

TEST REPORT

Applicant: Ablerex Electronics Co., Ltd.
1F, No. 3, Lane 7, Paokao Rd., Hsintien 23144, Taipei Hsien,
Taiwan R.O.C.

Product: PV Inverter

Brand name: Ablerex

Model: ES10000

Rating: Input: Nominal 740 Vdc, MPPT 370-850 Vdc, Max. 2 x 14.3 A
Output: 220 Vac, 60 Hz, 10000 W, 3 x 14.49 A

Sample Description: Power inverter for PV

Testing Specification: IEEE 519, Rev. June. 5. 2004

Date of Test: September 02, 2011 –September 08, 2011

Sample of Receipt the Test Item: September 01, 2011

Conclusion: From the results of our testing on the submitted sample(s), we are of the opinion that the submitted sample(s) **COMPLY WITH** the above testing specification.

Tested by:

Lawrence Lin
Project Engineer

Reviewed by:

Tin Lin
Supervisor

Harmonics test for Inverters

Results:

Load		10K		Voltage Phase		U		DC input		740 Vdc	
								AC output		220 Vac	
Harm. order h		2	3	4	5	6	7	8	9	10	
Current (%)		0.150	0.186	0.061	1.012	0.149	1.911	0.056	0.031	0.033	
Limit (%)		1.000	4.000	1.000	4.000	1.000	4.000	1.000	4.000	1.000	
Harm. order h	11	12	13	14	15	16	17	18	19	20	
Current (%)	0.977	0.067	0.713	0.035	0.011	0.021	0.442	0.048	0.336	0.027	
Limit (%)	2.000	0.500	2.000	0.500	2.000	0.500	1.500	0.375	1.500	0.375	
Harm. order h	21	22	23	24	25	26	27	28	29	30	
Current (%)	0.015	0.005	0.250	0.029	0.193	0.024	0.004	0.005	0.159	0.027	
Limit (%)	1.500	0.375	0.600	0.150	0.600	0.150	0.600	0.150	0.600	0.150	
Harm. order h	31	32	33	34	35	36	37	38	39	40	
Current (%)	0.131	0.020	0.005	0.007	0.124	0.025	0.122	0.026	0.009	0.009	
Limit (%)	0.600	0.150	0.600	0.150	0.300	0.075	0.300	0.075	0.300	0.075	
TRD (%)	2.592										
Limit (%)	5										

Results

Load		10K		Voltage Phase		V		DC input		740 Vdc	
								AC output		220 Vac	
Harm. order h		2	3	4	5	6	7	8	9	10	
Current (%)		0.547	0.140	0.114	0.946	0.129	1.891	0.107	0.003	0.074	
Limit (%)		1.000	4.000	1.000	4.000	1.000	4.000	1.000	4.000	1.000	
Harm. order h	11	12	13	14	15	16	17	18	19	20	
Current (%)	0.944	0.073	0.722	0.053	0.014	0.046	0.411	0.052	0.350	0.030	
Limit (%)	2.000	0.500	2.000	0.500	2.000	0.500	1.500	0.375	1.500	0.375	
Harm. order h	21	22	23	24	25	26	27	28	29	30	
Current (%)	0.025	0.022	0.233	0.031	0.209	0.027	0.014	0.011	0.152	0.023	
Limit (%)	1.500	0.375	0.600	0.150	0.600	0.150	0.600	0.150	0.600	0.150	
Harm. order h	31	32	33	34	35	36	37	38	39	40	
Current (%)	0.144	0.021	0.012	0.008	0.123	0.024	0.128	0.024	0.001	0.006	
Limit (%)	0.600	0.150	0.600	0.150	0.300	0.075	0.300	0.075	0.300	0.075	
TRD (%)	2.594										
Limit (%)	5										

Results

Load		10K		Voltage Phase		W		DC input		740 Vdc	
								AC output		220 Vac	
Harm. order h		2	3	4	5	6	7	8	9	10	
Current (%)		0.552	0.097	0.057	0.955	0.051	1.895	0.099	0.027	0.053	
Limit (%)		1.000	4.000	1.000	4.000	1.000	4.000	1.000	4.000	1.000	
Harm. order h	11	12	13	14	15	16	17	18	19	20	
Current (%)	0.951	0.026	0.703	0.046	0.020	0.039	0.414	0.019	0.343	0.032	
Limit (%)	2.000	0.500	2.000	0.500	2.000	0.500	1.500	0.375	1.500	0.375	
Harm. order h	21	22	23	24	25	26	27	28	29	30	
Current (%)	0.012	0.021	0.228	0.014	0.198	0.022	0.007	0.013	0.158	0.012	
Limit (%)	1.500	0.375	0.600	0.150	0.600	0.150	0.600	0.150	0.600	0.150	
Harm. order h	31	32	33	34	35	36	37	38	39	40	
Current (%)	0.138	0.019	0.016	0.014	0.124	0.008	0.123	0.023	0.011	0.017	
Limit (%)	0.600	0.150	0.600	0.150	0.300	0.075	0.300	0.075	0.300	0.075	
TRD (%)	2.588										
Limit (%)	5										