



Product Service

CERTIFICATE

No. B 104339 0040 Rev. 01

Holder of Certificate: Ningbo Sunways Technologies Co.,Ltd.
No. 1,Second Road
Green Industrial Zone
Chongshou Town
315334 Cixi,Ningbo,Zhejiang
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product: Converter
HYBRID INVERTER

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 5040922003113-00

Valid until: 2028-04-10

Date, 2023-04-12

(Zhengdong Ma)

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No. B 104339 0040 Rev. 01

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 6.

Tested according to:

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

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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			
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		

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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
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		
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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
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		
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