

Certificate of Conformity

Certificate Number: CN-PVES-230619R1

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced standards at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture. The manufacturer shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant: Afore New Energy Technology (Shanghai) Co., Ltd.

Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.201112

Product: Hybrid Inverter

Ratings & Principle See appendix of Certificate of Conformity Characteristics:

Model: 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)

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

Brand Name<s>: Afore

Product Complies with: C10/11: ed.2.2, 15 Mar 2021

Certificate Issuing Office

Name & Address:

Intertek Testing Services Ltd. Shanghai

West Area, 2nd Floor, No. 707, Zhangyang Road

China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China

Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012

Test Report No.<s>: 2408B2668SHA-001

Additional information in Appendix.

Replaces certificate CN-PV-230619 dated 15 November 2023

Signature

Certification Manager: Qiao Qiao

Date: 05 November 2024

ACCREDIA 5

PRD N° 306B



This is an Appendix to Certificate of Conformity Number: CN-PVES-230619R1

Ratings & Principal Characteristics:

Model	Specifications table						
AF1K-ASL-1		AF1K-SL-1	AF1.5K-SL-1	AF2K-SL-1	AF2.5K-SL-1	AF3K-SL-1	
Ppv Max (W)	Model	AF1K-ASL-1		AF2K-ASL-1		AF3K-ASL-1	
Vmax PV (V) 550 550 550 550 550 Isc PV (absolute Max.) (A) 26 26 26 26 26 Number of MPP trackers 1	Input						
Sc PV (absolute Max.) (A)	Ppv Max (W)	1500	2300	3000	3800	4500	
Number of MPP trackers	Vmax PV (V)	550	550	550	550	550	
Number of input strings	Isc PV (absolute Max.) (A)	26	26	26	26	26	
Max. PV input range (A) 18.5 18.5 18.5 18.5 MPPT Voltage Range (V) 80-500 80-500 80-500 80-500 Vdc range @ full power (V) 80-500 90-500 120-500 150-500 170-500 Battery (charge/discharge) Battery (charge/discharge) Li-ion / lead acid etc. Battery Nominal Voltage (V) Battery Voltage Range (V) 40-60 Max. Charge/Discharge 25 40 50 63 80 Current (A) 50 63 80 Max. Charge/Discharge 25 40 50 63 80 Max. Charge/Discharge 1000 1500 2000 2500 3000 AC Grid (input and output) Nominal Voltage (V) L/N/PE, 230Vac Nominal Prequency (Hz) 50 Max. con Current (A) 5 7 10 12 14 Nominal Prequ		1	1	1	1	1	
MPPT Voltage Range (V) 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 170-500 Battery (charge/discharge) Battery Nominal Voltage (V) 40-60 Max. Charge/Discharge 25 40 50 63 80 Current (A) 50 63 80 AC Grid (input and output) Nominal Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) <td col<="" td=""><td>Number of input strings</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></td>	<td>Number of input strings</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td>	Number of input strings	1	1	1	1	1
MPPT Voltage Range (V) 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 80-500 170-500 Battery (charge/discharge) Battery Nominal Voltage (V) 40-60 Max. Charge/Discharge 25 40 50 63 80 Current (A) 50 63 80 Max. Charge/Discharge 1000 1500 2000 2500 3000 AC Grid (input and output) Nominal Voltage (V) L/N/PE, 230Vac Nominal Prequency (Hz) 100 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor<	Max. PV input range (A)	18.5	18.5	18.5	18.5	18.5	
Vdc range @ full power (V) 80-500 90-500 120-500 150-500 170-500 Battery (charge/discharge) Battery type Li-ion / lead acid etc. Battery Nominal Voltage (V) 51.2 Battery Voltage Range (V) 40-60 Max. Charge/Discharge 25 40 50 63 80 Current (A) Max. Charge/Discharge 1000 1500 2000 2500 3000 Power (W) 1000 1500 2000 2500 3000 AC Grid (input and output) L/N/PE, 230Vac 14 14 Nominal Voltage (V) L/N/PE, 230Vac 14 14 Nominal Frequency (Hz) 1000 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal F		80-500	80-500	80-500	80-500	80-500	
