



## Dichiarazione di Conformita' CEI-021

1. Tipologia di apparecchiatura cui si riferisce la dichiarazione												
Costruttore:	Afore New Energy Technology (Shanghai) Co., Ltd. Building 7, No.333 Wanfang Rd, Minhang District, Shanghai, China											
Tipo apparecchiatura:	DISPOSITIVO DI INTERFACCIA			PROTEZIONE DI INTERFACCIA			DISPOSITIVO DI CONVERSIONE STATICA			DISPOSITIVO DI GENERAZIONE ROTANTE		
	SI			SI			SI			NO		
Modello:	AF1K-SL-1 AF1K-SL-0	AF1.5K-SL-1 AF1.5K-SL-0	AF2K-SL-1 AF2K-SL-0	AF2.5K-SL-1 AF2.5K-SL-0	AF3K-SL-1 AF3K-SL-0 AF3K-SL	AF3.6K-SL-1 AF3.6K-SL AF3.6K-SL-0	AF4K-SL AF4K-SL-0	AF4.6K-SL AF4.6K-SL-0	AF5K-SL AF5K-SL-0	AF5.5K-SL AF5.5K-SL-0	AF6K-SL AF6K-SL-0	
Potenza attiva nominale:	1000 W	1500 W	2000 W	2500 W	3000 W	3600 W	4000 W	4600 W	5000 W	5500 W	6000 W	
Versione FW non inferiore a:	V06											
Numero di fasi:	L/N/PE (monofase)											
Nota:	Il dispositivo è in grado di limitare la I <sub>dc</sub> allo 0,5% della corrente nominale.											

2. Sistemi d'accumulo associabili	
Costruttore Modulo Batteria:	Shenzhen Lithium Valley Technology Co., Ltd.
Modello Modulo Batteria:	LV-BAT-W10.24Ac, LV-BAT-W10.24Aa
Tensione Nominale:	51.2V
Numero di Moduli Installabili:	16
CUS (Capacita' Nominale):	10.24KWh
PSN (Potenza di Scarica Nominale):	5120W
PCN (Potenza di Carica Nominale):	5120W
PSmax (Massima Potenza di Scarica):	10240W
PCmax (Massima Potenza di Carica):	10240W



Afore New Energy Technology (Shanghai) Co., Ltd  
Building 7, No.333 Wanfang Rd, Minhang District, Shanghai, China  
Phone: +86-21-54326236 Fax: +86-21-54326136 Email: info@aforeenergy.com

Tecnologia:	elettrochimica al Litio (Lithium-ion)
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### 3. Riferimenti del laboratorio che ha eseguito le prove e dei relativi fascicoli di prova:

Fascicolo di prova n.:	6182549.02COC
Emesso da:	DEKRA Testing and Certification (Suzhou) Co., Ltd. No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Accreditamento:	L5313 (CNAS-ILAC)

### 4. Dichiarazione di conformità alle prescrizioni CEI-021

Con la presente dichiarazione, resa ai sensi degli artt. 46 e 47 DPR 28 dicembre 2000, n. 445, consapevole delle responsabilità e delle sanzioni penali previste dall'art. 76 del citato DPR per false attestazioni e dichiarazioni mendaci, il sottoscritto **Xinghe Chen**, in qualità di legale rappresentante della società Afore New Energy Technology (Shanghai) Co., Ltd. con sede in Building 7, No.333 Wanfang Rd, Minhang District, Shanghai, China, con P.IVA **91310000561932991K**, iscritta al registro delle imprese della pretura di **None** (Cina) con numero di registrazione **00000000202009040020**.

#### DICHIARA

che gli inverter di propria costruzione di cui al precedente punto 1, sono conformi alle prescrizioni contenute nelle Norme CEI 0-21:2022-03.

Shanghai, 19/10/2023

**Afore New Energy Technology (Shanghai) Co., Ltd.**  
Xinghe Chen



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**Informativa ai sensi dell'art.13 D. Lgs. 196/2003:** i dati sopra riportati sono previsti dalle disposizioni vigenti ai fini del procedimento amministrativo per il quale sono richiesti e verranno utilizzati solo per tale scopo.



