Manufacturer: Delta Energy Systems

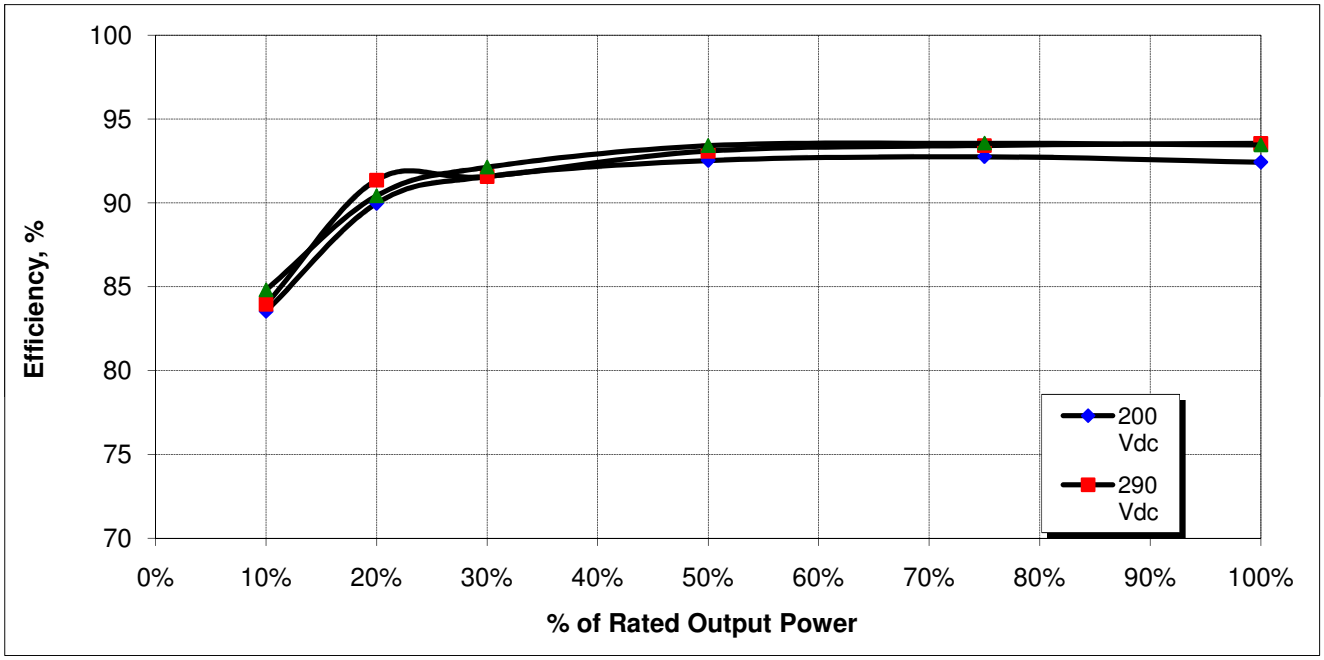
Model #: SI 1800 US (208V)

Rated Maximum Continuous Output Power: 1.80 kW Night Tare Loss: 0.26 W

Vmin: 200 Vdc Vnom: 290 Vdc Vmax: 320 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.18	0.36	0.54	0.90	1.35	1.80	Wtd
Vmin	200	83.5	90.0	91.6	92.5	92.8	92.4	92.0
Vnom	290	84.0	91.4	91.6	93.1	93.4	93.5	92.6
Vmax	320	84.8	90.4	92.1	93.4	93.6	93.5	92.8

