Report No. 160429138GZU-001

TEST REPORT

Applicant name and address	:	Shenzhen SOFARSOLAR Co., Ltd. 3A-1, Huake Building, East Technology Park, Qiaoxiang Road, Nanshan District, Shenzhen, China.
Manufacture name and address	:	Shenzhen SOFARSOLAR Co., Ltd. 3A-1, Huake Building, East Technology Park, Qiaoxiang Road, Nanshan District, Shenzhen, China.

Report No	:	160429138GZU-001	**Issue Date** :	30 May, 2016
Total Pages	:	19		

Sample Description

Name of Sample	:	Solar Inverter
Model Number	:	Sofar 3000TL, Sofar 2700TL, Sofar 2200TL, Sofar 1600TL, Sofar 1100TL
Sample Condition	:	Prototype
Quantity of Sample(s)	:	5 pcs
Date of Receival	:	29 Apr., 2016
Date of test Conducted	:	13 May, 2016 – 21 May, 2016

Test

Test Requested	:	Power efficiency, loss measurement, Test A: clod, Test B: Dry heat, Test N: change of temperature, Test Db: Damp heat, cyclic
Test Method	:	Refer to IEC 60068-2-1:2007, IEC 60068-2-2:2007, IEC60068-2-14:2009, IEC60068-2-30:2005, IEC61683:1999
Test Conclusion:	:	Refer to test result
Other information	:	--
Remark	:	• This test report is only for evaluation of the specified standard clauses listed in *Test Requested*. • When determine the test result, measurement uncertainty has been considered.

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Tested by:

Tommy Zhong
Assistant Technical Manager

Approved by:

Grady Ye
Assistant Manager

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TEST REPORT

Note:

1. This report does not imply the compliance of all requirements of above standards. It is only partial checking according to above standards.
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3. When determining of test conclusion, measurement uncertainty of test has been considered.

Electrical Rating:

Input voltage rang: 100-500 V (for Sofar 3000TL, Sofar 2700TL, Sofar 2200TL); 90-450 V (for Sofar 1600TL, Sofar 1100TL)

MPPT voltage range with full power output: 230-500 V (for Sofar 3000TL); 200-500 V (for Sofar 2700TL); 170-500 V (for Sofar 2200TL); 165-450 V (for Sofar 1600TL); 110-450 V (for Sofar 1100TL)

Max. input current: 13 A (for Sofar 3000TL, Sofar 2700TL, Sofar 2200TL); 10 A (for Sofar 1600TL, Sofar 1100TL)

Nominal output voltage: 230 V

Max. output current: 13 A (for Sofar 3000TL); 11.5 A (for Sofar 2700TL); 9.5 A (for Sofar 2200TL); 7 A (for Sofar 1600TL); 4.5 A (for Sofar 1100TL)

Nominal frequency: 50 Hz

Max. output power: 2800 W (for Sofar 3000TL); 2500 W (for Sofar 2700TL); 2000 W (for Sofar 2200TL); 1500 W (for Sofar 1600TL); 1000 W (for Sofar 1100TL)

Ingress protection: IP65

Operating temperature range: -25～60℃

All the models have identical mechanical and electrical construction except some components and some parameter of the software architecture in order to control the max output power.

Unless other special note, the model Sofar 3000TL was selected as representative sample for testing

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TEST REPORT

Test Results:

Clause	Title/ Description	Pass	Fail	N.A.	Comment[1]
IEC 61683: 1999 (Cl.6)	Power efficiency	✓			
IEC 61683: 1999 (Cl.7)	Loss measurement	✓			
IEC 60068-2-1:2007 (Cl. 5.2)	Test A: Cold	✓			
IEC 60068-2-2:2007 (Cl. 5.2)	Test B: Dry heat	✓			
IEC 60068-2-14:2009 (Cl. 7)	Test N: Change of temperature	✓			
IEC 60068-2-30:2005 (Cl. 7)	Test Db: Damp heat, cyclic	✓			

Remark:
1. If there is special attention or condition needed to be pointed out, it can be written down in the column of "comment".

