Manufacturer: SMA Technology AG

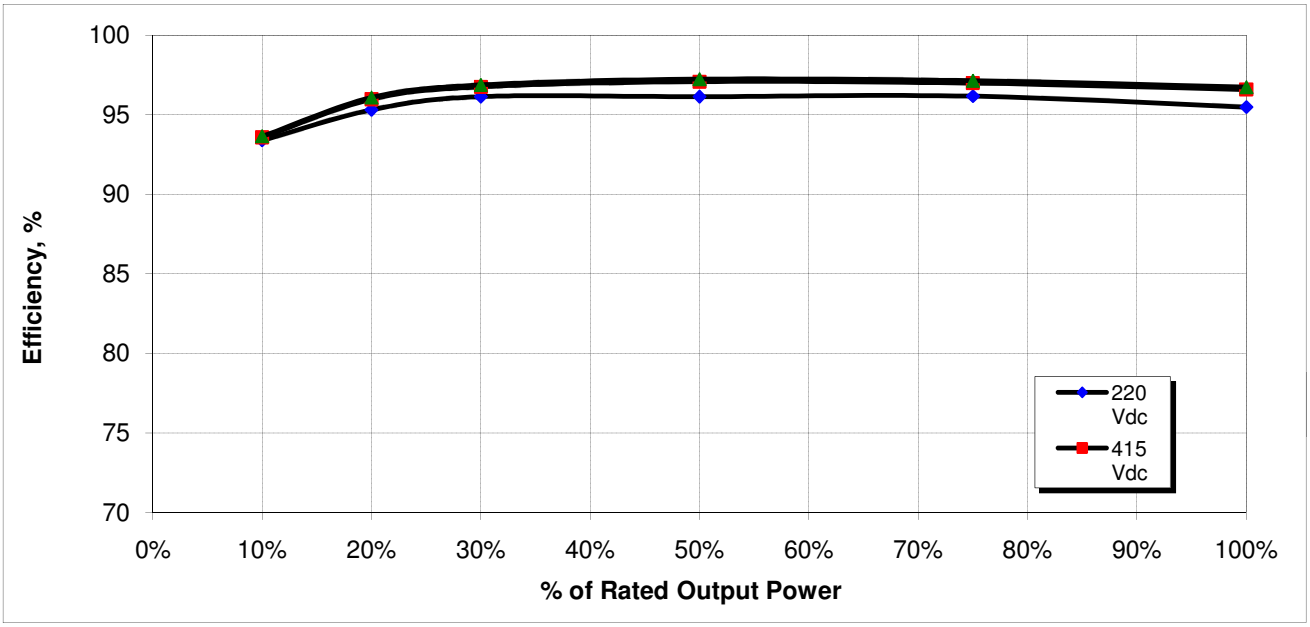
Model #: SB 2500HFUS-30 -240V

Rated Maximum Continuous Output Power: 2.53 kW Night Tare Loss: 1.12 W

Vmin: 220 Vdc Vnom: 415 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.25	0.51	0.76	1.26	1.90	2.53	Wtd
Vmin	220	93.4	95.3	96.1	96.1	96.2	95.5	96.0
Vnom	415	93.6	96.0	96.7	97.1	97.0	96.6	96.8
Vmax	480	93.6	96.1	96.9	97.2	97.1	96.7	96.9