# CERTIFICATE OF CONFORMITY

## CERTIFICATO DI CONFORMITÀ

Issued to: Afore New Energy Technology (Shanghai) Co., Ltd.  
Rilasciato a: Building 7, No.333 Wanfang Rd, Minhang District, Shanghai, China

For the product: Hybrid Inverter  
Tipo prodotto:

Trade name:  
Marchio:

  
**Afore**

Type/Model: AF1K-SL-1, AF1.5K-SL-1, AF2K-SL-1, AF2.5K-SL-1, AF3K-SL-1, AF3.6K-SL-1,  
Riferimento modello: AF3K-SL, AF3.6K-SL, AF4K-SL, AF4.6K-SL, AF5K-SL, AF5.5K-SL, AF6K-SL,  
AF4K-SLP, AF4.6K-SLP, AF5K-SLP, AF5.5K-SLP, AF6K-SLP,  
AF1K-SL-0, AF1.5K-SL-0, AF2K-SL-0, AF2.5K-SL-0, AF3K-SL-0, AF3.6K-SL-0,  
AF4K-SL-0, AF4.6K-SL-0, AF5K-SL-0, AF5.5K-SL-0, AF6K-SL-0

Ratings: See Annex  
Dati di targa:

Manufactured by: Afore New Energy Technology (Shanghai) Co., Ltd.  
Costruttore: Building 7, No.333 Wanfang Rd, Minhang District, Shanghai, China

Requirements: CEI 0-21:2022-03  
Requisiti: *Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti BT delle imprese distributrici di energia elettrica*

The tested models are suitable for installation in systems with a total power greater than 11.08 kW.  
*I modelli testati sono adatti per l'installazione in sistemi con potenza di uscita maggiore di 11.08 kW.*  
This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 6182549.51  
*Il presente certificato è rilasciato a causa di un esame da parte di DEKRA, i cui risultati sono riportati in un file riservato n. 6182549.51*

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The certificate does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.  
*Il sottoscritto dichiara che il prodotto di cui sopra è conforme ai requisiti tecnici menzionati. Questo attestato di conformità è rilasciato sulla base dei risultati di prova riferiti nel rapporto sopra menzionato.*  
*La valutazione non include una verifica della produzione di serie né del luogo di produzione.*  
This Test Certificate expires at the latest on 2029-04-12 or expires upon withdrawal of one of the above mentioned standards.  
*Il presente certificato di prova scade al più tardi il 2029-04-12 o scade al momento del ritiro di uno dei suddetti standard.*

Shanghai, 12 April 2024

Certificate Number: 6182549.02COC

DEKRA Testing and Certification (Shanghai) Ltd.



Cliff Lin  
Certification Manager

© Integral publication of this certificate and adjoining reports is allowed

Accreditation of the certification body by IAS according to ISO/IEC 17065 for products.  
Accreditation is valid in the areas of certification mentioned in the certificate.

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Document no. : 6182549.02COC

## Ratings of the testing Hybrid Inverter:

Valutazioni dell'invertitore ibrido di prova:

Models	AF1K-SL-1	AF1.5K-SL-1	AF2K-SL-1	AF2.5K-SL-1	AF3K-SL-1	AF3.6K-SL-1
<b>PV input:</b>						
Max PV voltage (V)	550					
MPPT voltage range (V)	80-500					
Max PV current (A)	18.5					
Isc PV (A)	26					
Max PV power (W)	1500	2300	3000	3800	4500	5400
<b>Battery port:</b>						
Battery type	Rechargeable Li-ion Battery/ LiFePO4/ Lead-acid					
Battery normal voltage (range) (Vdc)	51.2 (40-60)					
Max charge/discharge current (A)	25	40	50	63	80	80
Max charge/discharge power (W)	1000	1500	2000	2500	3000	3600
<b>AC grid (input and output):</b>						
Rated voltage (V)	L/N/PE, 230Vac					
Rated frequency (Hz)	50					
Max AC current (A)	5	7	10	12	14	17
Rated AC power (W)	1000	1500	2000	2500	3000	3600
Max AC apparent power (VA)	1000	1500	2000	2500	3000	3600
Power factor range	1.0 (-0.8 ~ +0.8 adjustable)					
<b>AC load output (stand alone):</b>						
Rated voltage (V)	L/N/PE, 230Vac					
Rated frequency (Hz)	50					
Max AC current (A)	5	7	10	12	14	17
Rated continuous AC power (W)	1000	1500	2000	2500	3000	3600
Max continuous AC apparent power (VA)	1000	1500	2000	2500	3000	3600
<b>General:</b>						
Protection class	I					
Degree of protection	IP65					
Overvoltage category	II(DC), III(AC)					
Ambient temperature	-25...+60°C (Derating > 45°C)					