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency (for Sofar 1100TL)

a) Test condition: Rated input voltage: 110 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	110.380	110.130	110.920	110.510	110.640	--
Input current (A)	1.1066	2.5888	5.0271	7.5304	9.9706	--
Input power (kW)	0.1221	0.2849	0.5573	0.8317	1.1026	--
Output voltage (V)	230.046	230.102	230.203	230.253	230.410	--
Output current (A)	0.4744	1.1500	2.2859	3.4210	4.5161	--
Output power (kW)	0.1049	0.2631	0.5254	0.7871	1.0399	--
Efficiency (%)	85.966	92.350	94.311	94.641	94.314	--
Power factor	0.9616	0.9944	0.9984	0.9992	0.9993	--

b) Test condition: Rated input voltage: 280Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	280.300	280.860	280.820	280.470	281.860	--
Input current (A)	0.4301	1.0034	1.9543	2.9191	3.8540	--
Input power (kW)	0.1205	0.2817	0.5485	0.8182	1.0855	--
Output voltage (V)	229.755	229.806	229.898	229.986	230.392	--
Output current (A)	0.4769	1.1522	2.2863	3.4242	4.5414	--
Output power (kW)	105.541	0.2633	0.5248	0.7869	1.0457	--
Efficiency (%)	87.597	93.494	95.675	96.177	96.341	--
Power factor	0.9633	0.9945	0.9984	0.9992	0.9995	--

c) Test condition: Rated input voltage: 405 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	405.790	405.890	405.720	404.930	406.860	--
Input current (A)	0.2908	0.6849	1.3364	2.0041	2.6658	--
Input power (kW)	0.1179	0.2779	0.5419	0.8109	1.0836	--
Output voltage (V)	230.028	230.082	230.202	230.300	230.393	--
Output current (A)	0.4790	1.1477	2.2742	3.4199	4.5587	--
Output power (kW)	105.008	262.195	0.5224	0.7868	1.0496	--
Efficiency (%)	89.037	94.367	96.418	97.028	96.860	--
Power factor	0.9633	0.9945	0.9984	0.9992	0.9995	--

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency (for Sofar 1600TL)

b) Test condition: Rated input voltage: 165 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	164.700	165.020	165.890	165.580	165.310	--
Input current (A)	1.0560	2.4957	4.8887	7.3406	9.8134	--
Input power (kW)	0.1738	0.4116	0.8105	1.2146	1.6209	--
Output voltage (V)	230.058	230.141	230.279	230.419	230.556	--
Output current (A)	0.6929	1.6912	3.3673	5.0477	6.7251	--
Output power (kW)	0.1549	0.3874	0.7744	1.1623	1.5498	--
Efficiency (%)	89.135	94.115	95.549	95.697	95.614	--
Power factor	0.9719	0.9953	0.9987	0.9993	0.9996	--

b) Test condition: Rated input voltage: 307.5Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	307.540	307.140	307.460	306.440	305.360	--
Input current (A)	0.5500	1.3266	2.6137	3.9255	5.2448	--
Input power (kW)	0.1691	0.4072	0.8031	1.2019	1.5999	--
Output voltage (V)	230.080	230.160	230.291	230.426	230.559	--
Output current (A)	0.6907	1.6932	3.3701	5.0498	6.7163	--
Output power (kW)	0.1544	0.3879	0.7751	1.1629	1.5478	--
Efficiency (%)	91.335	95.252	96.516	96.757	96.747	--
Power factor	0.9716	0.9953	0.9987	0.9993	0.9996	--

c) Test condition: Rated input voltage: 405 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	405.840	405.760	405.390	405.190	404.83	--
Input current (A)	0.4155	0.9976	1.9844	2.9553	3.9334	--
Input power (kW)	0.1685	0.4047	0.8039	1.1963	1.5903	--
Output voltage (V)	230.081	230.161	230.283	230.415	230.550	--
Output current (A)	0.7043	1.6990	3.3948	5.0514	6.7081	--
Output power (kW)	0.1652	0.3886	0.7805	1.1629	1.5457	--
Efficiency (%)	92.668	96.062	97.086	97.209	97.192	--
Power factor	0.9637	0.9938	0.9983	0.9992	0.9994	--

