Manufacturer: Advanced Energy Industries, Inc.

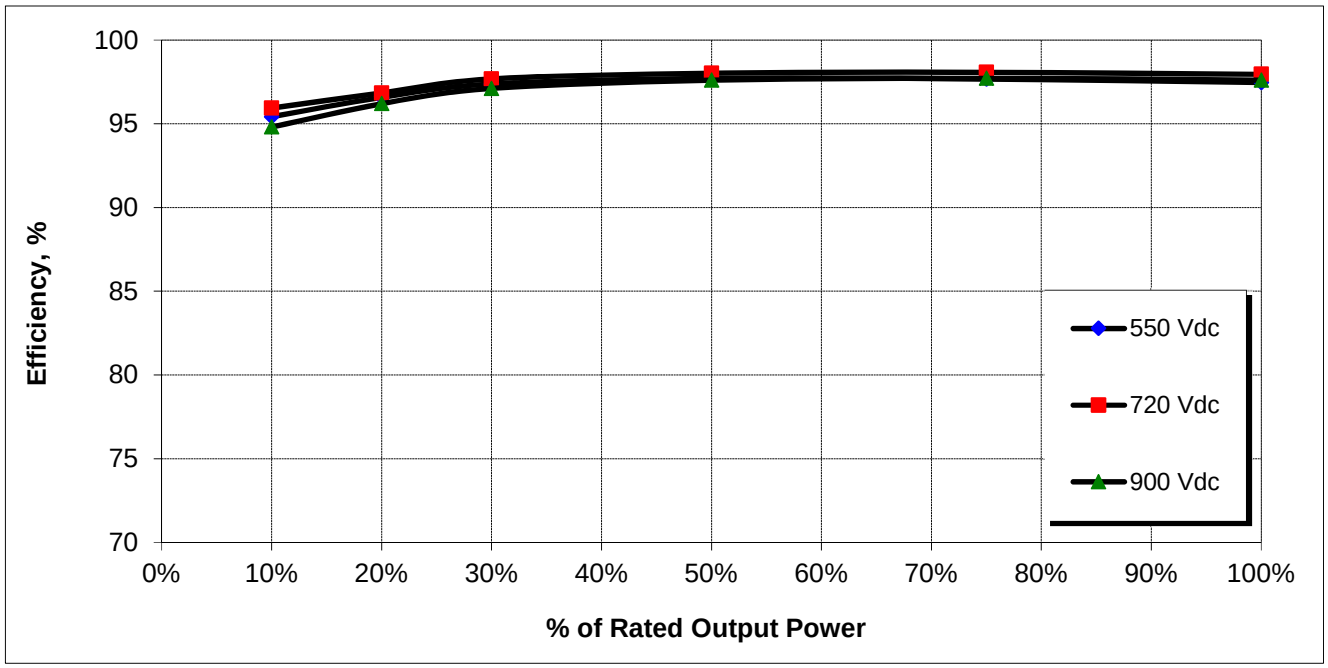
Model #: AE_3TL-G3_20_10-08

Rated Maximum Continuous Output Power: 20.00 kW Night Tare Loss: 0.47 W

Vmin: 550 Vdc Vnom: 720 Vdc Vmax: 900 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		2.00	4.00	6.00	10.00	15.00	20.00	Wtd
Vmin	550	95.4	96.6	97.4	97.7	97.7	97.5	97.5
Vnom	720	95.9	96.8	97.7	98.0	98.1	98.0	97.9
Vmax	900	94.8	96.2	97.1	97.6	97.7	97.6	97.4

