Manufacturer: Advanced Energy Industries, Inc

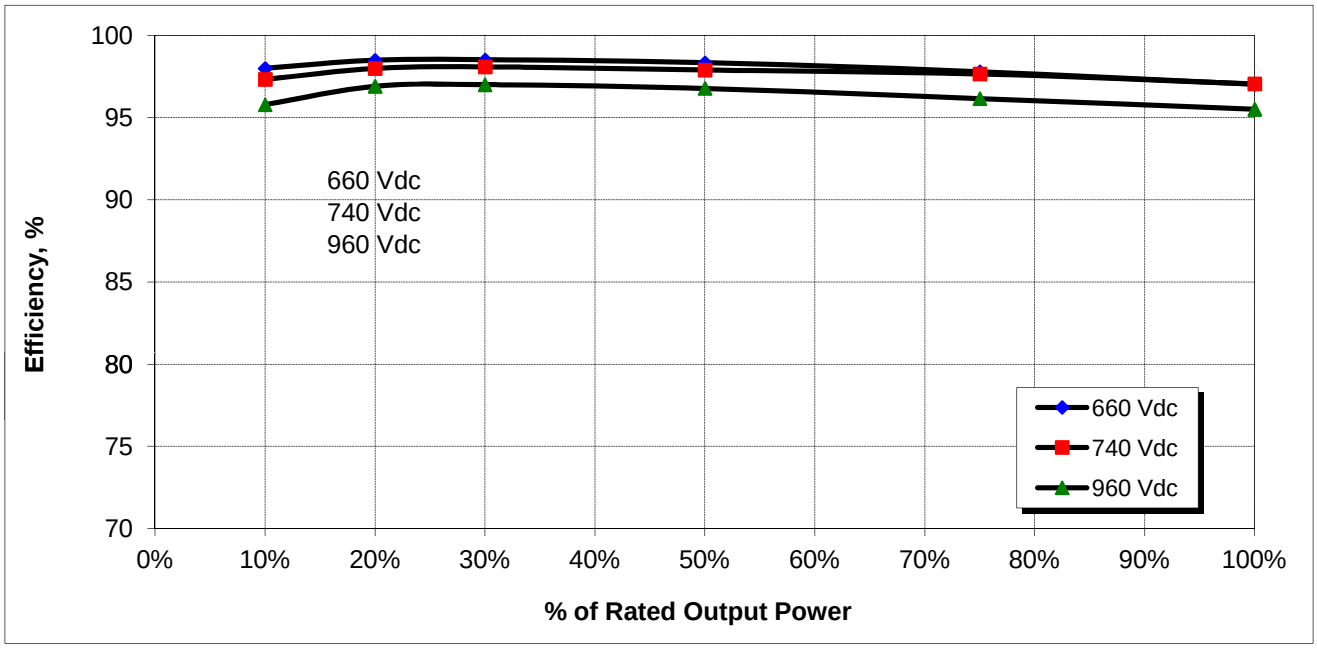
Model #: AE 500NX; 3159500-001

Rated Maximum Continuous Output Power: 500.00 kW Night Tare Loss: 85 W

Vmin: 660 Vdc Vnom: 740 Vdc Vmax: 960 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	660	98.0	98.5	98.5	98.3	97.8	97.0	98.0
Vnom	740	97.3	98.0	98.1	97.9	97.6	97.0	97.7
Vmax	960	95.8	96.9	97.0	96.8	96.2	95.5	96.4

