



Product Service

Attestation of Conformity

No. N8A 104339 0041 Rev. 01

Holder of Attestation: **Ningbo Sunways Technologies Co.,Ltd.**

No. 1, Second Road
Green Industrial Zone
Chongshou Town
315334 Cixi, Ningbo, Zhejiang
PEOPLE'S REPUBLIC OF CHINA

Product: **Converter**
HYBRID INVERTER

This Attestation of Conformity is issued on a voluntary basis according to the Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits. It confirms that the listed equipment complies with the principal protection requirements of the directive and is based on the technical specifications applicable at the time of issuance. It refers only to the particular sample submitted for conformity assessment. For details see: www.tuvsud.com/ps-cert

Test report no.: 5040922003113-00

Date, 2023-04-12


(Zhengdong Ma)

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Model(s):

STH-4KTL-HT, STH-5KTL-HT, STH-6KTL-HT,
STH-8KTL-HT, STH-10KTL-HT, STH-12KTL-HT,
STH-4KTL-HT-P, STH-5KTL-HT-P, STH-6KTL-HT-P,
STH-8KTL-HT-P, STH-10KTL-HT-P, STH-12KTL-HT-P.

Parameters:

Please see pages 3 to 7.

**Tested
according to:**

EN 62109-1:2010
EN 62109-2:2011

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Models	STH-4KTL-HT	STH-5KTL-HT	STH-6KTL-HT
PV Port			
D.C. Max. Input Voltage:	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.
D.C. MPPT Voltage Range:	150-850 Vd.c.	150-850 Vd.c.	200-850 Vd.c.
D.C. Max. Input Current:	13/13 Ad.c.	13/13 Ad.c.	13/13 Ad.c.
Isc PV:	18/18 Ad.c.	18/18 Ad.c.	18/18 Ad.c.
Battery Port			
Battery Voltage Range:	140-750 Vd.c.	140-750 Vd.c.	140-750 Vd.c.
Battery Max. Charge/Discharge Current:	25/25 Ad.c.	25/25 Ad.c.	25/25 Ad.c.
Battery Type:	Li-Ion	Li-Ion	Li-Ion
AC Input Port			
AC Input Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
AC Input Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
AC Input Max. Current:	11.6 Aa.c.	14.5 Aa.c.	17.4 Aa.c.
AC Input Max. Apparent Power:	8000 VA	10000 VA	12000 VA
AC Output Port			
A.C. Output Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
A.C. Output Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
A.C. Output Rated Power:	4000 W	5000 W	6000 W
A.C. Output Rated Apparent Power:	4000 VA	5000 VA	6000 VA
A.C. Output Max. Apparent Power:	4400 VA	5500 VA	6600 VA
A.C. Output Rated Current:	5.8 Aa.c.	7.3 Aa.c.	8.7 Aa.c.
A.C. Output Max. Current:	6.7 Aa.c.	8.3 Aa.c.	10 Aa.c.
Power Factor:	0.8leading... 0.8lagging	0.8leading... 0.8lagging	0.8leading... 0.8lagging
Back-up Output Port			
Back-up Output Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
Back-up Output Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
Back-up Output Rated Power:	4000 W	5000 W	6000 W
Back-up Output Rated Apparent Power:	4000 VA	5000 VA	6000 VA
Back-up Output Max. Apparent Power:	4400 VA	5500 VA	6600 VA

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General Data	
Operating Attitude:	3000 m
Protective Class:	I
Ingress Protection:	IP65
Overvoltage Category:	II(DC), III(AC)
Operating Temperature Range:	-30°C ... +60°C
Inverter Topology:	Non-isolated

Models	STH-8KTL-HT	STH-10KTL-HT	STH-12KTL-HT
PV Port			
D.C. Max. Input Voltage:	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.
D.C. MPPT Voltage Range:	200-850 Vd.c.	200-850 Vd.c.	200-850 Vd.c.
D.C. Max. Input Current:	13/13 Ad.c.	13/13 Ad.c.	13/13 Ad.c.
Isc PV:	18/18 Ad.c.	18/18 Ad.c.	18/18 Ad.c.
Battery Port			
Battery Voltage Range:	140-750 Vd.c.	140-750 Vd.c.	140-750 Vd.c.
Battery Max. Charge/Discharge Current:	25/25 Ad.c.	25/25 Ad.c.	25/25 Ad.c.
Battery Type:	Li-Ion	Li-Ion	Li-Ion
AC Input Port			
AC Input Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
AC Input Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
AC Input Max. Current:	23.2 Aa.c.	23.9 Aa.c.	23.9 Aa.c.
AC Input Max. Apparent Power:	16000 VA	16500 VA	16500 VA
AC Output Port			
A.C. Output Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
A.C. Output Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
A.C. Output Rated Power:	8000 W	10000 W	12000 W
A.C. Output Rated Apparent Power:	8000 VA	10000 VA	12000 VA
A.C. Output Max. Apparent Power:	8800 VA	11000 VA	13200 VA
A.C. Output Rated Current:	11.6 Aa.c.	14.5 Aa.c.	17.4 Aa.c.
A.C. Output Max. Current:	13.3 Aa.c.	16.5 Aa.c.	20 Aa.c.
Power Factor:	0.8 leading... 0.8 lagging	0.8 leading... 0.8 lagging	0.8 leading... 0.8 lagging
Back-up Output Port			

