SigenStor TP Harmonic Current Emission

Manufacturer: Shanghai Sigen New Energy Technology Co., Ltd.

Address: No.175 Weizhan Rd. Lin-gang 201304, Shanghai, People's Republic of China

Harmonic Current Emission									
Test Model	SigenStor EC 5.0 TP								
Harmonic Order n	L1		L2		L3				
	Watts[kW]	1.662	Watts[kW]	1.668	Watts[kW]	1.675			
	Vrms[V]	229.943	Vrms[V]	230.067	Vrms[V]	230.108			
	Arms[A]	7.245	Arms[A]	7.269	Arms[A]	7.297			
	Frequency[Hz]	50.000	Frequency[Hz]	50.000	Frequency[Hz]	50.000			
	THD100(100% Output Power)	2.703	THD100(100% Output Power)	2.618	THD100(100% Output Power)	2.814			
	Phase 1 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 2 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 3 Current Magnitude [A] at 100% rated output power	% of Fundamental	Limit in EN 61000-3-2 in Amps	Higher limit for odd harmonics 21 and above	Phase
1	7.231	100.000	7.251	100.000	7.282	100.000	-	-	Three Phase
2	0.007	0.091	0.006	0.086	0.008	0.107	1.080	-	Three Phase
3	0.037	0.512	0.005	0.070	0.033	0.458	2.300	-	Three Phase
4	0.010	0.141	0.009	0.119	0.009	0.126	0.430	-	Three Phase
5	0.109	1.508	0.100	1.375	0.126	1.732	1.140	-	Three Phase
6	0.002	0.031	0.001	0.019	0.002	0.022	0.300	-	Three Phase
7	0.054	0.751	0.069	0.957	0.063	0.866	0.770	-	Three Phase
8	0.003	0.042	0.004	0.051	0.003	0.039	0.230	-	Three Phase
9	0.016	0.228	0.002	0.026	0.016	0.215	0.400	-	Three Phase
10	0.003	0.035	0.003	0.045	0.002	0.031	0.184	-	Three Phase
11	0.081	1.122	0.080	1.105	0.082	1.130	0.330	-	Three Phase
12	0.002	0.026	0.002	0.023	0.002	0.024	0.153	-	Three Phase
13	0.078	1.085	0.082	1.133	0.085	1.170	0.210	-	Three Phase
14	0.003	0.040	0.003	0.037	0.002	0.029	0.131	-	Three Phase
15	0.010	0.138	0.005	0.074	0.006	0.088	0.150	-	Three Phase
16	0.003	0.048	0.004	0.049	0.003	0.036	0.115	-	Three Phase
17	0.063	0.869	0.062	0.850	0.051	0.706	0.132	-	Three Phase
18	0.002	0.033	0.002	0.027	0.002	0.028	0.102	-	Three Phase
19	0.038	0.520	0.030	0.409	0.029	0.402	0.118	-	Three Phase
20	0.003	0.037	0.003	0.041	0.002	0.029	0.092	-	Three Phase
21	0.011	0.146	0.005	0.069	0.009	0.122	0.107	0.160	Three Phase
22	0.002	0.031	0.002	0.029	0.002	0.026	0.084	-	Three Phase
23	0.025	0.342	0.024	0.326	0.022	0.309	0.098	0.147	Three Phase
24	0.002	0.029	0.002	0.028	0.002	0.025	0.077	-	Three Phase
25	0.025	0.343	0.024	0.330	0.027	0.370	0.090	0.135	Three Phase
26	0.002	0.031	0.002	0.030	0.003	0.036	0.071	-	Three Phase
27	0.007	0.097	0.004	0.056	0.007	0.091	0.083	0.124	Three Phase
28	0.002	0.033	0.002	0.031	0.002	0.033	0.066	-	Three Phase
29	0.009	0.121	0.006	0.081	0.004	0.061	0.078	0.117	Three Phase
30	0.002	0.030	0.002	0.029	0.002	0.028	0.061	-	Three Phase
31	0.010	0.134	0.012	0.159	0.010	0.142	0.073	0.109	Three Phase
32	0.002	0.027	0.002	0.030	0.002	0.028	0.058	-	Three Phase
33	0.009	0.130	0.004	0.058	0.007	0.096	0.068	0.102	Three Phase
34	0.002	0.030	0.002	0.029	0.002	0.029	0.054	-	Three Phase
35	0.012	0.165	0.018	0.246	0.012	0.164	0.064	0.096	Three Phase
36	0.002	0.030	0.002	0.031	0.002	0.028	0.051	-	Three Phase
37	0.014	0.198	0.010	0.137	0.012	0.164	0.061	0.091	Three Phase
38	0.002	0.030	0.002	0.033	0.002	0.030	0.048	-	Three Phase
39	0.004	0.056	0.005	0.071	0.005	0.069	0.058	0.087	Three Phase
40	0.002	0.031	0.003	0.040	0.002	0.029	0.046	-	Three Phase

