

# Test Verification of Conformity

Verification Number: 210901901SHA-V1

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. 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. Build No.7, 333 Wanfang Road, Minhang District, Shanghai 201112, China
Product Description:	Hybird Inverter (Grid support Utility Interactive Inverter, Non-Isolated)
Ratings & Principle Characteristics:	See appendix for details
Models/Type References:	AF followed by 3K, 3.6K, 4K, 4.6K, 5K, 5.5K, 6K, 7K, 7.6K, 8K, 8.6K or 9.6K; followed by -DH.
Brand Name:	Afore
Relevant Standards:	CFR 47 Part 15 (2020) ANSI C63.4 (2014)
Verification Issuing Office Name & Address:	Intertek Testing Services Shanghai Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
Date of test:	2021-07-09 to 2021-07-11
Test Report Number(s):	210901901SHA-001

  
**Signature**

**Name: Max Jin**  
**Position: General Manager**  
**Date: 2022-11-30**

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## APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 210901901SHA-V1.

Manufacturing Site Name &  
Address:

Afore New Energy Technology (Shanghai) Co., Ltd.  
Build No.7, 333 Wanfang Road, Minhang District, Shanghai 201112, China



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Specifications table				
Model	AF3K-DH	AF3.6K-DH	AF4K-DH	AF4.6K-DH
<b>PV input</b>				
P pv Max(kW)	4.5	5.4	6	6.9
Vmax PV (Vdc) (absolute Max.)	600	600	600	600
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)	15.5 x 2	15.5 x 2	15.5 x 2	15.5 x 2
MPPT voltage range (Vdc)	80-550	80-550	80-550	80-550
Vdc range @ full power (Vdc)	110-550	135-550	150-550	170-550
<b>Battery (charge/discharge)</b>				
Battery type	Li-ion/Lead-acid			
Battery Norma Voltage (Range) (Vdc)	80-495 (Field adapt battery voltage range)			
Max charge/discharge Current(A)	50	50	50	50
Max charge/discharge Power(kW)	4.5	5.4	6	6.9
<b>AC Grid (input and output)</b>				
Normal AC Voltage (VAC)	240/208 1Φ3W (split-phase)			
Frequency (Hz)	60			
Max. cont. input/output current (A) (240V/208V)	15.0	17.5	19.5	22.5
Normal Power (kW)	3	3.6	4	4.6
Max. cont. input/output Power (kW)	3	3.6	4	4.6
Max. cont. Apparent Power (kVA)	3	3.6	4	4.6
Power factor(adjustable)	1.0(-0.8~ +0.8)			
<b>Gen input and Stand alone (Backup AC output)</b>				
Normal Voltage (L-L) (VAC)	240/208			
Normal Voltage (L-O) (VAC)	120/104			
Frequency (Hz)	60			
Nominal Current(A) (240V/208V)	12.5/14.5	15/17.4	17/19.3	19.5/22.2
Max. cont. Power (kW)	3	3.6	4	4.6
Max. cont. Apparent Power (kVA)	3	3.6	4	4.6
S backup Peak (kVA) -10 min	4.5	5.4	6	6.9
Power factor	1.0			
<b>Others</b>				
Ingress protection (IP)	NEMA 4X			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated (PV- battery- AC)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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<b>Specifications table</b>				
<b>Model</b>	AF5K-DH	AF5.5K-DH	AF6K-DH	AF7K-DH
<b>PV input</b>				
P pv Max(kW)	7.5	8.3	9	10.5
Vmax PV (Vdc) (absolute Max.)	600	600	600	600
Isc PV (absolute Max.) (A)	26 x 2	26 x 2	26 x 2	26 x 3
Number MPP trackers	2	2	2	3
Number input strings	1/1	1/1	1/1	1/1/1
