Manufacturer: Advanced Energy Industries

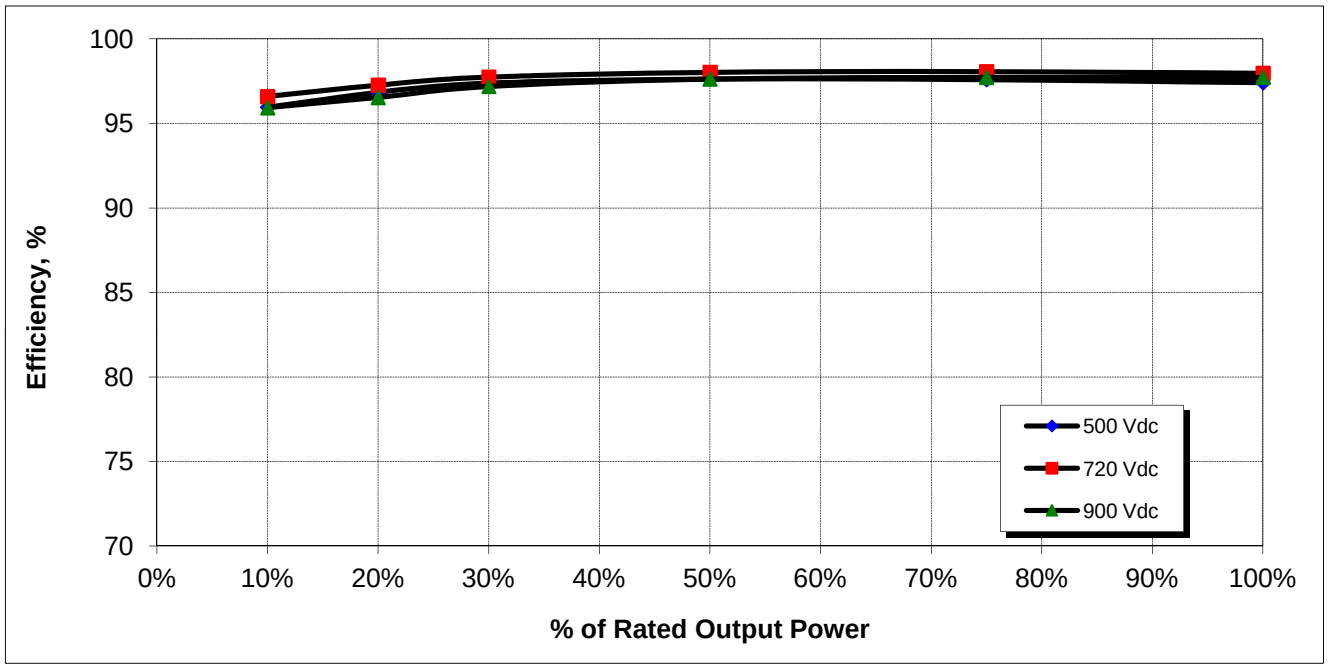
Model #: AE_3TL-16_6-08

Rated Maximum Continuous Output Power: 16.10 kW Night Tare Loss: 0.09 W

Vmin: 500 Vdc Vnom: 720 Vdc Vmax: 900 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		1.61	3.22	4.83	8.05	12.08	16.10	Wtd
Vmin	500	96.0	96.8	97.4	97.6	97.6	97.4	97.5
Vnom	720	96.6	97.3	97.7	98.0	98.1	98.0	97.9
Vmax	900	95.9	96.5	97.2	97.6	97.7	97.7	97.5