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency (for Sofar 2200TL)

c) Test condition: Rated input voltage: 170 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	169.520	169.940	170.890	170.620	169.970	--
Input current (A)	1.3788	3.2724	6.4356	9.6543	12.9743	--
Input power (kW)	0.2336	0.5558	1.0991	1.6461	2.2039	--
Output voltage (V)	230.081	230.189	230.367	230.547	230.685	--
Output current (A)	0.9514	2.3005	4.5715	6.8358	9.0936	--
Output power (kW)	0.2113	0.5264	1.0514	1.5747	2.0964	--
Efficiency (%)	90.455	94.713	95.660	95.662	95.123	--
Power factor	0.9653	0.9941	0.9984	0.9992	0.9994	--

b) Test condition: Rated input voltage: 335Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	334.950	335.270	335.650	335.290	334.960	--
Input current (A)	0.6799	1.6397	3.2445	4.8608	6.4807	--
Input power (kW)	0.2276	0.5494	1.0883	1.6285	2.1677	--
Output voltage (V)	230.077	230.183	230.365	230.542	230.687	--
Output current (A)	0.9508	2.3001	4.5755	6.8481	9.0922	--
Output power (kW)	0.2112	0.5263	1.0523	1.5775	2.0961	--
Efficiency (%)	92.787	95.789	96.690	96.868	96.695	--
Power factor	0.9655	0.9940	0.9983	0.9992	0.9994	--

c) Test condition: Rated input voltage: 450 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	449.640	450.36	450.610	450.220	450.060	--
Input current (A)	0.5110	1.2188	2.4127	3.6161	4.8394	--
Input power (kW)	0.2297	0.5486	1.0865	1.6267	2.1695	--
Output voltage (V)	230.095	230.204	230.397	230.585	230.689	--
Output current (A)	0.9702	2.2925	4.5698	6.8445	9.1151	--
Output power (kW)	0.2099	0.5221	1.0499	1.5761	2.1008	--
Efficiency (%)	91.381	95.172	96.631	96.891	96.831	--
Power factor	0.9401	0.9894	0.9972	0.9986	0.9991	--

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency (for Sofar 2700TL)

d) Test condition: Rated input voltage: 200 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	200.250	200.240	200.660	200.830	200.490	--
Input current (A)	1.4308	3.4234	6.7630	10.1131	13.4222	--
Input power (kW)	0.2864	0.6851	1.3562	2.0295	2.6885	--
Output voltage (V)	230.825	230.554	231.341	231.585	232.150	--
Output current (A)	1.1717	2.8425	5.6381	8.4329	11.1638	--
Output power (kW)	0.2609	0.6513	1.3019	1.9510	2.5813	--
Efficiency (%)	91.120	95.064	96.000	96.131	96.082	--
Power factor	0.9647	0.9938	0.9981	0.9990	0.9967	--

b) Test condition: Rated input voltage: 350Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	350.070	350.340	349.850	350.790	347.240	--
Input current (A)	0.7927	1.9321	3.8434	5.7377	7.7475	--
Input power (kW)	0.2773	0.6765	1.3437	2.0110	2.6875	--
Output voltage (V)	230.457	230.314	231.268	231.853	232.095	--
Output current (A)	1.1579	2.8747	5.6559	8.4270	11.2351	--
Output power (kW)	0.2587	0.6538	1.3010	1.9484	2.6032	--
Efficiency (%)	93.274	96.651	96.827	96.885	96.864	--
Power factor	0.9694	0.9875	0.9946	0.9972	0.9983	--

c) Test condition: Rated input voltage: 450 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	450.250	450.970	499.840	449.480	449.930	--
Input current (A)	0.6323	1.5085	2.9953	4.4848	5.9851	--
Input power (kW)	0.2845	0.6799	1.3464	2.0140	2.6898	--
Output voltage (V)	230.660	231.054	230.999	231.678	231.839	--
Output current (A)	1.2101	2.8356	5.6562	8.4330	11.2560	--
Output power (kW)	0.2625	0.6480	1.3027	1.9507	2.6069	--
Efficiency (%)	92.251	95.309	96.754	96.860	96.918	--
Power factor	0.9405	0.9890	0.9970	0.9985	0.9990	--