Max. PV input current / strings (A)	15.5 x 2	15.5 x 2	15.5 x 2	15.5 x 3
MPPT voltage range (Vdc)	80-550	80-550	80-550	80-550
Vdc range @ full power (Vdc)	185-550	200-550	220-550	170-550
<b>Battery (charge/discharge)</b>				
Battery type	Li-ion/Lead-acid			
Battery Norma Voltage (Range) (Vdc)	80-495 (Field adapt battery voltage range)			
Max charge/discharge Current(A)	50	50	50	50
Max charge/discharge Power(kW)	7.5	8.3	9	10.5/10.3
<b>AC Grid (input and output)</b>				
Normal AC Voltage (VAC)	240/208 1Φ3W (split-phase)			
Frequency (Hz)	60			
Max. cont. input/output current (A) (240V/208V)	24.5	27.0	29.0	34.0
Normal Power (kW)	5	5.5	6	7
Max. cont. input/output Power (kW)	5	5.5	6	7
Max. cont. Apparent Power (kVA)	5	5.5	6	7
Power factor(adjustable)	1.0( -0.8~ +0.8)			
<b>Gen input and Stand alone (Backup AC output)</b>				
Normal Voltage (L-L) (VAC)	240/208			
Normal Voltage (L-O) (VAC)	120/104			
Frequency (Hz)	60			
Nominal Current(A) (240V/208V)	20.9/24.1	23/26.5	25/28.9	29.2/33.7
Max. cont. Power (kW)	5	5.5	6	7
Max. cont. Apparent Power (kVA)	5	5.5	6	7
S backup Peak (kVA) -10 min (240V/208V)	7.5	8.3	9	10.5/10.3
Power factor	1.0			
<b>Others</b>				
Ingress protection (IP)	NEMA 4X			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated (PV- battery- AC)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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Specifications table				
Model	AF7.6K-DH	AF8K-DH	AF8.6K-DH	AF9.6K-DH
<b>PV input</b>				
P pv Max(kW)	11.4	12	12.9	15
Vmax PV (Vdc) (absolute Max.)	600	600	600	600
Isc PV (absolute Max.) (A)	26 x 3	26 x 3	26 x 3	26 x 3
Number MPP trackers	3	3	3	3
Number input strings	1/1/1	1/1/1	1/1/1	1/1/1
Max. PV input current / strings (A)	15.5 x 3	15.5 x 3	15.5 x 3	15.5 x 3
MPPT voltage range (Vdc)	80-550	80-550	80-550	80-550
Vdc range @ full power (Vdc)	185-550	195-550	210-550	235-550
<b>Battery (charge/discharge)</b>				
Battery type	Li-ion/Lead-acid			
Battery Norma Voltage (Range) (Vdc)	80-495 (Field adapt battery voltage range)			
Max charge/discharge Current(A)	50	50	50	50
Max charge/discharge Power(kW)	11.4/10.3	11.5/10.3	11.5/10.3	11.5/10.3
<b>AC Grid (input and output)</b>				
Normal AC Voltage (VAC)	240/208 1Φ3W (split-phase)			
Frequency (Hz)	60			
Max. cont. input/output current (A) (240V/208V)	37.0	39.0	41.5	46.5
Normal Power (kW)	7.6	8	8.6	9.6
Max. cont. input/output Power (kW)	7.6	8	8.6	9.6
Max. cont. Apparent Power (kVA)	7.6	8	8.6	9.6
Power factor(adjustable)	1.0( -0.8~ +0.8)			
<b>Gen input and Stand alone (Backup AC output)</b>				
Normal Voltage (L-L) (VAC)	240/208			
Normal Voltage (L-O) (VAC)	120/104			
Frequency (Hz)	60			
Nominal Current(A) (240V/208V)	31.7/36.6	33.4/38.5	35.9/41.4	40.0/46.2
Max. cont. Power (kW)	7.6	8	8.6	9.6
Max. cont. Apparent Power (kVA)	7.6	8	8.6	9.6
S backup Peak (kVA) -10 min (240V/208V)	11.4/10.3	11.5/10.3	11.5/10.3	11.5/10.3
Power factor	1.0			
<b>Others</b>				
Ingress protection (IP)	NEMA 4X			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated (PV- battery- AC)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			

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