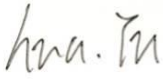


TEST REPORT	
Report Reference No.	: 6052106.51D
Tested by (name + signature)	: Hua Yu 
Approved by (name + signature)	: Jason Guo 
Date of issue	: 2019-08-16
Dates tests performed	: 2019-06-01 to 2019-06-14
Contents / enclosures	: N/A
Testing Laboratory	: DEKRA Testing and Certification (Suzhou) Co., Ltd.
Testing location / address	: No.99, Hongye Road, Suzhou Industrial Park, Suzhou, Jiangsu, P.R. China.
Applicant	: EAST Group Co., Ltd.
Address	: No.6 Northern Industry Road, Songshan Lake Sci. & Tech. Industrial Park, Dongguan City, Guangdong Province, China
Test specification:	
Standards	: IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14, IEC60068-2-30
Test procedure	: <input type="checkbox"/> Basic safety test <input type="checkbox"/> Screen test <input type="checkbox"/> Quick scan <input type="checkbox"/> Basic EMC test <input type="checkbox"/> Flash test <input type="checkbox"/> IP65 <input checked="" type="checkbox"/> Environmental test <input type="checkbox"/> Fitness for use
Test object description	: Grid-connected PV Inverter
Trade Mark	: 
Manufacturer	: EAST Group Co., Ltd.
Address	: No.6 Northern Industry Road, Songshan Lake Sci. & Tech. Industrial Park, Dongguan City, Guangdong Province, China
Model/Type reference	: EA5KTSI, EA6KTSI, EA8KTSI, EA10KTSI, EA13KTSI, EA16KTSI
Ratings	: EA5KTSI: PV input: Max. 1000 Vdc, MPPT voltage range: 120-950 Vdc, max 11A /11 A, Isc PV: 12 A/12 A Output: 230/400 Vac, 3/N/PE, 50 Hz, 5000 VA, max 7.3 A EA6KTSI: PV input: Max. 1000 Vdc, MPPT voltage range: 120-950 Vdc, max 11 A/11 A, Isc PV: 12 A/12 A Output: 230/400 Vac, 3/N/PE, 50 Hz, 6000 VA, max 8.7 A EA8KTSI: PV input: Max. 1000 Vdc, MPPT voltage range: 120-950 Vdc, max 11 A/11 A, Isc PV: 12 A/12 A Output: 230/400 Vac, 3/N/PE, 50 Hz, 8000 VA, max 11.6 A EA10KTSI: PV input: Max. 1000 Vdc, MPPT voltage range: 200-950 Vdc, max 11 A, Isc PV: 12 A/12 A Output: 230/400 Vac, 3/N/PE, 50 Hz, 10000 VA, max 14.5 A



	<p>EA13KTSI: PV input: Max. 1000 Vdc, MPPT voltage range: 200-950 Vdc, max 22 A/11 A, Isc PV: 24 A/12 A Output: 230/400 Vac, 3/N/PE, 50 Hz, 13000 VA, max 18.9 A</p> <p>EA16KTSI: PV input: Max. 1000 Vdc, MPPT voltage range: 200-950 Vdc, max 22 A/11 A, Isc PV: 24 A/12 A Output: 230/400 Vac, 3/N/PE, 50 Hz, 16000 VA, max 23.2 A</p>
Number of test objects	: 1 pcs
Possible test case verdicts:	<ul style="list-style-type: none"> - test case does not apply to the test object : N/A - test object does meet the requirement : P(Pass) - test object does not meet the requirement : F(Fail)
Test program	: The test object has been submitted to a test program as mentioned on the next page.
Summary of test results:	<p>The test had been performed on EA16KTSI are valid for EA13KTSI, EA10KTSI, EA8KTSI, EA6KTSI and EA5KTSI due to they have identical metal enclosure. After test, there was no damage observable outside and inside of the PV inverter and the sample can work normally.</p> <p>According to mentioned standards, the test result is accepted.</p> <p>The test results shown in this report relate only to the tests performed according to the test program. The test object has not been submitted to a full test program.</p> <p style="text-align: center;">© Integral publication of this document is allowed.</p>
Test program:	<p>IEC 60068-2-1:2007-03: Environmental testing – Part 2-1: Tests – Test A: Cold IEC 60068-2-2:2007-07: Environmental testing – Part 2-2: Tests – Test B: Dry heat IEC 60068-2-14:2009-01: Environmental testing – Part 2-14: Tests – Test N: Change of temperature IEC 60068-2-30:2005-08: Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 h + 12 h cycle)</p>
List of Attachments (including a total number of pages in each attachment):	<p>This test report contains 5 parts listed as below:</p> <ul style="list-style-type: none"> - 6052106.51A covering IEC 61683 and pictures (37 pages) - 6052106.51B covering IEC 61727 (35 pages) - 6052106.51C covering IEC 62116 (23 pages) - 6052106.51D covering IEC 60068-2-x (“x” including 1, 2, 14, 30) (7 pages) - 6052106.51E covering IEC 60529 (5 pages)



Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

EAST

PV Inverter	
Model	EA5KTSI
Max.Input Voltage	1000Vd.c.
MPPT Voltage Range	120~950Vd.c.
Max.Input Current	11A/11A
Isc PV	12A/12A
Rated Output Voltage	3/N/PE~230V/400Va.c.
Rated Output Frequency	50/60Hz
Max.Output Current	7.3A
Rated Output Power	5000W
Max. Apparent Power	5000VA
Power Factor Range	0.8 cap.~0.8 ind.
Enclosure	IP65
Overvoltage Category	III(AC), II(DC)
Ambient Temperature	-25°C ~60°C

Protection Class I
EA5KTSI 201903290001

EAST

PV Inverter	
Model	EA6KTSI
Max.Input Voltage	1000Vd.c.
MPPT Voltage Range	120~950Vd.c.
Max.Input Current	11A/11A
Isc PV	12A/12A
Rated Output Voltage	3/N/PE~230V/400Va.c.
Rated Output Frequency	50/60Hz
Max.Output Current	8.7A
Rated Output Power	6000W
Max. Apparent Power	6000VA
Power Factor Range	0.8 cap.~0.8 ind.
Enclosure	IP65
Overvoltage Category	III(AC), II(DC)
Ambient Temperature	-25°C ~60°C

Protection Class I
EA6KTSI 201903290001

EAST

PV Inverter	
Model	EA8KTSI
Max.Input Voltage	1000Vd.c.
MPPT Voltage Range	120~950Vd.c.
Max.Input Current	11A/11A
Isc PV	12A/12A
Rated Output Voltage	3/N/PE~230V/400Va.c.
Rated Output Frequency	50/60Hz
Max.Output Current	11.6A
Rated Output Power	8000W
Max. Apparent Power	8000VA
Power Factor Range	0.8 cap.~0.8 ind.
Enclosure	IP65
Overvoltage Category	III(AC), II(DC)
Ambient Temperature	-25°C ~60°C

Protection Class I
EA8KTSI 201903290001

EAST

PV Inverter	
Model	EA10KTSI
Max.Input Voltage	1000Vd.c.
MPPT Voltage Range	200~950Vd.c.
Max.Input Current	11A/11A
Isc PV	12A/12A
Rated Output Voltage	3/N/PE~230V/400Va.c.
Rated Output Frequency	50/60Hz
Max.Output Current	14.5A
Rated Output Power	10000W
Max. Apparent Power	10000VA
Power Factor Range	0.8 cap.~0.8 ind.
Enclosure	IP65
Overvoltage Category	III(AC), II(DC)
Ambient Temperature	-25°C ~60°C