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency (for Sofar 3000TL)

e) Test condition: Rated input voltage: 230 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	230.410	229.990	230.380	230.430	231.440	--
Input current (A)	1.3816	3.3296	6.5918	9.8716	13.0407	--
Input power (kW)	0.3182	0.7653	1.5176	2.2730	3.0134	--
Output voltage (V)	229.799	231.139	231.452	232.424	231.567	--
Output current (A)	1.4350	3.2216	6.3203	9.4296	12.5371	--
Output power (kW)	0.2920	0.7295	1.4603	2.1896	2.8983	--
Efficiency (%)	91.764	95.318	96.225	96.332	96.152	--
Power factor	0.8853	0.9796	0.9983	0.9991	0.9982	--

b) Test condition: Rated input voltage: 365Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	364.830	364.410	364.710	365.680	365.820	--
Input current (A)	0.8545	2.0697	4.1230	6.1675	8.1924	--
Input power (kW)	0.3116	0.7573	1.5023	2.2525	2.9920	--
Output voltage (V)	229.953	229.728	230.300	231.075	231.483	--
Output current (A)	1.4252	3.2431	6.3699	9.5040	12.5782	--
Output power (kW)	0.2933	0.7292	1.4591	2.1903	2.9066	--
Efficiency (%)	94.142	96.746	97.121	97.240	97.146	--
Power factor	0.8951	0.9788	0.9946	0.9973	0.9983	--

c) Test condition: Rated input voltage: 450 Vdc, Resistive load:

Power level	10%	25%	50%	75%	100%	120%
Input voltage (V)	449.30	449.150	449.440	450.210	450.160	--
Input current (A)	0.7064	1.7012	3.3592	5.0270	6.6379	--
Input power (kW)	0.3172	0.7637	1.5086	2.2611	2.9843	--
Output voltage (V)	230.558	230.994	231.542	231.860	231.905	--
Output current (A)	1.3481	3.2567	6.3287	9.4758	12.4960	--
Output power (kW)	0.2922	0.7316	1.4611	2.1894	2.8910	--
Efficiency (%)	92.094	95.797	96.846	96.828	96.872	--
Power factor	0.9399	0.9725	0.9971	0.9965	0.9976	--

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency

7 Loss measurement (for Sofar 1100TL)

7,1 No-load loss

a) manufacturer's minimum rated input voltage: 110Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
109.930	0.0480	5.3	--	--	0

b) the inverter's nominal voltage or average of its rated input range: 280Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
280.020	0.0172	5.5	--	--	0

c) 90% of the inverter's maximum input voltage: 405Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
405.00	0.0135	5.5	--	--	0

7.2 Standby loss

Input voltage (V)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output current (A)	Output power W2 (W)
--	--	229.947	50.0	0.1693	0.067

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency

7 Loss measurement (for Sofar 1600TL)

7,1 No-load loss

a) manufacturer's minimum rated input voltage: 165Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
164.960	0.0286	4.7	--	--	0

b) the inverter's nominal voltage or average of its rated input range: 307.5Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
307.58	0.0124	3.8	--	--	0

c) 90% of the inverter's maximum input voltage: 405Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
404.980	0.0099	1.0	--	--	0

7.2 Standby loss

Input voltage (V)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output current (A)	Output power W2 (W)
--	--	230.021	50.0	0.1664	0.067

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency

7 Loss measurement (for Sofar 2200TL)

7,1 No-load loss

a) manufacturer's minimum rated input voltage: 170Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
170.010	0.0282	4.8	--	--	0

b) the inverter's nominal voltage or average of its rated input range: 335Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
334.970	0.0145	4.9	--	--	0

c) 90% of the inverter's maximum input voltage: 450Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
450.020	0.0094	4.2	--	--	0

7.2 Standby loss

Input voltage (V)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output current (A)	Output power W2 (W)
--	--	229.995	50.0	0.1657	0.075