SigenStor TP Harmonic Current Emission

Harmonic Current Emission									
Harmonic Order n	L1		L2		L3				
	Phase 1 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 2 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 3 Current Magnitude [A] at 100% rated output power	% of Fundamental	Limit in EN 61000-3-2 in Amps	Higher limit for odd harmonics 21 and above	Phase
41	0.010	0.145	0.015	0.203	0.008	0.112	-	-	Three Phase
42	0.002	0.031	0.003	0.043	0.002	0.031	-	-	Three Phase
43	0.007	0.100	0.014	0.193	0.009	0.128	-	-	Three Phase
44	0.002	0.032	0.003	0.048	0.002	0.032	-	-	Three Phase
45	0.007	0.098	0.004	0.055	0.005	0.074	-	-	Three Phase
46	0.002	0.033	0.004	0.049	0.002	0.032	-	-	Three Phase
47	0.005	0.070	0.005	0.072	0.008	0.112	-	-	Three Phase
48	0.002	0.031	0.003	0.046	0.002	0.033	-	-	Three Phase
49	0.007	0.100	0.006	0.078	0.004	0.060	-	-	Three Phase
50	0.002	0.033	0.003	0.048	0.002	0.032	-	-	Three Phase
51	0.005	0.075	0.004	0.054	0.004	0.055	-	-	Three Phase
52	0.002	0.030	0.003	0.042	0.002	0.029	-	-	Three Phase
53	0.006	0.087	0.005	0.073	0.006	0.077	-	-	Three Phase
54	0.002	0.028	0.003	0.036	0.002	0.029	-	-	Three Phase
55	0.003	0.035	0.003	0.043	0.003	0.034	-	-	Three Phase
56	0.002	0.025	0.003	0.035	0.002	0.024	-	-	Three Phase
57	0.003	0.048	0.003	0.041	0.003	0.035	-	-	Three Phase
58	0.002	0.024	0.002	0.033	0.002	0.023	-	-	Three Phase
59	0.007	0.102	0.009	0.118	0.008	0.107	-	-	Three Phase
60	0.002	0.025	0.003	0.035	0.002	0.024	-	-	Three Phase
61	0.010	0.141	0.009	0.128	0.009	0.130	-	-	Three Phase
62	0.002	0.023	0.002	0.030	0.002	0.023	-	-	Three Phase
63	0.004	0.050	0.003	0.036	0.003	0.037	-	-	Three Phase
64	0.002	0.021	0.002	0.028	0.002	0.022	-	-	Three Phase
65	0.006	0.089	0.004	0.060	0.005	0.069	-	-	Three Phase
66	0.002	0.021	0.002	0.026	0.002	0.021	-	-	Three Phase
67	0.005	0.071	0.005	0.063	0.003	0.036	-	-	Three Phase
68	0.002	0.022	0.002	0.025	0.002	0.021	-	-	Three Phase
69	0.003	0.046	0.003	0.041	0.002	0.034	-	-	Three Phase
70	0.002	0.021	0.002	0.023	0.002	0.021	-	-	Three Phase
71	0.006	0.085	0.009	0.118	0.007	0.098	-	-	Three Phase
72	0.001	0.020	0.002	0.021	0.001	0.019	-	-	Three Phase
73	0.010	0.132	0.007	0.102	0.010	0.135	-	-	Three Phase
74	0.001	0.020	0.001	0.020	0.001	0.019	-	-	Three Phase
75	0.003	0.040	0.003	0.038	0.002	0.030	-	-	Three Phase
76	0.001	0.021	0.001	0.020	0.001	0.019	-	-	Three Phase
77	0.009	0.123	0.006	0.081	0.006	0.088	-	-	Three Phase
78	0.002	0.023	0.001	0.020	0.001	0.020	-	-	Three Phase
79	0.006	0.090	0.005	0.071	0.005	0.068	-	-	Three Phase
80	0.002	0.023	0.002	0.021	0.001	0.020	-	-	Three Phase
81	0.004	0.056	0.004	0.048	0.003	0.041	-	-	Three Phase
82	0.002	0.022	0.001	0.021	0.001	0.020	-	-	Three Phase
83	0.005	0.070	0.006	0.084	0.007	0.100	-	-	Three Phase
84	0.002	0.022	0.002	0.021	0.001	0.020	-	-	Three Phase
85	0.007	0.101	0.006	0.083	0.007	0.097	-	-	Three Phase
86	0.002	0.022	0.002	0.023	0.001	0.020	-	-	Three Phase
87	0.003	0.039	0.002	0.032	0.003	0.034	-	-	Three Phase
88	0.002	0.022	0.002	0.022	0.002	0.021	-	-	Three Phase
89	0.008	0.105	0.007	0.098	0.006	0.086	-	-	Three Phase
90	0.002	0.023	0.002	0.022	0.002	0.025	-	-	Three Phase