Protection Class I
EA10KTSI 201903290001

EAST

PV Inverter	
Model	EA13KTSI
Max.Input Voltage	1000Vd.c.
MPPT Voltage Range	200~950Vd.c.
Max.Input Current	22A/11A
Isc PV	24A/12A
Rated Output Voltage	3/N/PE~230V/400Va.c.
Rated Output Frequency	50/60Hz
Max.Output Current	18.9A
Rated Output Power	13000W
Max. Apparent Power	13000VA
Power Factor Range	0.8 cap.~0.8 ind.
Enclosure	IP65
Overvoltage Category	III(AC), II(DC)
Ambient Temperature	-25°C ~60°C

Protection Class I
EA13KTSI 201903290001

EAST

PV Inverter	
Model	EA16KTSI
Max.Input Voltage	1000Vd.c.
MPPT Voltage Range	200~950Vd.c.
Max.Input Current	22A/11A
Isc PV	24A/12A
Rated Output Voltage	3/N/PE~230V/400Va.c.
Rated Output Frequency	50/60Hz
Max.Output Current	23.2A
Rated Output Power	16000W
Max. Apparent Power	16000VA
Power Factor Range	0.8 cap.~0.8 ind.
Enclosure	IP65
Overvoltage Category	III(AC), II(DC)
Ambient Temperature	-25°C ~60°C

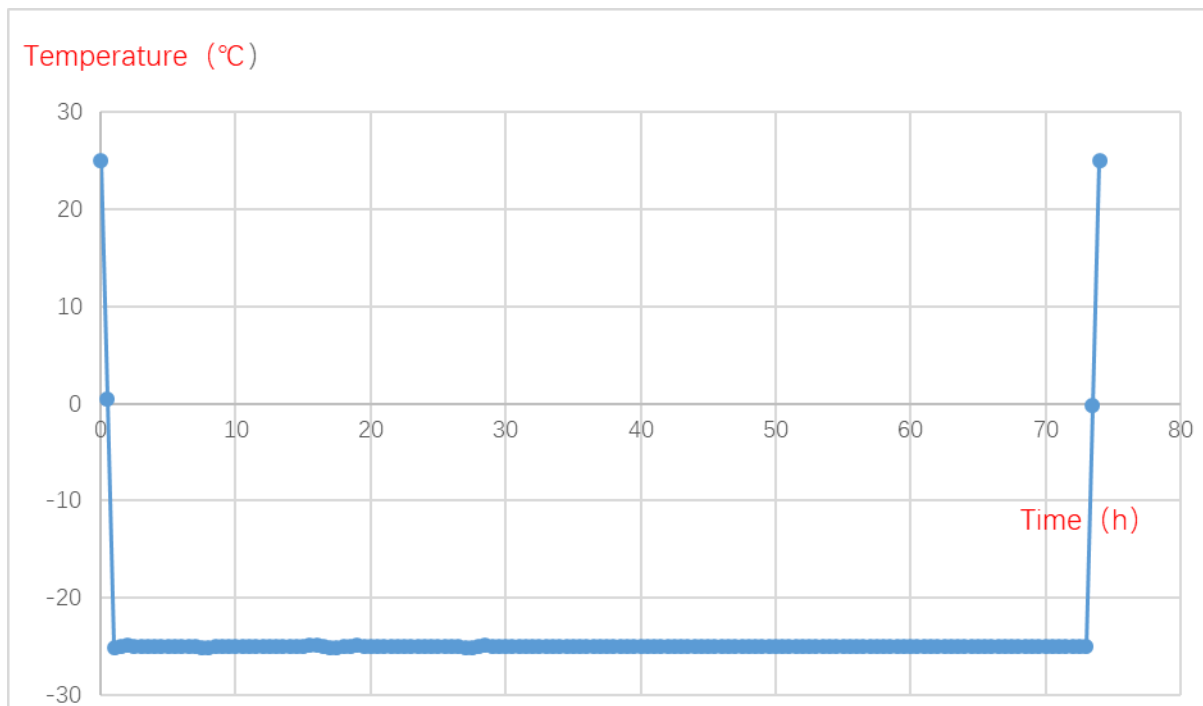
Protection Class I
EA16KTSI 201903290001

DRM label:

DRM0	X	DRM1		DRM2	
DRM3		DRM4		DRM5	X
DRM6	X	DRM7	X	DRM8	X

**Test Results:**

TABLE	IEC 60068-2-1:2007-03: Part 2-1: Test A: Cold	P
Model:	EA16KTSI	
Temperature (°C):	-25 °C	
Test duration (h):	72 h	
Test result:	During and after the test, the specimen was visually inspected and no mechanical damage or functional failure.	