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency

7 Loss measurement (for Sofar 2700TL)

7,1 No-load loss

a) manufacturer's minimum rated input voltage: 200Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
200.05	0.0301	6.0	--	--	0

b) the inverter's nominal voltage or average of its rated input range: 350Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
350.05	0.0199	7.0	--	--	0

c) 90% of the inverter's maximum input voltage: 450Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
450.04	0.0178	8.0	--	--	0

7.2 Standby loss

Input voltage (V)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output current (A)	Output power W2 (W)
--	--	229.939	50.0	0.1651	0.093

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TEST REPORT

Test Results:

IEC 61683: 1999
Power efficiency

7 Loss measurement (for Sofar 3000TL)

7,1 No-load loss

a) manufacturer's minimum rated input voltage: 230Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
229.670	0.0252	5.8	--	--	0

b) the inverter's nominal voltage or average of its rated input range: 365Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
364.60	0.0144	5.2	--	--	0

c) 90% of the inverter's maximum input voltage: 450Vdc

Input voltage (V)	Input current (A)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output power W2 (W)
449.52	0.0125	5.6	--	--	0

7.2 Standby loss

Input voltage (V)	Input power W1 (W)	Output voltage (V)	Frequency (Hz)	Output current (A)	Output power W2 (W)
--	--	229.939	50.0	0.1651	0.093

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TEST REPORT

Test Results:

IEC 60068-2-1: 2007 Test A: Cold

Clause 5.2 Test Ab: Cold for non heat-dissipating specimens with gradual change of temperature

The specimen is introduced into the chamber which is at the temperature of the laboratory. The temperature is then adjusted to the temperature appropriate to the degree of severity, as specified in the relevant specification. After temperature stability of the test specimen has been reached, the specimen is exposed to these conditions for the specified duration. For specimens that are required to be operational (even though they do not meet the requirements of being heat dissipating), power shall then be applied to the specimen and a functional test is performed as necessary. A further period of stabilization may be necessary and the specimen shall then be exposed to the low temperature conditions for a duration as specified in the relevant specification. Specimens under test are normally in non-operating conditions.
Specimens under test are normally in non-operating conditions.

Test condition:
Test Temperature : -25℃
Test Duration : 16h

Test result:
After the test, the specimens can operation normally.

IEC 60068-2-2: 2007 Test B: Dry heat

Clause 5.2 Test Bb: Dry heat for non heat-dissipating specimens with gradual change of temperature

The specimen is introduced into the chamber, which is at the temperature of the laboratory. The temperature is then adjusted to the temperature appropriate to the degree of severity as specified in the relevant specification. After temperature stability of the test specimen has been reached, the specimen is exposed to these conditions for the specified duration. For specimens that are required to be operational (even though they do not meet the requirements of being heat dissipating) power shall then be applied to the specimen and a functional test is performed as necessary. A further period of stabilization may be necessary and the specimen shall then be exposed to the high temperature conditions for a duration as specified in the relevant specification.
Specimens under test are normally in non-operating conditions.

Test condition:
Test Temperature : +60℃
Test Duration : 16h

Test result:
After the test, the specimens can operation normally.

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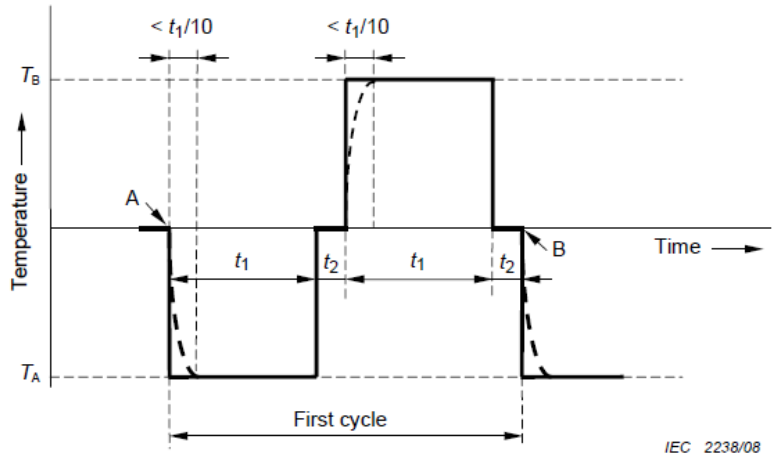
TEST REPORT