CEC Efficiency = 96.5%



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)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin	298.29	220.6	93.336	298.2	220.58	93.298	298.3	220.59	93.459	298.2	220.56	93.355	298.2	220.56	93.380
20%	Vmin	543.85	220.61	95.195	544	220.62	95.333	544.1	220.71	95.333	544.2	220.7	95.248	544.1	220.67	95.372
30%	Vmin	811.97	220.71	96.123	811.9	220.7	96.146	811.8	220.7	96.132	811.8	220.71	96.119	811.8	220.7	96.181
50%	Vmin	811.97	220.71	96.123	811.9	220.7	96.146	811.8	220.7	96.132	811.8	220.71	96.119	811.8	220.7	96.181
75%	Vmin	1792	220.83	96.138	1792	220.78	96.141	1792	220.84	96.164	1793	220.86	96.158	1793	220.87	96.183
100%	Vmin	2473.7	220.94	95.473	2474	220.97	95.473	2473	220.98	95.484	2473	220.97	95.480	2473	220.93	95.480
10%	Vnom	289.67	415.27	93.732	289.7	415.22	93.363	289.6	415.21	93.261	289.6	415.17	93.447	289.7	415.15	93.741
20%	Vnom	550.35	415.25	95.932	550.5	415.31	96.126	550.5	415.31	95.982	550.5	415.29	95.962	550.5	415.24	95.921
30%	Vnom	817.51	415.35	96.747	817.5	415.34	96.811	817.4	415.29	96.674	817.4	415.3	96.754	817.4	415.33	96.710
50%	Vnom	1273.8	415.23	97.088	1274	415.21	97.061	1274	415.24	97.115	1274	415.25	97.101	1274	415.3	97.026
75%	Vnom	1792	415.33	96.951	1792	415.34	96.964	1792	415.34	96.991	1792	415.39	96.983	1792	415.35	96.966
100%	Vnom	2438.6	415.37	96.619	2438	415.35	96.567	2438	415.31	96.593	2438	415.34	96.574	2439	415.38	96.592
10%	Vmax	295.6	479.73	93.497	295.6	479.71	93.892	295.7	479.74	93.337	295.8	479.77	93.860	295.7	479.75	93.435
20%	Vmax	548.57	479.85	96.155	548.7	479.85	96.064	548.8	479.85	95.973	548.6	479.86	96.057	548.6	479.86	96.155
30%	Vmax	806.41	479.77	96.940	806.4	479.78	96.940	806.4	479.77	96.881	806.4	479.78	96.759	806.5	479.82	96.897
50%	Vmax	1271.5	479.86	97.258	1272	479.86	97.260	1272	479.9	97.290	1272	479.87	97.226	1272	479.85	97.234
75%	Vmax	1809.1	479.79	97.140	1809	479.8	97.144	1809	479.75	97.127	1809	479.8	97.122	1810	479.82	97.123
100%	Vmax	2482.1	479.98	96.759	2482	479.99	96.696	2482	480	96.747	2482	479.98	96.753	2482	479.94	96.710

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	
(% of rated)	(Vdc)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	
10%	Vmin	298.26	220.57	93.477	298.2	220.56	93.366	298.2	220.53	93.395	298.1	220.5	93.349	298.2	220.55	93.424
20%	Vmin	543.97	220.65	95.258	544.1	220.67	95.340	544.1	220.69	95.350	544.1	220.69	95.324	544.1	220.66	95.323
30%	Vmin	811.75	220.72	96.136	811.7	220.69	96.133	811.5	220.67	96.119	811.5	220.66	96.117	811.5	220.66	96.151
50%	Vmin	811.75	220.72	96.136	811.7	220.69	96.133	811.5	220.67	96.119	811.5	220.66	96.117	811.5	220.66	96.151
75%	Vmin	1792.8	220.89	96.158	1793	220.91	96.168	1793	220.89	96.154	1793	220.88	96.190	1793	220.88	96.200
100%	Vmin	2473.2	220.9	95.484	2473	220.91	95.483	2473	220.95	95.460	2473	220.98	95.483	2473	220.92	95.468
10%	Vnom	289.76	415.18	93.610	289.7	415.16	93.816	289.8	415.17	93.535	289.8	415.17	93.400	289.9	415.18	93.852
20%	Vnom	550.51	415.25	95.987	550.2	415.13	95.987	550.1	415.12	95.976	550.2	415.19	95.941	550.1	415.16	95.875
30%	Vnom	817.46	415.34	96.738	817.3	415.3	96.723	817.4	415.26	96.775	817.2	415.24	96.737	817.3	415.26	96.787
50%	Vnom	1274.1	415.32	97.091	1274	415.31	97.083	1274	415.33	97.065	1274	415.28	97.052	1274	415.24	97.055
75%	Vnom	1792	415.3	96.966	1792	415.26	97.018	1792	415.27	96.987	1792	415.33	96.969	1792	415.31	96.997
100%	Vnom	2438.4	415.34	96.557	2438	415.34	96.571	2439	415.45	96.564	2439	415.45	96.554	2439	415.42	96.572
10%	Vmax	295.69	479.76	93.713	295.8	479.82	93.882	295.8	479.79	93.513	295.9	479.78	93.643	295.8	479.74	93.670
20%	Vmax	548.58	479.78	96.116	548.6	479.81	96.071	548.6	479.85	95.903	548.7	479.85	96.180	548.7	479.85	96.100
30%	Vmax	806.51	479.83	96.857	806.4	479.9	96.825	806.5	479.93	96.781	806.5	479.92	96.911	806.6	479.91	96.879
50%	Vmax	1271.5	479.87	97.143	1272	479.86	97.238	1272	479.85	97.234	1271	479.78	97.214	1271	479.77	97.214
75%	Vmax	1809.7	479.84	97.153	1810	479.85	97.136	1810	479.84	97.140	1809	479.82	97.108	1810	479.92	97.138
100%	Vmax	2482	479.93	96.744	2482	479.93	96.725	2482	479.91	96.736	2482	479.89	96.715	2482	479.93	96.749