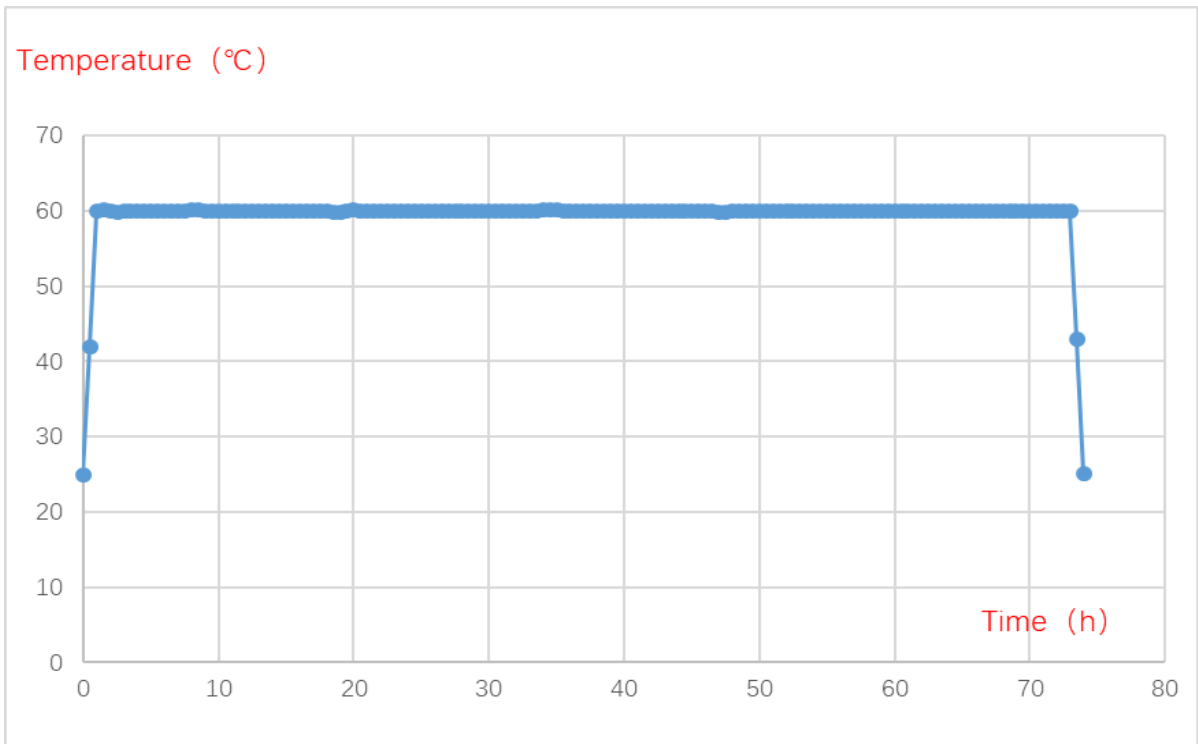
Measurement Temperature Chart**Remark:**

The air temperature in the chamber shall be measured by temperature sensors located at such a distance from the specimen that the effect of the dissipation is negligible.

The specimen shall then remain under standard atmospheric conditions for recovery for a period adequate for the attainment of temperature stability, with a minimum of 1 h.

TABLE	IEC 60068-2-2:2007-07: Part 2-2: Test B: Dry heat	P
Model:	EA16KTSI	
Temperature (°C):	+40 °C	
Test duration (h):	72 h	
Test result:	During and after the test, the specimen was visually inspected and no mechanical damage or functional failure.	

