Manufacturer: Advanced Energy Industries Inc.

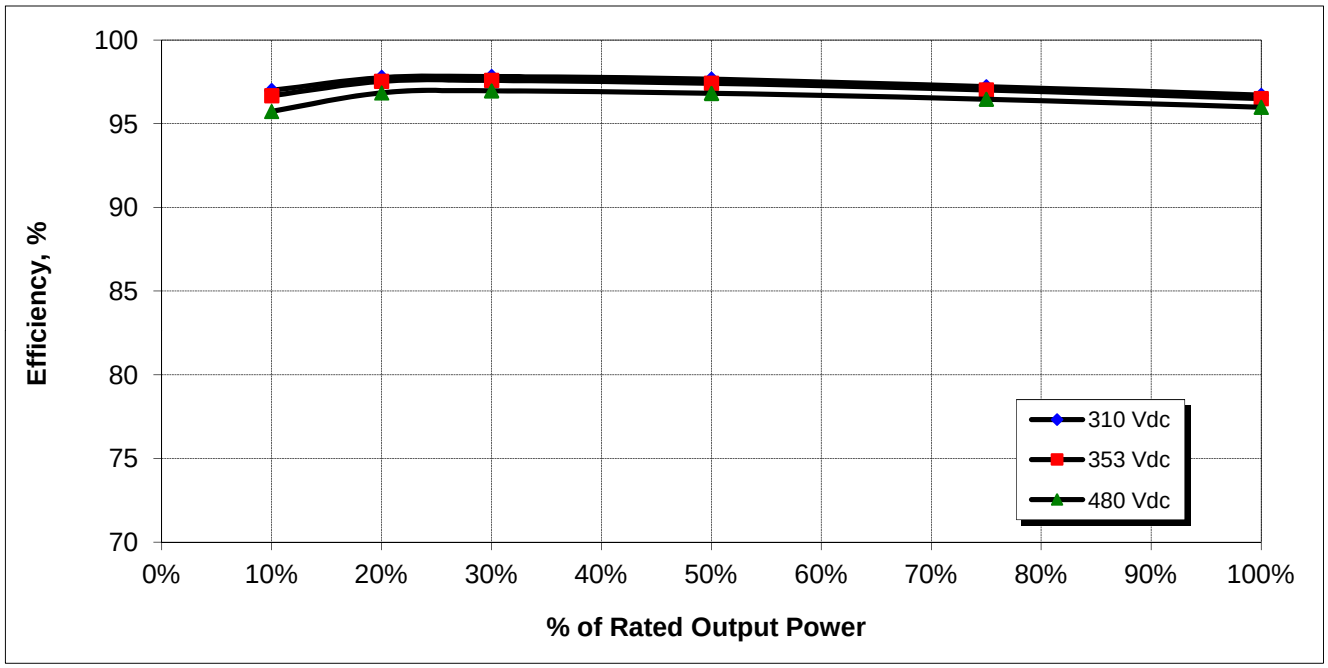
Model #: AE 500-480

Rated Maximum Continuous Output Power: 500.00 kW Night Tare Loss: 58.00 W

Vmin: 310 Vdc Vnom: 353 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		50.00	100.00	150.00	250.00	375.00	500.00	Wtd
Vmin	310	97.0	97.8	97.8	97.7	97.2	96.7	97.4
Vnom	353	96.7	97.5	97.6	97.4	97.0	96.5	97.2
Vmax	480	95.7	96.8	97.0	96.8	96.5	96.0	96.6