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)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	1.81	551	95.414	1.81	551	95.346	1.81	551	95.365	1.81	551	95.283	1.81	551	95.370
20%	Vmin	3.63	551	96.603	3.63	551	96.562	3.63	551	96.601	3.63	551	96.597	3.63	551	96.570
30%	Vmin	5.50	551	97.362	5.50	551	97.339	5.50	551	97.379	5.50	551	97.368	5.50	551	97.360
50%	Vmin	9.26	551	97.687	9.26	551	97.723	9.27	551	97.731	9.26	551	97.681	9.26	551	97.712
75%	Vmin	14.20	551	97.680	14.20	551	97.685	14.20	551	97.645	14.20	551	97.670	14.20	551	97.699
100%	Vmin	19.10	551	97.454	19.10	551	97.493	19.10	551	97.483	19.10	551	97.458	19.10	551	97.470
10%	Vnom	1.81	720	95.808	1.81	720	96.101	1.81	720	96.021	1.82	720	96.341	1.81	720	95.868
20%	Vnom	3.61	720	96.818	3.61	720	96.810	3.61	720	96.846	3.61	720	96.843	3.61	720	96.819
30%	Vnom	5.72	720	97.656	5.72	720	97.683	5.72	720	97.712	5.72	720	97.655	5.72	720	97.661
50%	Vnom	9.24	720	98.007	9.24	720	98.044	9.24	720	98.013	9.23	720	97.999	9.23	720	98.041
75%	Vnom	14.20	720	98.089	14.20	720	98.050	14.20	720	98.059	14.20	720	98.097	14.20	720	98.072
100%	Vnom	19.10	719	97.978	19.10	719	97.931	19.10	719	97.943	19.10	719	97.978	19.10	719	97.962
10%	Vmax	1.62	901	95.055	1.61	901	94.956	1.61	901	94.520	1.61	901	94.582	1.61	901	94.717
20%	Vmax	3.67	900	96.190	3.67	900	96.221	3.68	900	96.236	3.67	900	96.186	3.66	900	96.165
30%	Vmax	5.53	900	97.111	5.53	900	97.139	5.53	900	97.137	5.53	900	97.113	5.53	900	97.088
50%	Vmax	9.28	900	97.601	9.27	900	97.600	9.28	900	97.626	9.28	900	97.623	9.28	900	97.576
75%	Vmax	14.20	900	97.700	14.20	900	97.736	14.20	900	97.731	14.20	900	97.703	14.20	900	97.692
100%	Vmax	19.10	901	97.623	19.10	901	97.628	19.10	901	97.584	19.10	901	97.630	19.10	901	97.611

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)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	1.81	551	95.481	1.82	551	95.674	1.82	551	95.670	1.81	551	95.301	1.81	551	95.347
20%	Vmin	3.63	551	96.572	3.64	551	96.569	3.64	551	96.575	3.64	551	96.546	3.64	551	96.555
30%	Vmin	5.50	551	97.378	5.51	551	97.428	5.51	551	97.379	5.51	551	97.383	5.51	551	97.420
50%	Vmin	9.26	551	97.739	9.26	551	97.714	9.26	551	97.673	9.27	551	97.729	9.27	551	97.730
75%	Vmin	14.20	551	97.670	14.20	551	97.689	14.20	551	97.716	14.20	551	97.691	14.20	551	97.662
100%	Vmin	19.20	551	97.489	19.10	551	97.447	19.10	551	97.457	19.10	551	97.488	19.10	551	97.455
10%	Vnom	1.81	720	95.614	1.82	720	96.268	1.80	720	95.723	1.81	720	96.168	1.80	720	95.516
20%	Vnom	3.61	720	96.840	3.61	720	96.867	3.61	720	96.860	3.61	720	96.816	3.61	720	96.859
30%	Vnom	5.72	720	97.706	5.72	720	97.673	5.72	720	97.655	5.72	720	97.704	5.73	720	97.706
50%	Vnom	9.24	720	98.019	9.24	720	98.012	9.23	720	98.036	9.24	720	98.056	9.24	720	97.991
75%	Vnom	14.20	720	98.064	14.20	720	98.084	14.20	720	98.112	14.20	720	98.058	14.20	720	98.058
100%	Vnom	19.10	719	97.942	19.10	719	97.975	19.10	719	97.965	19.10	719	97.942	19.10	719	97.966
10%	Vmax	1.61	901	94.708	1.61	901	94.716	1.62	901	94.949	1.61	901	95.011	1.61	901	94.848
20%	Vmax	3.67	900	96.208	3.68	900	96.184	3.67	900	96.173	3.67	900	96.218	3.67	900	96.200
30%	Vmax	5.53	900	97.097	5.53	900	97.104	5.53	900	97.093	5.53	900	97.095	5.53	900	97.144
50%	Vmax	9.28	900	97.608	9.28	900	97.633	9.28	900	97.599	9.28	900	97.594	9.28	900	97.600
75%	Vmax	14.20	900	97.735	14.20	900	97.714	14.20	900	97.701	14.20	900	97.715	14.20	900	97.726
100%	Vmax	19.10	901	97.584	19.10	901	97.596	19.10	901	97.627	19.10	901	97.602	19.10	901	97.606