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Models	AF3K-SL	AF3.6K-SL	AF4K-SL	AF4.6K-SL	AF5K-SL	AF5.5K-SL	AF6K-SL
<b>PV input:</b>							
Max PV voltage (V)	550						
MPPT voltage range (V)	80-500						
Max PV current (A)	18.5 x 2						
Isc PV (A)	26 x 2						
Max PV power (W)	4500	5400	6000	6900	7500	8300	9000
<b>Battery port:</b>							
Battery type	Rechargeable Li-ion Battery/ LiFePO4/ Lead-acid						
Battery normal voltage (range) (Vdc)	51.2 (40-60)						
Max charge/ discharge current (A)	80						
Max charge/ discharge power (W)	3000	3600	4000	4600	4800	4800	4800
<b>AC grid (input and output):</b>							
Rated voltage (V)	L/N/PE, 230Vac						
Rated frequency (Hz)	50						
Max AC current (A)	14	17	19	22	23	26	28
Rated AC power (W)	3000	3600	4000	4600	5000	5500	6000
Max AC apparent power (VA)	3000	3600	4000	4600	5000	5500	6000
Power factor range	1.0 (-0.8 ~ +0.8 adjustable)						
<b>AC load output (stand alone):</b>							
Rated voltage (V)	L/N/PE, 230Vac						
Rated frequency (Hz)	50						
Max AC current (A)	14	17	19	22	23	26	28
Rated continuous AC power (W)	3000	3600	4000	4600	5000	5500	6000
Max continuous AC apparent power (VA)	3000	3600	4000	4600	5000	5500	6000
<b>General:</b>							
Protection class	I						
Degree of protection	IP65						
Overvoltage category	II(DC), III(AC)						
Ambient temperature	-25...+60°C (Derating > 45°C)						

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Models	AF4K-SLP	AF4.6K-SLP	AF5K-SLP	AF5.5K-SLP	AF6K-SLP
<b>PV input:</b>					
Max PV voltage (V)	550				
MPPT voltage range (V)	80-500				
Max PV current (A)	18.5 x 2				
Isc PV (A)	26 x 2				
Max PV power (W)	6000	6900	7500	8300	9000
<b>Battery port:</b>					
Battery type	Rechargeable Li-ion Battery/ LiFePO4/ Lead-acid				
Battery normal voltage (range) (Vdc)	51.2 (40-60)				
Max charge/discharge current (A)	120				
Max charge/discharge power (W)	4000	4600	5000	5500	6000
<b>AC grid (input and output):</b>					
Rated voltage (V)	L/N/PE, 230Vac				
Rated frequency (Hz)	50				
Max AC current (A)	19	22	23	26	28
Rated AC power (W)	4000	4600	5000	5500	6000
Max AC apparent power (VA)	4000	4600	5000	5500	6000
Power factor range	1.0 (-0.8~ +0.8 adjustable)				
<b>AC load output (stand alone):</b>					
Rated voltage (V)	L/N/PE, 230Vac				
Rated frequency (Hz)	50				
Max AC current (A)	19	22	23	26	28
Rated continuous AC power (W)	4000	4600	5000	5500	6000
Max continuous AC apparent power (VA)	4000	4600	5000	5500	6000
<b>General:</b>					
Protection class	I				
Degree of protection	IP65				
Overvoltage category	II(DC), III(AC)				
Ambient temperature	-25...+60°C (Derating > 45°C)				



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Models	AF1K-SL-0	AF1.5K-SL-0	AF2K-SL-0	AF2.5K-SL-0	AF3K-SL-0	AF3.6K-SL-0
<b>Battery port:</b>						
Battery type	Rechargeable Li-ion Battery/ LiFePO4/ Lead-acid					
Battery normal voltage (range) (Vdc)	51.2 (40-60)					
Max charge/ discharge current (A)	25	40	50	63	80	80
Max charge/ discharge power (W)	1000	1500	2000	2500	3000	3600
<b>AC grid (input and output):</b>						
Rated voltage (V)	L/N/PE, 230Vac					
Rated frequency (Hz)	50					
Max AC current (A)	5	7	10	12	14	17
Rated AC power (W)	1000	1500	2000	2500	3000	3600
Max AC apparent power (VA)	1000	1500	2000	2500	3000	3600
Power factor range	1.0 (-0.8 ~ +0.8 adjustable)					
<b>AC load output (stand alone):</b>						
Rated voltage (V)	L/N/PE, 230Vac					
Rated frequency (Hz)	50					
Max AC current (A)	5	7	10	12	14	17
Rated continuous AC power (W)	1000	1500	2000	2500	3000	3600
Max continuous AC apparent power (VA)	1000	1500	2000	2500	3000	3600
<b>General:</b>						
Protection class	I					
Degree of protection	IP65					
Overvoltage category	II(DC), III(AC)					
Ambient temperature	-25...+60°C (Derating > 45°C)					