Test Results:

IEC 60068-2-14: 2009 Test N: Change of temperature

Clause 7 Test Na: Rapid change of temperature with prescribed time of transfer

The severity of the test is defined by the combination of the two temperatures, the transfer time, the exposure time of the specimen and the number of cycles.
The lower temperature, T_A, shall be specified in the relevant specification and should be chosen from the test temperatures of IEC 60068-2-1 and IEC 60068-2-2.
The higher temperature, T_B, shall be specified in the relevant specification and should be chosen from the test temperatures of IEC 60068-2-1 and IEC 60068-2-2.
The exposure time, t_1, of each of the two temperatures depends upon the heat capacity of the specimen. It may be 3 h, 2 h, 1 h, 30 min or 10 min, or as specified in the relevant specification. Where no exposure period is specified in the relevant specification, it is understood to be 3 h.
The preferred number of test cycles is five, unless otherwise specified in the relevant specification.



Key

A start of first cycle
B end of first cycle and start of second cycle

NOTE The dotted curve is explained above.

Figure 2 – Na test cycle

Test condition:
Low temperature T_A: -25℃
High temperature T_B: +60℃
Duration of exposure time t_1: 3h
Duration of transfer time t_2: 3min
Number of cycles: 5
Recovery: 2h

Test result:
Initial measurements: Input: 365.63Vdc; 7.926A; 2.892kW Output: 230.37Vac; 12.189A; 2.805kW
Final measurements: Input: 365.28Vdc; 7.869A; 2.863kW Output: 230.52Vac; 12.250A; 2.817kW

After the test, the specimens can operation normally.

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TEST REPORT

Test Results:

IEC 60068-2-30: 2005 Test Db: Damp heat, cyclic

Clause 7 Test Na: Rapid change of temperature with prescribed time of transfer

Variant 2 (see Figure 2b)
The temperature shall be lowered to 25 °C ± 3 K within 3 h to 6 h, but without the additional requirement for the first hour and one half as in variant 1. The relative humidity shall be not less than 80 % RH.

