Manufacturer: Solarmax

Model #: SM75TS-A

Serial #: N/A

Insulation Value High

Maximum Continuous Output Power: 75.133 kW

Tare Loss: 11.24 W

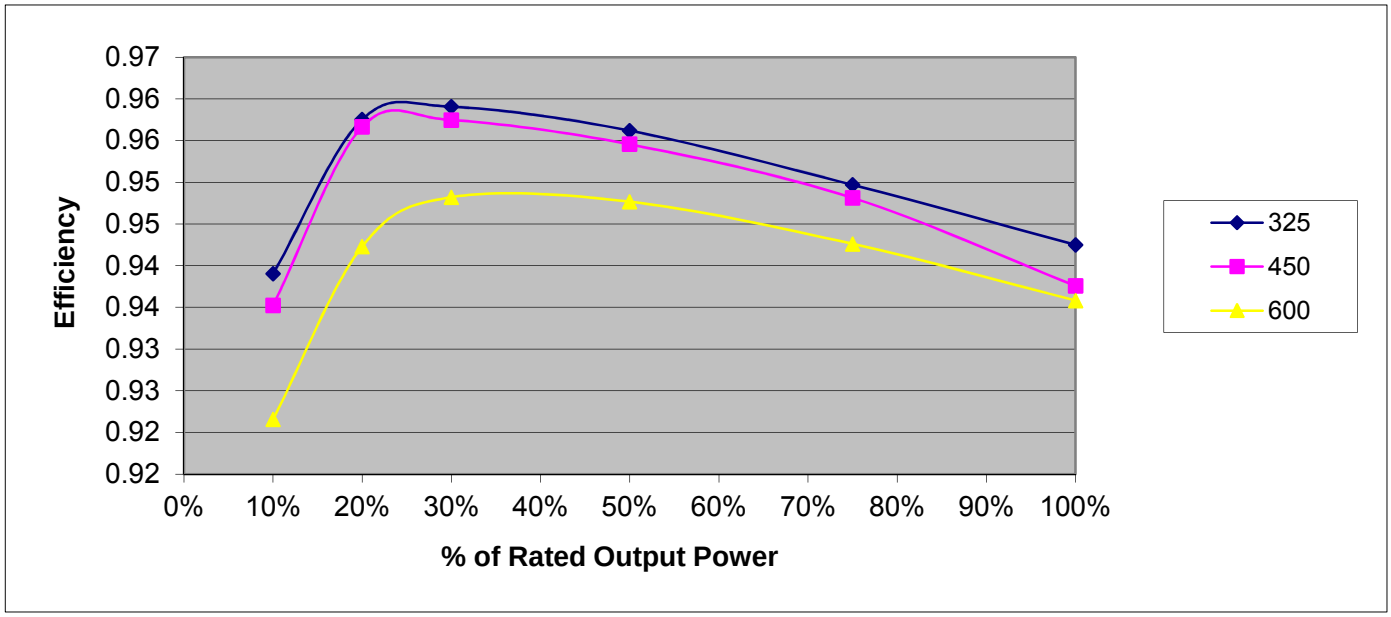
Vmin: 325 Vdc Vnom: 450 Vdc Vmax: 600 Vdc

		Power Level (%; kW)							
		5%	10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)			7.0	16.3	22.8	41.9	55.3	75.5	Wtd
Vmin	325		0.94	0.96	0.96	0.96	0.95	0.94	0.95
Vnom	450		0.94	0.96	0.96	0.95	0.95	0.94	0.95
Vmax	600		0.92	0.94	0.95	0.95	0.94	0.94	0.94

Peak Efficiency: 95.91% %

Nominal Average Efficiency: 94.6% %

CEC Efficiency = 95.0%



All Efficiency data is within 3 standard deviations from the average? Pass

All input power levels are within tolerances during Efficiency Test? Pass

Equipment Used:

Asset #	Description	Mfg	Model	Serial	Cal Date	Cal Due
E4372	Power anazlier	Yokogawa	WT300	(1f730638	13-Feb-13	13-May-13
I038	Data logger	Yokogawa	MW100	916B31456	31-Aug-12	31-Aug-13
A349	Current Transformer	Flex Core	200:5pha	2983883	22-Feb-13	22-Feb-14
C194	Current Transformer	Saturn	STH600	9101040043	2-Oct-12	2-Oct-12