SigenStor TP Harmonic Current Emission

Harmonic Current Emission									
Harmonic Order n	L1		L2		L3				
	Phase 1 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 2 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 3 Current Magnitude [A] at 100% rated output power	% of Fundamental	Limit in EN 61000-3-2 in Amps	Higher limit for odd harmonics 21 and above	Phase
91	0.007	0.090	0.006	0.081	0.006	0.087	-	-	Three Phase
92	0.002	0.022	0.002	0.025	0.002	0.023	-	-	Three Phase
93	0.003	0.042	0.003	0.043	0.003	0.037	-	-	Three Phase
94	0.002	0.023	0.002	0.022	0.002	0.022	-	-	Three Phase
95	0.005	0.076	0.006	0.076	0.005	0.068	-	-	Three Phase
96	0.002	0.022	0.002	0.024	0.002	0.023	-	-	Three Phase
97	0.005	0.069	0.005	0.068	0.006	0.079	-	-	Three Phase
98	0.002	0.026	0.002	0.025	0.002	0.027	-	-	Three Phase
99	0.003	0.042	0.003	0.044	0.003	0.041	-	-	Three Phase
100	0.002	0.027	0.002	0.026	0.002	0.032	-	-	Three Phase

SigenStor TP Harmonic Current Emission

Harmonic Current Emission									
Test Model	SigenStor EC 10.0 TP								
Harmonic Order n	L1		L2		L3				
	Watts[kW]	3.327	Watts[kW]	3.325	Watts[kW]	3.326			
	Vrms[V]	230.562	Vrms[V]	230.425	Vrms[V]	230.476			
	Arms[A]	14.438	Arms[A]	14.438	Arms[A]	14.438			
	Frequency[Hz]	50.000	Frequency[Hz]	50.000	Frequency[Hz]	50.000			
	THD100(100% Output Power)	2.132	THD100(100% Output Power)	2.148	THD100(100% Output Power)	2.022			
	Phase 1 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 2 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 3 Current Magnitude [A] at 100% rated output power	% of Fundamental	Limit in EN 61000-3-2 in Amps	Higher limit for odd harmonics 21 and above	Phase
1	43.488	100.000	43.558	100.000	43.544	100.000	-	-	Three Phase
2	0.028	0.065	0.039	0.090	0.020	0.047	1.080	-	Three Phase
3	0.016	0.037	0.020	0.045	0.027	0.062	2.300	-	Three Phase
4	0.062	0.143	0.061	0.139	0.058	0.134	0.430	-	Three Phase
5	0.478	1.100	0.518	1.190	0.479	1.100	1.140	-	Three Phase
6	0.001	0.003	0.002	0.005	0.003	0.006	0.300	-	Three Phase
7	0.230	0.529	0.224	0.515	0.228	0.523	0.770	-	Three Phase
8	0.006	0.013	0.005	0.011	0.006	0.013	0.230	-	Three Phase
9	0.004	0.010	0.011	0.026	0.005	0.011	0.400	-	Three Phase
10	0.007	0.017	0.009	0.020	0.012	0.027	0.184	-	Three Phase
11	0.180	0.413	0.192	0.440	0.185	0.424	0.330	-	Three Phase
12	0.003	0.006	0.003	0.008	0.005	0.012	0.153	-	Three Phase
13	0.148	0.341	0.136	0.311	0.136	0.313	0.210	-	Three Phase
14	0.005	0.013	0.003	0.006	0.005	0.011	0.131	-	Three Phase
15	0.013	0.029	0.011	0.025	0.012	0.028	0.150	-	Three Phase
16	0.004	0.010	0.006	0.014	0.010	0.022	0.115	-	Three Phase
17	0.119	0.273	0.114	0.262	0.116	0.266	0.132	-	Three Phase
18	0.003	0.006	0.003	0.007	0.006	0.013	0.102	-	Three Phase
19	0.086	0.198	0.077	0.176	0.070	0.162	0.118	-	Three Phase
20	0.005	0.012	0.002	0.004	0.005	0.013	0.092	-	Three Phase
21	0.028	0.064	0.027	0.061	0.030	0.068	0.107	0.160	Three Phase
22	0.004	0.010	0.004	0.008	0.007	0.016	0.084	-	Three Phase
23	0.063	0.144	0.065	0.148	0.063	0.145	0.098	0.147	Three Phase
24	0.004	0.008	0.003	0.007	0.006	0.015	0.077	-	Three Phase
25	0.075	0.171	0.068	0.156	0.064	0.147	0.090	0.135	Three Phase
26	0.003	0.007	0.003	0.006	0.003	0.008	0.071	-	Three Phase
27	0.020	0.045	0.018	0.042	0.020	0.047	0.083	0.124	Three Phase
28	0.003	0.007	0.004	0.009	0.005	0.011	0.066	-	Three Phase
29	0.060	0.139	0.069	0.158	0.065	0.150	0.078	0.117	Three Phase
30	0.003	0.007	0.004	0.010	0.007	0.016	0.061	-	Three Phase
31	0.057	0.130	0.052	0.119	0.052	0.119	0.073	0.109	Three Phase
32	0.004	0.008	0.005	0.011	0.005	0.012	0.058	-	Three Phase
33	0.030	0.068	0.030	0.070	0.019	0.043	0.068	0.102	Three Phase
34	0.003	0.007	0.005	0.013	0.007	0.017	0.054	-	Three Phase
35	0.080	0.183	0.045	0.104	0.040	0.092	0.064	0.096	Three Phase
36	0.004	0.009	0.004	0.009	0.007	0.017	0.051	-	Three Phase
37	0.054	0.124	0.056	0.130	0.057	0.131	0.061	0.091	Three Phase
38	0.003	0.006	0.005	0.011	0.005	0.012	0.048	-	Three Phase
39	0.046	0.105	0.046	0.105	0.044	0.101	0.058	0.087	Three Phase
40	0.003	0.007	0.004	0.010	0.006	0.013	0.046	-	Three Phase