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Models	AF4K-SL-0	AF4.6K-SL-0	AF5K-SL-0	AF5.5K-SL-0	AF6K-SL-0
<b>Battery port:</b>					
Battery type	Rechargeable Li-ion Battery/ LiFePO4/ Lead-acid				
Battery normal voltage (range) (Vdc)	51.2 (40-60)				
Max charge/discharge current (A)	120	120	120	120	120
Max charge/discharge power (W)	4000	4600	5000	5500	6000
<b>AC grid (input and output):</b>					
Rated voltage (V)	L/N/PE, 230Vac				
Rated frequency (Hz)	50				
Max AC current (A)	19	22	23	26	28
Rated AC power (W)	4000	4600	5000	5500	6000
Max AC apparent power (VA)	4000	4600	5000	5500	6000
Power factor range	1.0 (-0.8 ~ +0.8 adjustable)				
<b>AC load output (stand alone):</b>					
Rated voltage (V)	L/N/PE, 230Vac				
Rated frequency (Hz)	50				
Max AC current (A)	19	22	23	26	28
Rated continuous AC power (W)	4000	4600	5000	5500	6000
Max continuous AC apparent power (VA)	4000	4600	5000	5500	6000
<b>General:</b>					
Protection class	I				
Degree of protection	IP65				
Overvoltage category	II(DC), III(AC)				
Ambient temperature	-25...+60°C (Derating > 45°C)				

Type of generating unit:

*Tipologia di apparato:*

Static Conversion Device <i>Dispositivo di conversione statica</i>	Interface Protection <i>Protezione di interfaccia</i>	Interface Protection Device <i>Dispositivo di interfaccia</i>	Rotating Generator Device <i>Dispositivo di generazione rotante</i>
Yes/Sì	Yes/Sì	Yes/Sì	No

REMARK: the device is capable to limit the  $I_{dc}$  to 0,5% of the nominal current

NOTA: Il dispositivo è in grado di limitare la  $I_{dc}$  allo 0,5% della corrente nominale

Hardware version: 1.01

Versione hardware: 1.01

Firmware release (SW): V02

Revisione firmware (SW): V02

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**The battery used for testing with the Hybrid Inverter covered by this certificate:**

*La batteria utilizzata per i test con l'invertitore ibrido coperto dal presente certificato:*

Battery Models	LV-BAT-W10.24Ac, LV-BAT-W10.24Aa			
Manufacturer	Shenzhen Lithium Valley Technology Co., Ltd.			
Number of battery module in parallel	1	2	3	4
Nominal Voltage	51.2 V			
Nominal capacity	200 Ah	400 Ah	600 Ah	800 Ah
Battery System Capacity	10.24 kWh	20.48 kWh	30.72 kWh	40.96 kWh
Number of battery module in parallel	5	6	7	8
Nominal Voltage	51.2 V			
Nominal capacity	1000 Ah	1200 Ah	1400 Ah	1600 Ah
Battery System Capacity	51.20 kWh	61.44 kWh	71.68 kWh	81.92 kWh
Number of battery module in parallel	9	10	11	12
Nominal Voltage	51.2 V			
Nominal capacity	1800 Ah	2000 Ah	2200 Ah	2400 Ah
Battery System Capacity	92.16 kWh	102.40 kWh	112.64 kWh	122.88 kWh
Number of battery module in parallel	13	14	15	16
Nominal Voltage	51.2 V			
Nominal capacity	2600 Ah	2800 Ah	3000 Ah	-
Battery System Capacity	133.12 kWh	143.36 kWh	153.60 kWh	-
Remark:	<p>The CB test certificate No. of the battery: SE-111160M1                      When the batteries are connected in parallel, the charge/ discharge current is superimposed and is limited by the maximum current of the battery port of the Hybrid Inverter.                      The parameters of LV-BAT-W10.24Ac and LV-BAT-W10.24Aa are the same.                      The batteries are not integrated into the Hybrid Inverter and must be installed according to the local regulations.</p>			

**Testing Laboratory:**

**Laboratorio prove:**

Testing Laboratory for CEI 0-21:2022-03  
 DEKRA Testing and Certification (Suzhou) Co., Ltd.  
 No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China  
 Accreditation Number: L5313 (CNAS-ILAC)

Testing Laboratory for EMC:

1. Intertek Testing Services Shanghai  
 Building No.86, 1198 Qinzhou Road (North), Caohejing Development Zone, Shanghai 200233, China  
 Accreditation Number: 3309.02 (A2LA-ILAC)
2. Shanghai Inspection and Testing Institute of Instruments and Automation Systems Co., Ltd.  
 No.103, Caobao Road, Xuhui District, Shanghai, China  
 Accreditation Number: L0130 (CNAS-ILAC)

--- End ---