CEC Efficiency = 92.5%



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	170.6	199.95	83.6	167.9	199.65	82.8	167.9	199.41	83.0	168.8	199.67	83.4	168.3	199.59	83.6
20%	Vmin	365.13	200.42	90.0	364.9	200.25	90.4	362.8	200.26	90.0	361.6	200.19	89.7	361.9	200.12	89.7
30%	Vmin	579.83	200.36	91.7	577.67	200.37	91.6	576.8	200.37	91.5	577.6	200.38	91.6	577.1	200.34	91.6
50%	Vmin	971.3	200.84	92.6	968.17	201.16	92.6	966.8	201.46	92.5	966.1	201.69	92.5	965.2	201.68	92.5
75%	Vmin	1275.4	199.71	92.7	1275.8	199.72	92.7	1277	199.71	92.8	1276	199.73	92.8	1276	199.76	92.8
100%	Vmin	1793.5	200.29	92.3	1793.5	200.3	92.3	1795	200.28	92.3	1797	200.27	92.4	1799	200.26	92.5
10%	Vnom	160.3	289.07	83.6	161.5	288.71	84.1	162.2	290.02	84.0	160.7	290.41	83.6	159.3	288.77	83.8
20%	Vnom	386.87	288.46	90.6	387.17	288.4	91.4	386	288.89	91.5	385.5	289.27	91.6	379.7	289.64	91.5
30%	Vnom	554.83	289.97	91.6	556.27	289.82	91.6	554.1	289.95	91.3	554.4	290	91.4	555	289.71	91.5
50%	Vnom	870.17	287.55	93.3	870.27	287.44	93.3	868.8	287.38	93.1	867.2	287.3	93.0	867.4	287.48	93.0
75%	Vnom	1274.1	287.7	93.5	1274.5	287.77	93.4	1275	287.81	93.4	1275	287.78	93.4	1273	287.78	93.4
100%	Vnom	1765.3	290	93.6	1764.3	289.99	93.5	1765	290	93.5	1769	289.98	93.6	1768	289.95	93.5
10%	Vmax	174.47	318.5	84.3	174.77	318.31	84.4	175.4	319.09	84.8	175.9	319.97	84.5	176.4	320.85	85.0
20%	Vmax	380.1	320.32	90.1	380.93	320.32	89.9	381.2	320.11	89.6	380.1	320.29	89.9	382.1	320.6	90.9
30%	Vmax	565.63	320.11	92.5	565	320.9	92.5	564	321.2	92.4	561.5	321.21	92.3	557.6	320.86	92.1
50%	Vmax	891.77	318.44	93.3	889.33	318.43	93.3	891.8	318.4	93.4	891.9	318.4	93.4	892.9	318.51	93.6
75%	Vmax	1320.6	317.77	93.6	1323.8	317.78	93.6	1326	317.78	93.6	1329	318.06	93.5	1333	318.21	93.5
100%	Vmax	1791.1	320.29	93.4	1791.9	320.28	93.4	1795	320.27	93.5	1794	320.29	93.5	1791	320.31	93.5

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	169.13	199.82	84.0	169	199.94	84.3									
20%	Vmin	363.63	200.09	89.9	365.43	200.18	90.1									
30%	Vmin	576	200.26	91.5	575.23	200.2	91.5									
50%	Vmin	965.1	201.68	92.5	964.67	201.7	92.5									
75%	Vmin	1276.2	199.79	92.8	1276	199.81	92.7									
100%	Vmin	1800.3	200.26	92.6	1801.2	200.25	92.6									
10%	Vnom	159.5	287.78	84.1	159.37	289.47	84.5									
20%	Vnom	379.33	289.86	91.7	377.2	289.89	91.2									
30%	Vnom	554.27	289.6	91.6	555.77	289.66	92.0									
50%	Vnom	868.5	287.61	93.0	867.27	287.57	92.9									
75%	Vnom	1274.3	287.83	93.4	1276.1	287.84	93.4									
100%	Vnom	1765.9	289.98	93.5	1766.7	289.99	93.6									
10%	Vmax	177.8	320.04	85.3	177.77	319.62	85.4									
20%	Vmax	382.4	320.67	91.1	382.6	320.66	91.5									
30%	Vmax	554.2	320.72	91.5	556.1	320.42	91.6									
50%	Vmax	888.43	318.56	93.5	887.17	318.53	93.4									
75%	Vmax	1332.2	318.05	93.5	1334.4	318.04	93.6									
100%	Vmax	1790.6	320.31	93.5	1787.4	320.35	93.4									