Measurement Temperature Chart



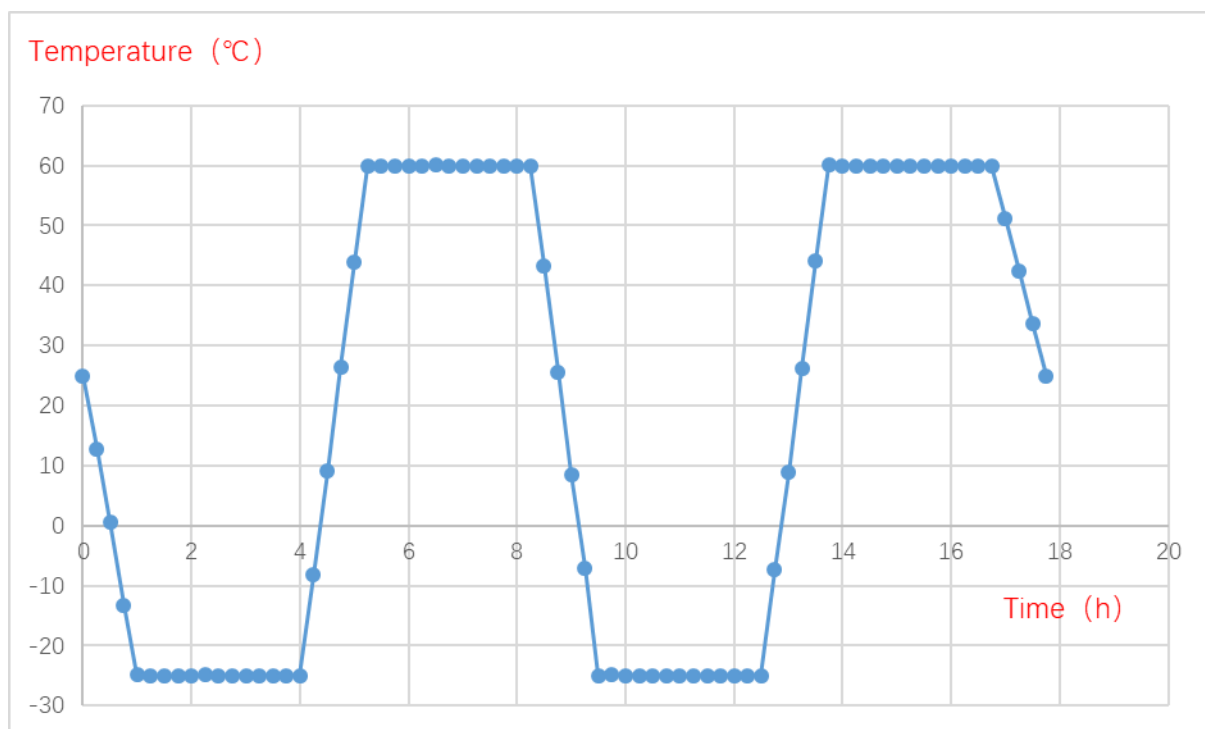
Remark:

The air temperature in the chamber shall be measured by temperature sensors located at such a distance from the specimen that the effect of the dissipation is negligible.
 In steady state conditions, the relative humidity was not exceeding 50 %.
 The specimen shall then remain under standard atmospheric conditions for recovery for a period adequate for the attainment of temperature stability, with a minimum of 1 h.



TABLE	IEC 60068-2-14:2009-01: Part 2-14: Test N: Change of temperature	P
Model:	EA16KTSI	
Temperature T_A (°C):	-25 °C	
Temperature T_B (°C):	+60 °C	
Test duration:	3 h for each steady state	
Number of cycles:	2 cycles	
Test result:	During and after the test, the specimen was visually inspected and no mechanical damage or functional failure.	