CEC Efficiency = 97.0%



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)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	49801	310.81	96.965	49864	310.81	96.973	49743	310.81	96.985	49733	310.81	96.990	49701	310.82	96.985
20%	Vmin	109640	310.59	97.758	109650	310.58	97.760	109670	310.58	97.753	109610	310.59	97.749	109670	310.58	97.756
30%	Vmin	162270	310.9	97.820	162210	310.9	97.823	162350	310.9	97.817	162240	310.91	97.821	162310	310.9	97.823
50%	Vmin	225300	310.25	97.665	225220	310.25	97.663	225150	310.26	97.659	225300	310.26	97.663	225240	310.26	97.655
75%	Vmin	350200	310.13	97.219	350260	310.13	97.223	350370	310.13	97.218	350210	310.14	97.220	350300	310.15	97.214
100%	Vmin	475510	310.19	96.705	475350	310.19	96.703	475520	310.19	96.705	475500	310.19	96.705	475440	310.19	96.697
10%	Vnom	49655	353.57	96.677	49617	353.57	96.671	49792	353.57	96.666	49707	353.57	96.670	49653	353.57	96.665
20%	Vnom	109740	353.45	97.545	109810	353.46	97.536	109780	353.47	97.538	109760	353.47	97.539	109810	353.47	97.536
30%	Vnom	162320	353.46	97.582	162390	353.46	97.582	162420	353.45	97.588	162330	353.45	97.591	162350	353.45	97.589
50%	Vnom	225240	353.18	97.419	225300	353.18	97.419	225430	353.17	97.421	225290	353.17	97.421	225320	353.16	97.422
75%	Vnom	350530	353.92	97.019	350400	353.91	97.023	350420	353.91	97.022	350520	353.91	97.021	350450	353.91	97.021
100%	Vnom	475290	353.23	96.497	475400	353.23	96.494	475290	353.24	96.493	475270	353.24	96.490	475360	353.23	96.497
10%	Vmax	49693	481.38	95.738	49702	481.38	95.730	49650	481.38	95.745	49793	481.38	95.747	49766	481.38	95.729
20%	Vmax	109670	482.18	96.842	109780	482.16	96.848	109710	482.16	96.847	109680	482.16	96.847	109760	482.15	96.842
30%	Vmax	162380	481.59	96.953	162460	481.59	96.959	162390	481.6	96.964	162330	481.6	96.962	162470	481.59	96.966
50%	Vmax	225640	480.31	96.819	225590	480.32	96.817	225540	480.32	96.814	225680	480.32	96.813	225650	480.32	96.818
75%	Vmax	350310	480.71	96.470	350490	480.71	96.460	350490	480.72	96.463	350260	480.73	96.470	350390	480.73	96.464
100%	Vmax	475350	480.99	95.981	475220	481	95.984	475230	481	95.983	475400	481	95.989	475190	481	95.988

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	49704	310.82	96.991	49713	310.82	96.981	49734	310.82	97.000	49758	310.81	96.992	49772	310.81	96.986
20%	Vmin	109610	310.58	97.757	109660	310.59	97.759	109570	310.6	97.762	109670	310.6	97.757	109590	310.6	97.758
30%	Vmin	162350	310.9	97.815	162250	310.88	97.821	162300	310.88	97.827	162360	310.89	97.821	162210	310.9	97.824
50%	Vmin	225200	310.26	97.660	225320	310.26	97.665	225280	310.26	97.667	225230	310.27	97.663	225330	310.26	97.666
75%	Vmin	350340	310.14	97.209	350230	310.14	97.211	350290	310.14	97.213	350350	310.13	97.216	350280	310.13	97.216
100%	Vmin	475550	310.18	96.708	475580	310.17	96.701	475480	310.17	96.702	475490	310.17	96.700	475560	310.18	96.698
10%	Vnom	49659	353.58	96.686	49697	353.57	96.677	49719	353.56	96.679	49622	353.56	96.678	49633	353.56	96.692
20%	Vnom	109760	353.48	97.528	109820	353.46	97.538	109760	353.48	97.534	109830	353.48	97.528	109800	353.48	97.530
30%	Vnom	162450	353.46	97.589	162360	353.47	97.586	162430	353.47	97.588	162450	353.47	97.591	162320	353.48	97.593
50%	Vnom	225400	353.19	97.419	225290	353.2	97.417	225320	353.21	97.421	225400	353.21	97.424	225320	353.21	97.420
75%	Vnom	350450	353.91	97.015	350580	353.91	97.022	350510	353.92	97.016	350450	353.92	97.002	350590	353.91	97.011
100%	Vnom	475310	353.23	96.492	475240	353.24	96.493	475380	353.24	96.496	475300	353.24	96.499	475270	353.24	96.497
10%	Vmax	49789	481.38	95.737	49713	481.38	95.729	49807	481.37	95.745	49732	481.38	95.746	49715	481.38	95.723
20%	Vmax	109670	482.15	96.845	109740	482.16	96.848	109740	482.16	96.841	109720	482.16	96.842	109760	482.17	96.846
30%	Vmax	162390	481.59	96.961	162400	481.59	96.963	162480	481.59	96.965	162430	481.58	96.970	162350	481.58	96.970
50%	Vmax	225590	480.32	96.815	225620	480.31	96.816	225660	480.3	96.822	225510	480.29	96.818	225640	480.29	96.820
75%	Vmax	350370	480.73	96.466	350290	480.73	96.468	350380	480.72	96.470	350390	480.73	96.471	350280	480.72	96.469
100%	Vmax	475250	481	95.983	475370	481	95.984	475350	480.99	95.984	475290	481	95.985	475490	480.99	95.986