

## DICHIARAZIONE DI CONFORMITÀ ALLE PRESCRIZIONI CEI 0-21:2019-04

### DECLARATION OF CONFORMITY WITH CEI REQUIREMENTS 0-21:2019-04

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 Chen Wei in qualità di vicepresidente della società Afore New Energy Technology (Shanghai) Co., Ltd. con sede a Building 7, NO.333 Wanfang Road, Minhang District, Shanghai, China

*With this declaration, made pursuant to articles 46 and 47 of Presidential Decree 28 December 2000, n. 445, aware of the responsibilities and penal sanctions provided for by art. 76 of the aforementioned Presidential Decree for false claims and misleading statements, the undersigned Chen Wei as Vice President of the company Afore New Energy Technology (Shanghai) Co., Ltd. based in Building 7, NO.333 Wanfang Road, Minhang District, Shanghai, China*

#### DICHIARA

#### DECLARES

che gli inverter di propria costruzione di cui al nella relazione allegata sono conformi alle prescrizioni della norma CEI 0-21:2019-04. Attesta altresì che la produzione dei dispositivi avviene in regime di qualità (secondo ISO 9001, ed. 2000 e s.m.i.)

*that the inverters of its own construction referred to in the attached report comply with the requirements of the CEI 0-21:2019-04 standard. It also certifies that the production of the devices takes place under a quality regime (according to ISO 9001, ed. 2000 and subsequent amendments)*

Firma

Signature





# CERTIFICATE OF CONFORMITY

## CERTIFICATO DI CONFORMITÀ

Issued to: Afore New Energy Technology (Shanghai) Co., Ltd.  
Rilasciato a: Build No.7, 333 Wanfang Road, 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,  
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: Build No.7, 333 Wanfang Road, 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*

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 6136775.50

*Il presente certificato è rilasciato a causa di un esame da parte di DEKRA, i cui risultati sono riportati in un file riservato n. 6136775.50*

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.

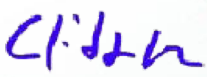
Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

*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.*

Shanghai, 16 December 2022 Certificate Number: 6136775.01COC  
It expires at the latest on: 16 December 2027

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.

DEKRA Testing and Certification (Shanghai) Ltd.  
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Document no. : 6136775.01COC

## 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	Li-ion / 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)					

Document no. : 6136775.01COC

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	Li-ion / 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)						

Document no. : 6136775.01COC

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	Li-ion / 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)					

Document no. : 6136775.01COC

Models	AF4K-SL-0	AF4.6K-SL-0	AF5K-SL-0	AF5.5K-SL-0	AF6K-SL-0
<b>Battery port:</b>					
Battery type	Li-ion / Lead-acid				
Battery normal voltage (range) (Vdc)	51.2 (40-60)				
Max charge/discharge current (A)	80	80	100	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

Firmware release (SW): V06

Revisione firmware (SW): V06

Document no. : 6136775.01COC

**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	E-BOX 48100R	E-BOX 48100R	E-BOX 48100R	E-BOX 48100R
Manufacturer	Shanghai PYTES Energy Co., Ltd.			
Number of battery module in parallel	1	2	3	4
Nominal Voltage	51.2 V			
Nominal capacity	100 Ah	200 Ah	300 Ah	400 Ah
CUS (Storage system useful capacity)	5.12 kWh	10.24 kWh	15.36 kWh	20.48 kWh
Battery Models	E-BOX 48100R	E-BOX 48100R	E-BOX 48100R	E-BOX 48100R
Manufacturer	Shanghai PYTES Energy Co., Ltd.			
Number of battery module in parallel	5	6	7	8
Nominal Voltage	51.2 V			
Nominal capacity	500 Ah	600 Ah	700 Ah	800 Ah
CUS (Storage system useful capacity)	25.60 kWh	30.72 kWh	35.84 kWh	40.96 kWh
<p>Remark:</p> <p>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.</p> <p>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:

- Intertek Testing Services Shanghai  
 Building No.86, 1198 Qinzhou Road (North), Caohejing Development Zone, Shanghai 200233, China  
 Accreditation Number: 3309.02 (A2LA-ILAC)
- 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)

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