Battery type		80-500	90-500	120-500	150-500	170-500	
Battery Nominal Voltage (V) S1.2							
Battery Voltage Range (V) 40-60 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) L/N/PE, 230Vac Nominal Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 14 Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 5 7 10 12 14 Max. cont. current (A) 5 7 10 12 14	Battery type		Li-	ion / lead acid e	etc.		
Battery Voltage Range (V) 40-60 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) L/N/PE, 230Vac Nominal Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 14 Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 5 7 10 12 14 Max. cont. current (A) 5 7 10 12 14	Battery Nominal Voltage (V)		-	51.2			
Max. Charge/Discharge 25 40 50 63 80 Max. Charge/Discharge Power (W) 1000 1500 2000 2500 3000 AC Grid (input and output) L/N/PE, 230Vac Nominal Voltage (V) Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14			_ ~ _	40-60			
Current (A) Max. Charge/Discharge Power (W) 1000 1500 2000 2500 3000 AC Grid (input and output) Nominal Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) Max. cont. current (A) 5 7 10 12 14		25	40	50	00	00	
Power (W) 1000 1500 2000 2500 3000 AC Grid (input and output) Nominal Voltage (V) L/N/PE, 230Vac Nominal power (Hz) 50 Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) Max. cont. current (A) 5 7 10 12 14	Current (A)	25	40	50	63	80	
AC Grid (input and output) Nominal Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	0 0	1000	1500	2000	2500	3000	
Nominal Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output 1(-0.8~+0.8 adjustable) Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	AC Grid (input and output)						
Nominal Frequency (Hz) 50 Max. con Current (A) 5 7 10 12 14 Nominal power (W) 1000 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14				L/N/PE, 230Vac	· //		
Nominal power (W) 1000 1500 2000 2500 3000 Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output L/N/PE, 230Vac Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	Nominal Frequency (Hz)	33-00		50	///		
Max. power (W) 1000 1500 2000 2500 3000 Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	Max. con Current (A)	5	7	10	12	14	
Max. apparent power (VA) 1000 1500 2000 2500 3000 Power Factor 1(-0.8~+0.8 adjustable) AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	Nominal power (W)	1000	1500	2000	2500	3000	
Power Factor 1(-0.8~+0.8 adjustable) AC Load output L/N/PE, 230Vac Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	Max. power (W)	1000	1500	2000	2500	3000	
AC Load output Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	Max. apparent power (VA)	1000	1500	2000	2500	3000	
Nominal Output Voltage (V) L/N/PE, 230Vac Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	Power Factor						
Nominal Frequency (Hz) 50 Max. cont. current (A) 5 7 10 12 14	AC Load output						
Max. cont. current (A) 5 7 10 12 14	Nominal Output Voltage (V)	L/N/PE, 230Vac					
	Nominal Frequency (Hz)			50			
Nominal Output Power(W) 1000 1500 2000 2500 3000	Max. cont. current (A)	5	7	10	12	14	
	Nominal Output Power(W)	1000	1500	2000	2500	3000	
Max. Output Power (W) 1000 1500 2000 2500 3000	Max. Output Power (W)	1000	1500	2000	2500	3000	
Max. apparent Power (VA) 1000 1500 2000 2500 3000	Max. apparent Power (VA)	1000	1500	2000	2500	3000	
Power Factor 1	Power Factor	1					
Others	Others						
Ingress protection (IP) IP65/IP66	Ingress protection (IP)		IP65/IP66				
Temperature (°C) -25°C to +60°C (Derating 45°C)							
Inverter Isolation Non-isolated (PV - AC - BAT)	. ,						
Firmware version 1.01	Firmware version				,		



This is an Appendix to Certificate of Conformity Number: CN-PVES-230619R1

Ratings & Principal Characteristics:

	Specifi	cations table			
84 - 1 - 1	AF3.6K-SL-1	AF3K-SL	AF3.6K-SL	A = 414 S:	
Model	AF3.6K-ASL-1	AF3K-ASL	AF3.6K-ASL	AF4K-SL	
Input			<u> </u>		
Ppv Max (W)	5400	4500	5400	6000	
Vmax PV (V)	550	550	550	550	
Isc PV (absolute Max.) (A)	26	26 x 2	26 x 2	26 x 2	
Number of MPP trackers	1.	2	2	2	
Number of input strings	1	1/1	1/1	1/1	
Max. PV input range (A)	18.5	18.5 x 2	18.5 x 2	18.5 x 2	
MPPT Voltage Range (V)	80-500	80-500	80-500	80-500	
Vdc range @ full power (V)	210-500	90-500	110-500	120-500	
Battery (charge/discharge)					
Battery type		Li-ion / le	ad acid etc.	4	
Battery Nominal Voltage (V)			1.2		
Battery Voltage Range (V)		40)-60	1	
Max. Charge/Discharge	80	80	80	80	
Current (A)	80	00	00	80	
Max. Charge/Discharge	3600	3000	3600	4000	
Power (W)	3000	3000	3000	4000	
AC Grid (input and output)					
Nominal Voltage (V)	10	L/N/PE	, 230Vac		
Nominal Frequency (Hz)			50		
Max. con Current (A)	17	14	17	19	
Nominal Power (W)	3600	3000	3600	4000	
Max. Power (W)	3600	3000	3600	4000	
Max. apparent Power (VA)	3600	3000	3600	4000	
Power Factor	1(-0.8~+0.8 adjustable)				
AC Load output					
Nominal Output Voltage (V)	L/N/PE, 230Vac				
Nominal Frequency (Hz)	50				
Max. cont. current (A)	17	14	17	19	
Nominal Output Power(W)	3600	3000	3600	4000	
Max. Output Power (W)	3600	3000	3600	4000	
Max. apparent Power (VA)	3600	3000	3600	4000	
Power Factor	1				
Others					
Ingress protection (IP)	IP65/IP66				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated (PV - AC - BAT)				
Firmware version	1.01				

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

Intertek



This is an Appendix to Certificate of Conformity Number: CN-PVES-230619R1

Ratings & Principal Characteristics:

Specifications table					
Model	AF4.6K-SL AF5K-SL AF6K-SL AF6K-SL				
Input					
Ppv Max (W)	6900	7500	8300	9000	
Vmax PV (V)	550	550	550	550	
Isc PV (absolute Max.) (A)	26 x 2	26 x 2	26 x 2	26 x 2	
Number of MPP trackers	2	2	2	2	
Number of input strings	1/1	1/1	1/1	1/1	
Max. PV input range (A)	18.5 x 2	18.5 x 2	18.5 x 2	18.5 x 2	
MPPT Voltage Range (V)	80-500	80-500	80-500	80-500	
Vdc range @ full power (V)	130-500	150-500	160-500	170-500	
Battery (charge/discharge)					
Battery type		Li-ion / lea	ad acid etc.		
Battery Nominal Voltage (V)		5	1.2		
Battery Voltage Range (V)		40)-60		
Max. Charge/Discharge	00	00	00	00	
Current (A)	80	80	80	80	
Max. Charge/Discharge	4600	4800	4800	4800	
Power (W)	4000	4600	4600	4000	
AC Grid (input and output)					
Nominal Voltage (V)		L/N/PE	, 230Vac		
Nominal Frequency (Hz)			50		
Max. con Current (A)	22	23	26	26	
Nominal Power (W)	4600	5000	5500	6000	
Max. Power (W)	4600	5000	5500	6000	
Max. apparent Power (VA)	4600 5000 5500 6				
Power Factor	1(-0.8~+0.8 adjustable)				
AC Load output					
Nominal Output Voltage (V)	L/N/PE, 230Vac				
Nominal Frequency (Hz)	50				
Max. cont. current (A)	22	23	26	28	
Nominal Output Power(W)	4600	5000	5500	6000	
Max. Output Power (W)	4600	5000	5500	6000	
Max. apparent Power (VA)	4600	5000	5500	6000	
Power Factor	1				
others					
Ingress protection (IP)	IP65				
Temperature (°C)	-25°C to +60°C (Derating45°C)				
Inverter Isolation	Non-isolated (PV - AC - BAT)				
Firmware version	1.01				



This is an Appendix to Certificate of Conformity Number: CN-PVES-230619R1

Ratings & Principal Characteristics:

Specifications table						
Model	AF4K-SLP	AF4.6K-SLP	AF5K-SLP	AF5.5K-SLP	AF6K-SLP	
Model	AF4K-ASL	AF4.6K-ASL	AF5K-ASL	AF5.5K-ASL	AF6K-ASL	
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			
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, 230Va	3		
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) Power factor	4000	4600	5000 1.0	5500	6000	
Others			1.0			
	-		.=			
Ingress protection (IP)	IP65/ IP66					
Protective class	Class I					
Temperature ($^{\circ}$ 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)					
Firmware	1.01					