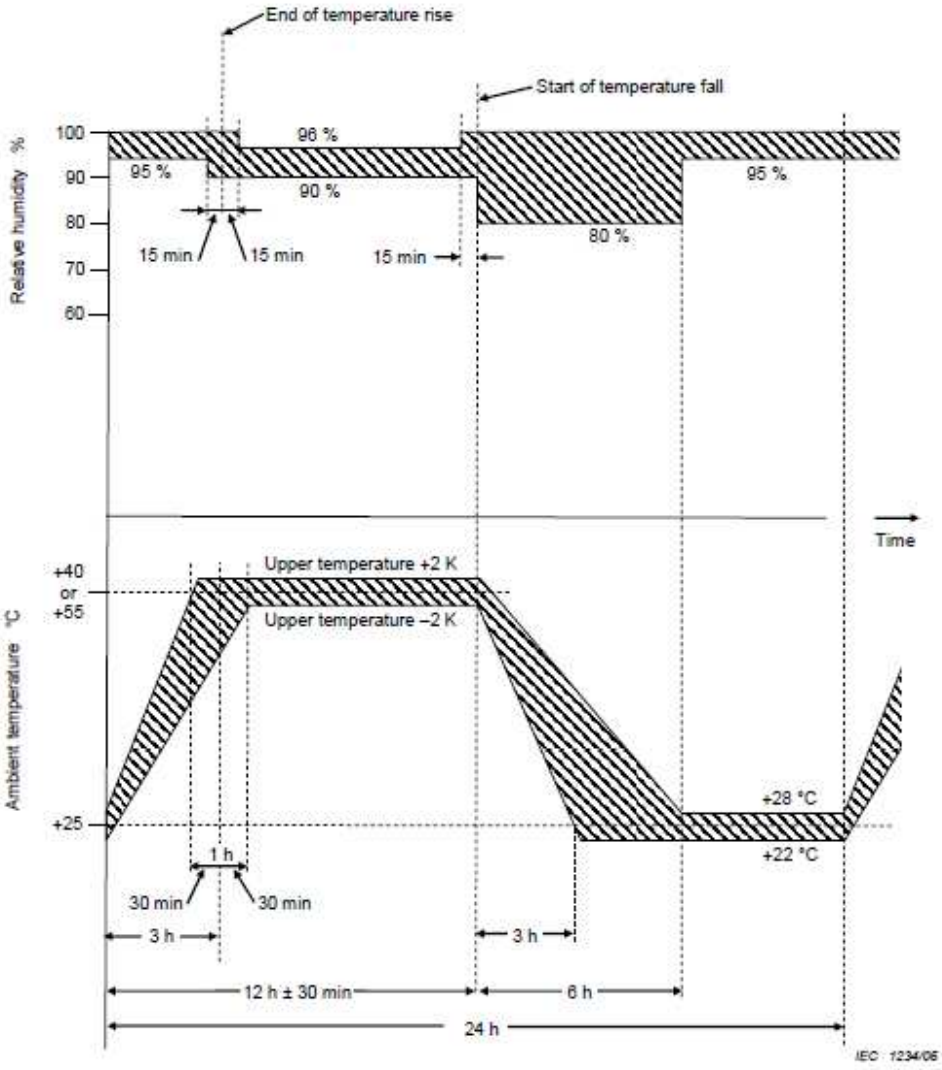

Figure 2b – Test Db – Test cycle – Variant 2

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TEST REPORT

Test Results:

Test condition:

Test Db, variant 2, b-cycle
The humidity level shall be 95 % ± 5 %
A minimum number of 3 cycles
Lower temperature: 25°C
Upper temperature: 40°C

Test result:

Initial measurements: Input: 365.28Vdc; 7.869A; 2.863kW Output: 230.52Vac; 12.250A; 2.817kW
Final measurements: Input: 365.55Vdc; 7.839A; 2.856kW Output: 230.33Vac; 12.189A; 2.802kW

After the test, the specimens can operation normally.

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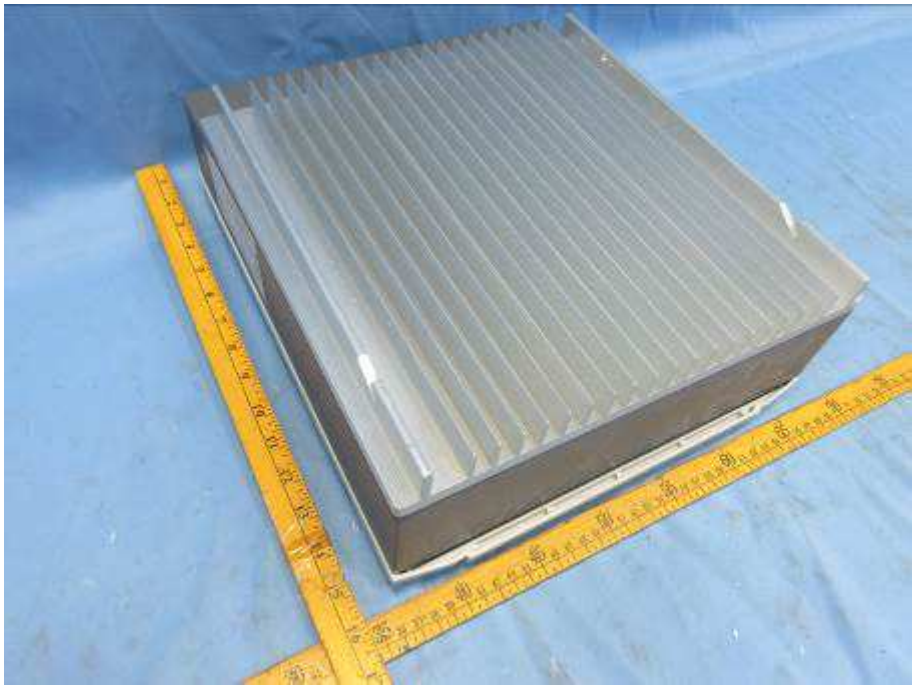
TEST REPORT

Appendix 1: Photo document

Overall view



Backside view

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TEST REPORT

Appendix 1: Photo document

Terminals view

Internal view

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