CEC Efficiency = 97.5%



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	1513.18	501.36	95.900	1512.78	501.37	95.940	1512.62	501.37	95.940	1512.71	501.38	95.950	1512.58	501.37	95.970
20%	Vmin	3022.36	501.3	96.850	3022.39	501.3	96.830	3022.06	501.3	96.830	3022.28	501.3	96.830	3022.54	501.3	96.830
30%	Vmin	4615.41	501.21	97.370	4616.14	501.22	97.380	4615.71	501.22	97.370	4616.28	501.22	97.390	4616.14	501.22	97.370
50%	Vmin	7841.64	501.1	97.630	7841.35	501.1	97.630	7842.25	501.1	97.640	7841.47	501.1	97.640	7841.47	501.1	97.640
75%	Vmin	11884.1	500.9	97.590	11886.9	500.9	97.610	11886.2	500.9	97.520	11886.9	500.9	97.590	11886.5	500.9	97.610
100%	Vmin	15941.2	500.7	97.410	15940.9	500.7	97.410	15938.9	500.7	97.400	15939.4	500.7	97.400	15939.4	500.7	97.400
10%	Vnom	1589.6	720.38	96.590	1589.39	720.37	96.640	1589.62	720.37	96.610	1589.38	720.37	96.580	1589.04	720.37	96.590
20%	Vnom	3163.62	720.33	97.270	3164.27	720.33	97.250	3163.15	720.33	97.280	3162.51	720.33	97.250	3164.09	720.32	97.250
30%	Vnom	4752.85	720.29	97.770	4752.02	720.28	97.730	4751.7	720.28	97.720	4751.37	720.27	97.750	4752.04	720.28	97.750
50%	Vnom	7979.05	720.18	98.020	7979.42	720.18	98.020	7979.1	720.18	98.020	7979.42	720.17	98.040	7979.08	720.18	98.010
75%	Vnom	12028	720.03	98.060	12028.4	720.03	98.070	12027.7	720.02	98.060	1208.2	720.02	98.070	12027.8	720.03	98.060
100%	Vnom	16067.8	719.9	97.960	16064.7	719.9	97.970	16064.7	719.9	97.960	16065.1	719.9	97.980	16065.9	719.9	97.970
10%	Vmax	1608.18	901.35	95.850	1608.41	901.35	95.920	1608.29	901.35	95.930	1607.76	901.35	95.870	1607.85	901.34	95.970
20%	Vmax	3201.02	901.31	96.530	3200.59	901.31	96.540	3200.79	901.31	96.530	3200.34	901.31	96.570	3200.84	901.31	96.530
30%	Vmax	4781.15	901.26	97.160	4780.81	901.27	97.190	4781.23	901.26	97.160	4780.39	901.27	97.190	4780.68	901.26	97.200
50%	Vmax	8000.64	901.18	97.620	8000.56	901.18	97.630	8000.32	901.17	97.630	8000.57	901.17	97.620	7999.57	901.18	97.640
75%	Vmax	12045.1	901.1	97.720	12044.4	901.1	97.720	12044.8	901.1	97.720	12044.4	901.1	97.730	12043.8	901.1	97.720
100%	Vmax	16097	900.99	97.690	16098.4	900.98	97.680	16098.6	900.98	97.700	16098	900.98	97.690	16098.3	90098	97.690

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	1513.08	501.38	95.980	1513.67	501.38	95.950	1513	501.37	95.980	1512.8	501.36	95.960	1513.07	501.37	95.950
20%	Vmin	3022.28	501.3	96.840	3022.55	501.3	96.860	3022.7	501.3	96.830	3022.77	501.3	96.860	3022.93	501.3	96.830
30%	Vmin	4616.18	501.22	97.380	4616.25	501.23	97.380	4616.92	501.23	97.390	4616.86	501.23	97.400	4616.36	501.22	97.380
50%	Vmin	7842.21	501.1	97.460	7841.04	501.1	97.640	7841.29	501.1	97.640	7841.91	501.1	97.650	7843.3	501.1	97.650
75%	Vmin	11886.9	500.9	97.590	11886.3	500.9	97.520	11887.6	500.9	97.620	1887.5	500.9	97.620	1886.65	500.9	97.610
100%	Vmin	15939.5	500.7	97.410	15938.8	500.7	97.410	15939.7	500.7	97.410	15939.1	500.7	97.410	15939	500.7	97.410
10%	Vnom	1589.3	720.37	96.560	1588.99	720.37	96.590	1588.92	720.37	96.570	1588.73	720.37	96.580	1589.66	720.37	96.580
20%	Vnom	3164.75	720.32	97.250	3164	720.31	97.240	3164.21	720.32	97.290	3164.46	720.32	97.250	3164.43	720.32	97.300
30%	Vnom	4751.35	720.27	97.750	4751.91	720.27	97.740	4751.21	720.27	97.720	4751.74	720.27	97.720	4751.68	720.26	97.720
50%	Vnom	7978.95	720.18	98.020	7979.04	720.18	98.020	7979.18	720.18	98.020	7979.76	720.18	98.030	7979.49	720.18	98.020
75%	Vnom	12028.4	720.02	98.070	12028.2	720.03	98.070	12028.9	720.02	98.070	12028.9	720.02	98.070	12028.4	720.02	98.060
100%	Vnom	16066.1	719.9	97.970	16066.9	719.9	97.970	16067.4	719.9	97.970	16006.9	719.9	97.970	16067	719.9	97.970
10%	Vmax	1608.13	901.34	95.890	1608.26	901.34	95.960	1608.55	901.34	96.000	1608.07	901.34	95.990	1608.94	901.34	95.890
20%	Vmax	3200.5	901.31	96.530	3200.59	901.31	96.580	3200.21	901.31	96.530	3199.98	901.31	96.510	3200.21	901.31	96.520
30%	Vmax	4780.61	901.26	97.180	4780.07	901.26	97.230	4780.84	901.27	97.190	4780.93	901.27	97.190	4780.75	901.27	97.170
50%	Vmax	7999.69	901.18	97.620	7999	901.17	97.630	7999.48	901.18	97.620	7999.7	901.18	97.630	7998.94	901.18	97.640
75%	Vmax	12044.8	901.1	97.730	12044.2	901.1	97.720	12044.8	901.1	97.730	12045	901.1	97.730	12044.8	901.1	97.740
100%	Vmax	16098	900.98	97.960	16098.4	900.98	97.690	16098.8	90097	97.690	16098.2	900.98	97.680	16098	900.98	97.680