SigenStor TP Harmonic Current Emission

Harmonic Current Emission									
Harmonic Order n	L1		L2		L3				
	Phase 1 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 2 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 3 Current Magnitude [A] at 100% rated output power	% of Fundamental	Limit in EN 61000-3-2 in Amps	Higher limit for odd harmonics 21 and above	Phase
41	0.082	0.567	0.086	0.593	0.087	0.606	-	-	Three Phase
42	0.014	0.099	0.015	0.102	0.014	0.100	-	-	Three Phase
43	0.046	0.319	0.040	0.277	0.044	0.308	-	-	Three Phase
44	0.012	0.083	0.014	0.095	0.013	0.087	-	-	Three Phase
45	0.012	0.084	0.015	0.101	0.012	0.084	-	-	Three Phase
46	0.012	0.083	0.012	0.081	0.011	0.077	-	-	Three Phase
47	0.065	0.448	0.062	0.431	0.063	0.436	-	-	Three Phase
48	0.011	0.079	0.011	0.074	0.011	0.080	-	-	Three Phase
49	0.031	0.212	0.024	0.163	0.029	0.198	-	-	Three Phase
50	0.010	0.072	0.010	0.072	0.010	0.067	-	-	Three Phase
51	0.013	0.087	0.012	0.085	0.010	0.072	-	-	Three Phase
52	0.011	0.076	0.009	0.065	0.011	0.075	-	-	Three Phase
53	0.062	0.428	0.063	0.439	0.061	0.423	-	-	Three Phase
54	0.010	0.071	0.010	0.067	0.010	0.068	-	-	Three Phase
55	0.019	0.133	0.014	0.100	0.018	0.127	-	-	Three Phase
56	0.010	0.066	0.009	0.063	0.009	0.060	-	-	Three Phase
57	0.012	0.083	0.011	0.074	0.009	0.063	-	-	Three Phase
58	0.011	0.074	0.009	0.060	0.010	0.070	-	-	Three Phase
59	0.061	0.425	0.065	0.452	0.062	0.429	-	-	Three Phase
60	0.010	0.066	0.010	0.066	0.009	0.062	-	-	Three Phase
61	0.015	0.104	0.012	0.083	0.015	0.101	-	-	Three Phase
62	0.009	0.061	0.009	0.060	0.008	0.055	-	-	Three Phase
63	0.010	0.072	0.010	0.068	0.009	0.061	-	-	Three Phase
64	0.010	0.070	0.008	0.057	0.010	0.068	-	-	Three Phase
65	0.060	0.419	0.066	0.457	0.062	0.431	-	-	Three Phase
66	0.009	0.064	0.009	0.065	0.009	0.062	-	-	Three Phase
67	0.016	0.113	0.016	0.108	0.019	0.131	-	-	Three Phase
68	0.009	0.059	0.009	0.061	0.008	0.054	-	-	Three Phase
69	0.010	0.068	0.010	0.066	0.009	0.062	-	-	Three Phase
70	0.010	0.070	0.009	0.060	0.010	0.070	-	-	Three Phase
71	0.060	0.413	0.064	0.446	0.062	0.432	-	-	Three Phase
72	0.009	0.063	0.010	0.066	0.009	0.065	-	-	Three Phase
73	0.021	0.145	0.020	0.142	0.024	0.165	-	-	Three Phase