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Back-up Output Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
Back-up Output Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
Back-up Output Rated Power:	8000 W	10000 W	12000 W
Back-up Output Rated Apparent Power:	8000 VA	10000 VA	12000 VA
Back-up Output Max. Apparent Power:	8800 VA	11000 VA	13200 VA
General Data			
Operating Attitude:	3000 m		
Protective Class:	I		
Ingress Protection:	IP65		
Overvoltage Category:	II(DC), III(AC)		
Operating Temperature Range:	-30°C ... +60°C		
Inverter Topology:	Non-isolated		

Models	STH-4KTL-HT-P	STH-5KTL-HT-P	STH-6KTL-HT-P
PV Port			
D.C. Max. Input Voltage:	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.
D.C. MPPT Voltage Range:	150-850 Vd.c.	150-850 Vd.c.	200-850 Vd.c.
D.C. Max. Input Current:	16/16 Ad.c.	16/16 Ad.c.	16/16 Ad.c.
Isc PV:	18/18 Ad.c.	18/18 Ad.c.	18/18 Ad.c.
Battery Port			
Battery Voltage Range:	140-750 Vd.c.	140-750 Vd.c.	140-750 Vd.c.
Battery Max. Charge/Discharge Current:	25/25 Ad.c.	25/25 Ad.c.	25/25 Ad.c.
Battery Type:	Li-Ion	Li-Ion	Li-Ion
AC Input Port			
AC Input Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
AC Input Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
AC Input Max. Current:	11.6 Aa.c.	14.5 Aa.c.	17.4 Aa.c.
AC Input Max. Apparent Power:	8000 VA	10000 VA	12000 VA
AC Output Port			
A.C. Output Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
A.C. Output Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
A.C. Output Rated Power:	4000 W	5000 W	6000 W
A.C. Output Rated Apparent Power:	4000 VA	5000 VA	6000 VA
A.C. Output Max. Apparent Power:	4400 VA	5500 VA	6600 VA

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A.C. Output Rated Current:	5.8 Aa.c.	7.3 Aa.c.	8.7 Aa.c.
A.C. Output Max. Current:	6.7 Aa.c.	8.3 Aa.c.	10 Aa.c.
Power Factor:	0.8leading... 0.8lagging	0.8leading... 0.8lagging	0.8leading... 0.8lagging
Back-up Output Port			
Back-up Output Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
Back-up Output Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
Back-up Output Rated Power:	4000 W	5000 W	6000 W
Back-up Output Rated Apparent Power:	4000 VA	5000 VA	6000 VA
Back-up Output Max. Apparent Power:	4400 VA	5500 VA	6600 VA
General Data			
Operating Attitude:	3000 m		
Protective Class:	I		
Ingress Protection:	IP65		
Overvoltage Category:	II(DC), III(AC)		
Operating Temperature Range:	-30°C ... +60°C		
Inverter Topology:	Non-isolated		
Models	STH-8KTL-HT-P	STH-10KTL-HT-P	STH-12KTL-HT-P
PV Port			
D.C. Max. Input Voltage:	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.
D.C. MPPT Voltage Range:	200-850 Vd.c.	200-850 Vd.c.	200-850 Vd.c.
D.C. Max. Input Current:	16/16 Ad.c.	16/16 Ad.c.	16/16 Ad.c.
Isc PV:	18/18 Ad.c.	18/18 Ad.c.	18/18 Ad.c.
Battery Port			
Battery Voltage Range:	140-750 Vd.c.	140-750 Vd.c.	140-750 Vd.c.
Battery Max. Charge/Discharge Current:	25/25 Ad.c.	25/25 Ad.c.	25/25 Ad.c.
Battery Type:	Li-Ion	Li-Ion	Li-Ion
AC Input Port			
AC Input Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
AC Input Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
AC Input Max. Current:	23.2 Aa.c.	23.9 Aa.c.	23.9 Aa.c.
AC Input Max. Apparent Power:	16000 VA	16500 VA	16500 VA
AC Output Port			
A.C. Output Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V

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A.C. Output Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
A.C. Output Rated Power:	8000 W	10000 W	12000 W
A.C. Output Rated Apparent Power:	8000 VA	10000 VA	12000 VA
A.C. Output Max. Apparent Power:	8800 VA	11000 VA	13200 VA
A.C. Output Rated Current:	11.6 Aa.c.	14.5 Aa.c.	17.4 Aa.c.
A.C. Output Max. Current:	13.3 Aa.c.	16.5 Aa.c.	20 Aa.c.
Power Factor:	0.8 leading... 0.8 lagging	0.8 leading... 0.8 lagging	0.8 leading... 0.8 lagging
Back-up Output Port			
Back-up Output Nominal Voltage:	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V	3/N/PE~ 380/400 V
Back-up Output Nominal Frequency:	50/60 Hz	50/60 Hz	50/60 Hz
Back-up Output Rated Power:	8000 W	10000 W	12000 W
Back-up Output Rated Apparent Power:	8000 VA	10000 VA	12000 VA
Back-up Output Max. Apparent Power:	8800 VA	11000 VA	13200 VA
General Data			
Operating Attitude:	3000 m		
Protective Class:	I		
Ingress Protection:	IP65		
Overvoltage Category:	II(DC), III(AC)		
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Inverter Topology:	Non-isolated		

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