

Test Verification of Conformity

Verification Number: 2503B0871SHA-V1

On the basis of the tests undertaken, the sample<s> of the below product has been tested by an accredited 3rd party laboratory in accordance to 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. Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China. 201112
Product Description:	Utility Interactive Inverter(Non-Isolated Inverter)
Ratings & Principle Characteristics:	See Appendix
Models/Type References:	BNT followed by 017, 020, 025, 030 or 036; followed by KTA. BNT followed by 030, 036, 040, 050 or 060; followed by KTB.
Brand Name:	Afore
Relevant Standards/Directives:	47CFR Part 15 (2023) ANSI C63.4 (2014) +A1 (2017)
Verification Issuing Office Name & Address:	Intertek Testing Services (Shanghai FTZ) Co., Ltd. Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
Date of Tests:	2023-06-28 to 2023-07-17
Test Report Number(s):	2503B0871SHA-001


Signature

Name: Max Jin

Position: General Manager

Date: 2025-04-08

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APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 2503B0871SHA-V1

Specifications table					
Model	BNT030KTB	BNT036KTB	BNT040KTB	BNT050KTB	BNT060KTB
PV input					
P _{pv} Max(kW)	45	54	60	75	90
V _{max} PV (Vdc) (absolute Max.)	1100	1100	1100	1100	1100
I _{sc} PV (absolute Max.) (A)	48 x 2	48 x 3	48 x 3	48 x 3	48 x 4
Number MPP trackers	2	3	3	3	4
Number input strings	2/3	2/2/2	2/2/2	2/2/3	2/2/2/2
Max. PV input current / strings (A)	38 x 2	38 x 3	38 x 3	40 x 3	38 x 4
MPPT voltage range (Vdc)	200-1000	200-1000	200-1000	200-1000	200-1000
Vdc range @ full power (Vdc)	500-850	500-850	500-850	500-850	500-850
AC Grid (output)					
Normal AC Voltage (V _{AC})	3P+N+PE/3P+PE, 277/480				
Frequency (Hz)	60				
Normal AC Current (A)	36.2	43.4	48.2	60.2	72.3
Max. cont. output current (A)	40	48	54	67	80
Normal Power (kW)	30	36	40	50	60
Rated Apparent Power (kVA)	30	36	40	50	60
Max. cont. Power (kW)	30	36	40	50	60
Max. cont. Apparent Power (kVA)	30	36	40	50	60
Power factor(adjustable)	1.0(-0.8~ +0.8)				
Others					
Protective class	Class I				
Ingress protection (IP)	NEMA 4X				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated				
Overvoltage category	OVC III (AC Main), OVC II (PV)				

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Specifications table					
Model	BNT017KTA	BNT020KTA	BNT025KTA	BNT030KTA	BNT036KTA
PV input					
P _{pv} Max(kW)	25.5	30	37.5	45	54
V _{max} PV (Vdc) (absolute Max.)	750	750	750	750	750
I _{sc} PV (absolute Max.) (A)	48x2	48x3	48x3	48x4	48x4
Number MPP trackers	2	3	3	4	4
Number input strings	2/3	2/2/2	2/2/3	2/2/2/2	2/2/2/2
Max. PV input current / strings (A)	38x2	38x3	40x3	38x4	38x4
MPPT voltage range (Vdc)	200-700	200-700	200-700	200-700	200-700
Vdc range @ full power (Vdc)	310-600	320-600	300-600	300-600	300-600
AC Grid (output)					
Normal AC Voltage (V _{AC})	3P+PE/3P, 127/220				
Frequency (Hz)	50 / 60				
Normal AC Current (A)	44.7	52.5	65.7	78.8	94.5
Max. cont. output current (A)	48	60	80	96	96
Normal Power (kW)	17	20	25	30	36
Rated Apparent Power (kVA)	17	20	25	30	36
Max. cont. Power (kW)	17	20	25	30	36
Max. cont. Apparent Power (kVA)	17	20	25	30	36
Power factor(adjustable)	1.0(-0.8~ +0.8)				
Others					
Protective class	Class I				
Ingress protection (IP)	NEMA 4X				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated				
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