

Attestation of Conformity

Attestation No: SHA-AoC-230020

Applicant Name & Address: Afore New Energy Technology (Shanghai) Co., Ltd.
Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.
201112

Factory Name & Address: Afore New Energy Technology (Shanghai) Co., Ltd.
Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.
201112

Product Description: Hybrid inverter

Brand Name: Afore

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)

Characteristics: See appendix for details

Standards: EN 62109-1:2010; EN 62109-2:2011;

EU Directive: the Low Voltage Directive (LVD) (2014/35/EU)

Test Report No: 230601215SHA-001, 230601215SHA-002

Issued by: Intertek Testing Services Ltd. Shanghai
West Area, 2nd Floor, No. 707, Zhangyang Road, China (Shanghai)
Pilot Free Trade Zone, Shanghai, P. R. China

Issue date: 2023-11-15

This is to attest that the Technical Construction File for the product listed above has been evaluated against the Essential Safety Requirements of Annex I of the Low Voltage Directive (2014/35/EU). This Attestation can be used in support of the Manufacturers Declaration of Conformity on affixing the CE mark. Product conformity to CE marking is not assured until all other applicable EU Regulations are met in full.

Signature



Name: Qiao Qiao



APPENDIX: Attestation of Conformity

This is an Appendix to Attestation of Conformity Number: SHA-AoC-230020

Ratings & Principle Characteristics:

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	Li-ion/Lead-acid				
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 (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
Power factor	1.0				
Others					
Ingress protection (IP)	IP65				
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)				
Firmware	1.01				

This Attestation 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 Attestation. Only the Client is authorized to permit copying or distribution of this Attestation.. The observations and test/inspection results referenced in this Attestation are relevant only to the sample tested/inspected. This Attestation by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program. This Attestation is not accredited under a ISO IEC 17065 accreditation.

APPENDIX: Attestation of Conformity

This is an Appendix to Attestation of Conformity Number: SHA-AoC-230020

Ratings & Principle Characteristics:

Specifications table				
Model	AF3.6K-SL-1	AF3K-SL	AF3.6K-SL	AF4K-SL
<i>PV input</i>				
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
<i>Battery (charge/discharge)</i>				
Battery type	Li-ion/Lead-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
<i>AC Grid (input and output)</i>				
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)			
<i>AC Load output (stand alone)</i>				
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			
<i>Others</i>				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (℃)	-25℃ to +60℃ (Derating 45℃)			
Inverter Isolation	Non-isolated (PV-AC-BAT)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			
Firmware	1.01			

This Attestation 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 Attestation. Only the Client is authorized to permit copying or distribution of this Attestation.. The observations and test/inspection results referenced in this Attestation are relevant only to the sample tested/inspected. This Attestation by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program. This Attestation is not accredited under a ISO IEC 17065 accreditation.

APPENDIX: Attestation of Conformity

This is an Appendix to Attestation of Conformity Number: SHA-AoC-230020

Ratings & Principle Characteristics:

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/Lead-acid			
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
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
Power factor	1.0			
Others				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (°C)	-25℃ to +60℃ (Derating 45℃)			
Inverter Isolation	Non-isolated (PV-AC-BAT)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			
Firmware	1.01			

This Attestation 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 Attestation. Only the Client is authorized to permit copying or distribution of this Attestation.. The observations and test/inspection results referenced in this Attestation are relevant only to the sample tested/inspected. This Attestation by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program. This Attestation is not accredited under a ISO IEC 17065 accreditation.

APPENDIX: Attestation of Conformity

This is an Appendix to Attestation of Conformity Number: SHA-AoC-230020

Ratings & Principle Characteristics:

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
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)	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 (stand alone)					
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				
Others					
Ingress protection (IP)	IP65				
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)				
Firmware	1.01				

This Attestation 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 Attestation. Only the Client is authorized to permit copying or distribution of this Attestation.. The observations and test/inspection results referenced in this Attestation are relevant only to the sample tested/inspected. This Attestation by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program. This Attestation is not accredited under a ISO IEC 17065 accreditation.