ}\mathbb{C}$)					
Inverter Isolation	Non-isolated (PV-AC-BAT)					
Overvoltage category	OVC III (AC Main), OVC II (PV)					
Firmware	V06					

Signature

Name: Max Jin Position: Manager Date: 2022-11-08