Specified		Sample #1			Sample #2			Sample #3			Sample #4			Sample #5		
Output Power (% of rated)	Input Voltage (Vdc)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)	Output Power (W)	Input Voltage (Vdc)	Efficiency (%)
5%	Vmin 325Vdc															
10%		6.97455	326.36	93.99%	6.96775	326.58	93.92%	6.96794	326.44	93.87%	6.96601	326.7	93.83%	6.9522	326.81	93.89%
20%		15.603	327.92	95.74%	15.5673	328.27	95.68%	15.5648	327.92	95.79%	15.6256	328.12	95.78%	15.574	328.18	95.77%
30%		22.9349	329.04	95.76%	22.9484	329.23	95.76%	22.9405	328.27	96.00%	22.9406	328.37	96.01%	22.9392	328.49	95.99%
50%		39.3587	329.64	95.62%	39.3404	329.65	95.62%	39.3222	329.55	95.62%	39.3269	329.76	95.62%	39.3537	329.62	95.61%
75%		58.8579	329.98	94.97%	58.8064	330.15	94.96%	58.8505	330.17	94.96%	58.8323	329.91	95.00%	58.8234	330.28	94.95%
100%		75.5847	332.1	94.24%	75.4502	332.08	94.25%	75.5462	332.09	94.25%	75.5111	332.05	94.25%	75.5447	332.04	94.26%
5%	Vnom 450Vdc															
10%		7.01739	449.66	93.48%	7.01594	449.38	93.56%	7.01263	449.48	93.53%	7.00349	449.3	93.48%	7.01892	449.32	93.57%
20%		16.3372	361.93	95.66%	16.3354	426.45	95.66%	16.3374	445.19	95.66%	16.336	448.18	95.66%	16.3354	448.49	95.66%
30%		22.7788	460.25	95.75%	22.7742	460.27	95.73%	22.7783	460.3	95.73%	22.788	460.28	95.75%	22.7887	460.22	95.76%
50%		41.9083	455.56	95.58%	41.9058	455.68	95.18%	41.9113	455.32	95.38%	41.9208	455.66	95.58%	41.9228	455.58	95.57%
75%		55.3149	460.98	94.15%	55.3003	460.9	94.95%	55.2994	460.88	95.05%	55.3137	450.94	94.95%	55.3255	450.97	94.96%
100%		75.8852	450.21	93.75%	75.9319	450.19	93.77%	75.9504	450.19	93.76%	75.9178	450.2	93.76%	75.8838	500.2	93.75%
5%	Vmax 600Vdc															
10%		7.28648	596.87	92.15%	7.31556	596.97	92.10%	7.31792	597.02	92.14%	7.31699	596.72	92.12%	7.33702	596.91	92.28%
20%		15.6436	596.99	94.38%	15.54	597.2	94.34%	15.8075	597.11	94.32%	15.1513	597.24	94.29%	11.7726	597.31	93.81%
30%		23.0341	597.24	94.82%	23.0417	597.22	94.81%	23.0092	597.2	94.81%	23.0689	597.31	94.83%	23.022	597.19	94.84%
50%		38.7689	597.24	94.80%	38.7165	597.61	94.75%	38.7451	597.52	94.75%	38.7662	597.44	94.76%	38.7426	597.25	94.78%
75%		56.9086	597.75	94.27%	56.8986	597.79	94.26%	56.9059	597.5	94.26%	56.977	597.63	94.26%	56.8834	597.56	94.26%
100%		75.8036	597.73	93.57%	75.7316	597.77	93.57%	75.772	597.75	93.58%	75.7145	597.72	93.57%	75.7617	597.36	93.62%

Specified		Sample #6			Sample #7			Sample #8			Sample #9			Sample #10		
Output Power (% of rated)	Input Voltage (Vdc)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)	Output Power (kW)	Input Voltage (Vdc)	Efficiency (%)
5%	Vmin 325Vdc															
10%																
20%																
30%																
50%																
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100%																
5%	Vnom 450Vdc															
10%																
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5%	Vmax 600Vdc															
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