Manufacturer: SMA America

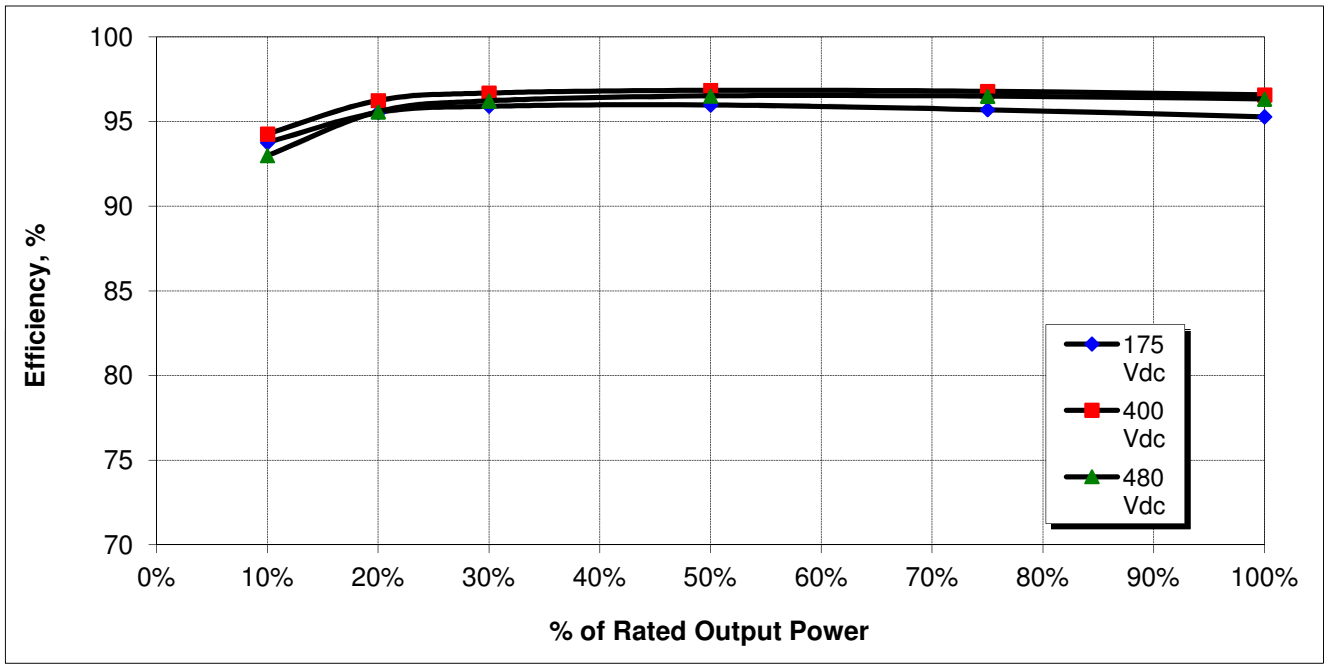
Model #: SB4000TL-US-22

Rated Maximum Continuous Output Power: 4.00 kW Night Tare Loss: 0.99 W

Vmin: 175 Vdc Vnom: 400 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.40	0.80	1.20	2.00	3.00	4.00	Wtd
Vmin	175	93.8	95.5	95.9	96.0	95.7	95.3	95.7
Vnom	400	94.3	96.2	96.7	96.8	96.8	96.6	96.6
Vmax	480	93.0	95.6	96.2	96.5	96.5	96.3	96.3

CEC Efficiency = 96.0%



Inverter Efficiency Data

Minimum of 5 samples required

Specified		Sample #1			Sample #2			Sample #3			Sample #4			Sample #5		
Output Power	Input Voltage	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency
(% of rated)	(Vdc)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin	361	172.49	94.010	360	172.51	93.506	361	172.51	93.766	362	172.47	94.026	359	172.5	93.490
20%	Vmin	809	172.54	95.401	808	172.52	95.508	809	172.52	95.626	810	172.53	95.632	810	172.55	95.519
30%	Vmin	1213	172.49	95.889	1213	172.49	95.889	1213	172.47	95.965	1214	172.48	95.893	1213	172.48	95.889
50%	Vmin	2019	172.48	96.006	2019	172.47	95.960	2017	172.44	95.956	2018	172.46	96.004	2018	172.46	96.004
75%	Vmin	2898	172.52	95.707	2898	172.52	95.707	2897	172.5	95.674	2898	172.5	95.707	2898	172.52	95.707
100%	Vmin	3949	173	95.248	3951	172.99	95.297	3952	173	95.298	3952	173	95.321	3951	173.02	95.274
10%	Vnom	375	398.55	94.458	376	398.57	94.236	375	398.54	94.221	375	398.54	94.221	374	398.57	94.207
20%	Vnom	833	398.65	96.309	835	398.65	96.083	834	398.66	96.189	833	398.68	96.305	834	398.68	96.305
30%	Vnom	1252	398.67	96.754	1252	398.67	96.680	1251	398.66	96.602	1251	398.67	96.677	1250	398.65	96.674
50%	Vnom	2076	398.75	96.828	2078	398.74	96.876	2078	398.74	96.831	2076	398.76	96.828	2077	398.78	96.830
75%	Vnom	2974	398.83	96.810	2973	398.85	96.777	2975	398.82	96.779	2975	398.84	96.748	2976	398.88	96.780
100%	Vnom	4139	399	96.593	4139	398.99	96.545	4139	399	96.569	4140	398.96	96.570	4141	398.99	96.595
10%	Vmax	375	478.58	93.052	373	478.57	92.786	374	478.57	92.804	374	478.55	93.267	375	478.58	93.052
20%	Vmax	832	478.68	95.522	833	478.7	95.637	833	478.71	95.528	832	478.71	95.522	833	478.69	95.637
30%	Vmax	1251	478.69	96.231	1251	478.71	96.231	1252	478.73	96.234	1249	478.7	96.151	1251	478.71	96.231
50%	Vmax	2077	478.74	96.515	2077	478.74	96.470	2077	478.76	96.515	2076	478.74	96.468	2077	478.75	96.560
75%	Vmax	2979	478.81	96.501	2980	478.84	96.503	2980	478.81	96.503	2978	478.81	96.500	2979	478.8	96.470
100%	Vmax	4002	478.85	96.341	3999	478.84	96.338	4001	478.85	96.317	3999	478.84	96.315	4001	478.86	96.340

Specified		Sample #6			Sample #7			Sample #8			Sample #9			Sample #10		
Output Power	Input Voltage	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency	Output Power	Input Voltage	Efficiency
(% of rated)	(Vdc)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin															
20%	Vmin															
30%	Vmin															
50%	Vmin															
75%	Vmin															
100%	Vmin															
10%	Vnom															
20%	Vnom															
30%	Vnom															
50%	Vnom															
75%	Vnom															
100%	Vnom															
10%	Vmax															
20%	Vmax															
30%	Vmax															
50%	Vmax															
75%	Vmax															
100%	Vmax															