74	0.009	0.059	0.009	0.063	0.009	0.059	-	-	Three Phase
75	0.011	0.074	0.010	0.072	0.010	0.073	-	-	Three Phase
76	0.010	0.069	0.009	0.061	0.011	0.073	-	-	Three Phase
77	0.057	0.392	0.059	0.410	0.058	0.405	-	-	Three Phase
78	0.009	0.064	0.010	0.069	0.010	0.071	-	-	Three Phase
79	0.025	0.174	0.025	0.172	0.026	0.178	-	-	Three Phase
80	0.009	0.062	0.009	0.065	0.009	0.064	-	-	Three Phase
81	0.016	0.108	0.018	0.123	0.016	0.113	-	-	Three Phase
82	0.010	0.072	0.009	0.063	0.011	0.077	-	-	Three Phase
83	0.053	0.365	0.054	0.378	0.053	0.366	-	-	Three Phase
84	0.010	0.069	0.010	0.071	0.011	0.074	-	-	Three Phase
85	0.028	0.195	0.028	0.193	0.027	0.184	-	-	Three Phase
86	0.010	0.069	0.010	0.069	0.010	0.069	-	-	Three Phase
87	0.015	0.101	0.017	0.118	0.016	0.110	-	-	Three Phase
88	0.011	0.077	0.010	0.069	0.012	0.081	-	-	Three Phase
89	0.046	0.316	0.047	0.323	0.045	0.312	-	-	Three Phase
90	0.011	0.073	0.010	0.072	0.011	0.076	-	-	Three Phase

SigenStor TP Harmonic Current Emission

Harmonic Current Emission									
Harmonic Order n	L1		L2		L3				
	Phase 1 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 2 Current Magnitude [A] at 100% rated output power	% of Fundamental	Phase 3 Current Magnitude [A] at 100% rated output power	% of Fundamental	Limit in EN 61000-3-2 in Amps	Higher limit for odd harmonics 21 and above	Phase
91	0.027	0.190	0.029	0.202	0.027	0.187	-	-	Three Phase
92	0.011	0.075	0.011	0.075	0.011	0.076	-	-	Three Phase
93	0.013	0.092	0.013	0.093	0.014	0.097	-	-	Three Phase
94	0.013	0.088	0.011	0.077	0.013	0.088	-	-	Three Phase
95	0.045	0.309	0.046	0.317	0.043	0.298	-	-	Three Phase
96	0.013	0.087	0.012	0.082	0.013	0.087	-	-	Three Phase
97	0.030	0.208	0.033	0.226	0.031	0.214	-	-	Three Phase
98	0.014	0.095	0.013	0.092	0.014	0.096	-	-	Three Phase
99	0.017	0.116	0.016	0.110	0.017	0.117	-	-	Three Phase
100	0.016	0.112	0.016	0.108	0.016	0.112	-	-	Three Phase

The above two tests had been performed on the SigenStor EC 5.0 TP and SigenStor EC 10.0 TP are valid for SigenStor EC 5.0 TP, SigenStor EC 6.0 TP, SigenStor EC 8.0 TP, SigenStor EC 10.0 TP, since it is same as in hardware and just power derated by software.