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)	(%)	(W)	(Vdc)	(%)
10%	Vmin	49080.00	664.000	97.96	49090.00	664.000	97.98	49096.67	664.000	98.00	49090.00	664.000	97.98	49096.67	664.000	98.00
20%	Vmin	109120.00	664.000	98.48	109123.33	664.000	98.49	109123.33	664.000	98.49	109126.67	664.000	98.49	109116.67	664.000	98.48
30%	Vmin	161856.67	662.100	98.51	161863.33	662.100	98.52	161870.00	662.100	98.52	161866.67	662.100	98.52	161853.33	662.100	98.51
50%	Vmin	226623.33	662.000	98.33	225756.67	662.000	98.34	225486.67	662.000	98.34	225466.67	662.000	98.33	225486.67	662.000	98.34
75%	Vmin	350963.33	668.933	97.79	350923.33	669.000	97.78	350790.00	669.333	97.79	350570.00	670.000	97.79	350576.67	670.000	97.79
100%	Vmin	476133.33	670.900	97.01	476130.00	670.900	97.02	476103.33	670.900	97.03	476120.00	670.900	97.03	476083.33	670.900	97.02
10%	Vnom	49830.00	728.900	97.32	49830.00	728.900	97.32	49830.00	728.900	97.32	49830.00	728.900	97.32	49833.33	728.900	97.33
20%	Vnom	109240.00	726.900	97.97	109240.00	726.900	98.00	109246.67	726.900	97.98	109253.33	726.900	97.99	109243.33	726.900	97.98
30%	Vnom	162233.33	726.900	98.09	162226.67	726.900	98.08	162230.00	726.900	98.08	162233.33	726.900	98.09	162226.67	726.900	98.08
50%	Vnom	225200.00	726.900	97.90	225203.33	726.900	97.87	225200.00	726.900	97.90	225210.00	726.900	97.90	225200.00	726.900	97.90
75%	Vnom	350636.67	726.800	97.66	350626.67	726.833	97.67	350623.33	726.800	97.66	350616.67	726.833	97.64	350623.33	726.800	97.65
100%	Vnom	476240.00	735.600	97.03	476346.67	735.600	97.05	476336.67	735.600	97.05	476340.00	735.633	97.05	476303.33	735.633	97.05
10%	Vmax	49110.00	942.900	95.79	49106.67	942.933	95.72	49123.33	942.933	95.76	49116.67	942.967	95.74	49130.00	942.967	95.83
20%	Vmax	109596.67	946.000	96.90	109596.67	946.000	96.90	109590.00	946.000	96.93	109586.67	946.000	96.89	109590.00	945.933	96.90
30%	Vmax	162736.67	942.900	96.98	161993.33	942.900	97.00	161616.67	942.900	97.01	161613.33	942.900	97.01	161616.67	942.900	97.01
50%	Vmax	225370.00	945.800	96.77	225376.67	945.800	96.77	225373.33	945.800	96.77	225373.33	945.800	96.77	225373.33	945.800	96.77
75%	Vmax	350360.00	950.600	96.15	350376.67	950.600	96.16	350376.67	950.567	96.15	350386.67	950.567	96.15	350363.33	950.600	96.16
100%	Vmax	476916.67	945.467	95.50	476956.67	945.467	95.51	476926.67	945.467	95.50	476936.67	945.500	95.50	476956.67	945.467	95.51

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	49093.33	664.000	97.99	49090	664.000	97.98									
20%	Vmin	109110.00	664.000	98.47	109110	664.000	98.50									
30%	Vmin	161860.00	662.100	98.51	161853.33	662.067	98.51									
50%	Vmin	225476.67	662.000	98.33	225473.33	662.033	98.33									
75%	Vmin	350583.33	670.000	97.79	350566.67	670.000	97.79									
100%	Vmin	476080.00	670.900	97.02	476063.33	670.900	97.02									
10%	Vnom	49823.33	728.900	97.31	49826.667	728.900	97.32									
20%	Vnom	109246.67	726.900	97.98	109253.33	726.900	98.01									
30%	Vnom	162230.00	726.900	98.08	162230	726.900	98.08									
50%	Vnom	225206.67	726.900	97.90	225203.33	726.900	97.89									
75%	Vnom	350623.33	726.867	97.64	350603.33	726.800	97.63									
100%	Vnom	476310.00	735.633	97.05	476290	735.700	97.05									
10%	Vmax	49130.00	942.967	95.77	49123.333	942.933	95.88									
20%	Vmax	109586.67	945.967	96.89	109586.67	945.967	96.89									
30%	Vmax	161613.33	942.900	97.01	161620	942.900	97.01									
50%	Vmax	225390.00	945.800	96.78	225396.67	945.800	96.78									
75%	Vmax	350390.00	950.567	96.16	350390	950.600	96.16									
100%	Vmax	476963.33	945.467	95.51	476936.67	945.467	95.50									