Measurement Temperature Chart

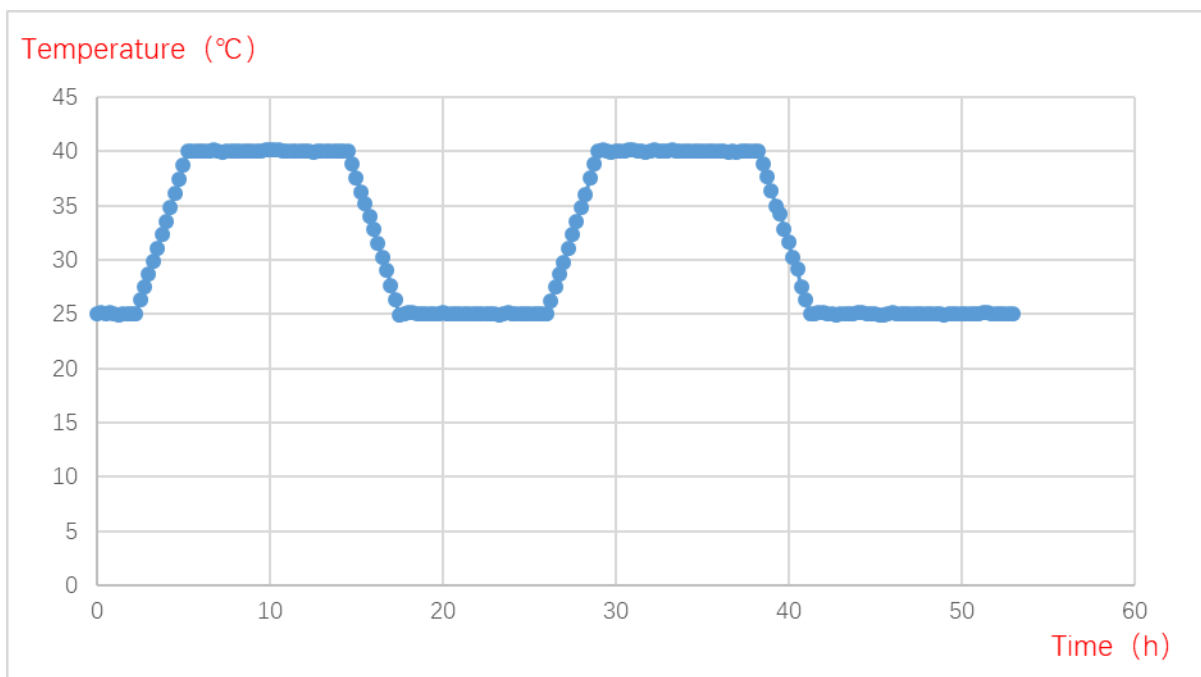


Remark:

The air temperature in the chamber shall be measured by temperature sensors located at such a distance from the specimen that the effect of the dissipation is negligible.

TABLE	IEC 60068-2-30:2005-08: Part 2-30: Test Db: Damp heat, cyclic (12 + 12 h cycle)			p
Model:	EA16KTSI			
Ambient temperature:	+25 °C			
Upper temperature:	+40 °C			
Test cycle:		Temperature (°C)	Humidity (%RH)	Test duration (h)
	1.	(25 ± 2)	(98 ± 2)	/
	2. Ramp	(40 ± 2)	(98 ± 2)	3
	3. Ramp	(40 ± 2)	(93 ± 2)	0.25
	4. Dwell	(40 ± 2)	(93 ± 2)	9
	5. Ramp	(40 ± 2)	(98 ± 2)	0.25
	6. Ramp	(25 ± 2)	(98 ± 2)	3
	7. Dwell	(25 ± 2)	(98 ± 2)	9
Number of cycles:	2 cycles			
Test result:	During and after the test, the specimen was visually inspected and no mechanical damage or functional failure.			

Measurement Temperature Chart



Remark:

The air temperature in the chamber shall be measured by temperature sensors located at such a distance from the specimen that the effect of the dissipation is negligible.

--- End of test report---