

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: On-Grid PV Inverter
Tipo prodotto:

Trade name:
Marchio:



Type/Model: HNS3000TL, HNS3600TL-1, HNS3600TL, HNS4000TL, HNS5000TL
Riferimento modello: HNS6000TL, HNS7000TL, HNS8000TL, HNS9000TL, HNS10000TL

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. 6157903.50
Il presente certificato è rilasciato a causa di un esame da parte di DEKRA, i cui risultati sono riportati in un file riservato n. 6157903.50

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, 26 May 2023
It expires at the latest on: 26 May 2028

Certificate Number: 6157903.01COC

DEKRA Testing and Certification (Shanghai) Ltd.


Cliff Lin
Certification Manager

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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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PCA-141

Document no. : 6157903.01COC

Ratings of the testing On-Grid PV Inverter:

Valutazioni del test On-Grid PV Inverter:

Specifications table					
Model	HNS3000TL	HNS3600TL -1	HNS3600TL	HNS4000TL	HNS5000TL
PV input					
P pv Max(W)	4500	5400	5400	6000	7000
Vmax PV (Vdc) (absolute Max.)	600	600	600	600	600
Isc PV (absolute Max.) (A)	18 x 2	18	18 x 2	18 x 2	18 x 2
Number MPP trackers	2	1	2	2	2
Number input strings	1/1	1	1/1	1/1	1/1
Max. PV input current (A)	14 x 2	14	14 x 2	14 x 2	14 x 2
MPPT voltage range (Vdc)	70-550	70-550	70-550	70-550	70-550
Vdc range @ full power (Vdc)	110-550	265-550	130-550	145-550	180-550
AC Grid (output)					
Normal AC Voltage (VAC)	L/N/PE, 220 Vac, 230 Vac, 240 Vac				
Frequency (Hz)	50 / 60				
Normal AC Current (A)	13.1	15.7	15.7	17.4	21.8
Max. cont. output current (A)	15	17.5	17.5	20	24
Normal Power (W)	3000	3600	3600	4000	5000
Rated Apparent Power (VA)	3000	3600	3600	4000	5000
Max. cont. Power (W)	3000	3600	3600	4000	5000
Max. cont. Apparent Power (VA)	3000	3600	3600	4000	5000
Power factor(adjustable)	1.0(-0.8~ +0.8)				
Others					
Protective class	Class I				
Ingress protection (IP)	IP65				
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	HNS6000TL	HNS7000TL	HNS8000TL	HNS9000TL	HNS10000TL
PV input					
P _{pv} Max(W)	8400	9800	11200	12600	14000
V _{max} PV (Vdc) (absolute Max.)	600	600	600	600	600
I _{sc} PV (absolute Max.) (A)	18 x 2	18+35	18+35	35 x 2	35 x 2
Number MPP trackers	2	2	2	2	2
Number input strings	1/1	1/2	1/2	2/2	2/2
Max. PV input current (A)	14 x 2	14+26	14+26	26 x 2	26 x 2
MPPT voltage range (Vdc)	70-550	70-550	70-550	70-550	70-550
Vdc range @ full power (Vdc)	220-550	220-550	220-550	220-550	220-550
AC Grid (output)					
Normal AC Voltage (VAC)	L/N/PE, 220 Vac, 230 Vac, 240 Vac				
Frequency (Hz)	50 / 60				
Normal AC Current (A)	26.1	30.5	34.8	39.2	43.5
Max. cont. output current (A)	28.7	33.6	38.3	45	50
Normal Power (W)	6000	7000	8000	9000	10000
Rated Apparent Power (VA)	6000	7000	8000	9000	10000
Max. cont. Power (W)	6000	7000	8000	9000	10000
Max. cont. Apparent Power (VA)	6000	7000	8000	9000	10000
Power factor(adjustable)	1.0(-0.8~ +0.8)				
Others					
Protective class	Class I				
Ingress protection (IP)	IP65				
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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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

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)

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