Manufacturer: Ballard Power Systems Corp.

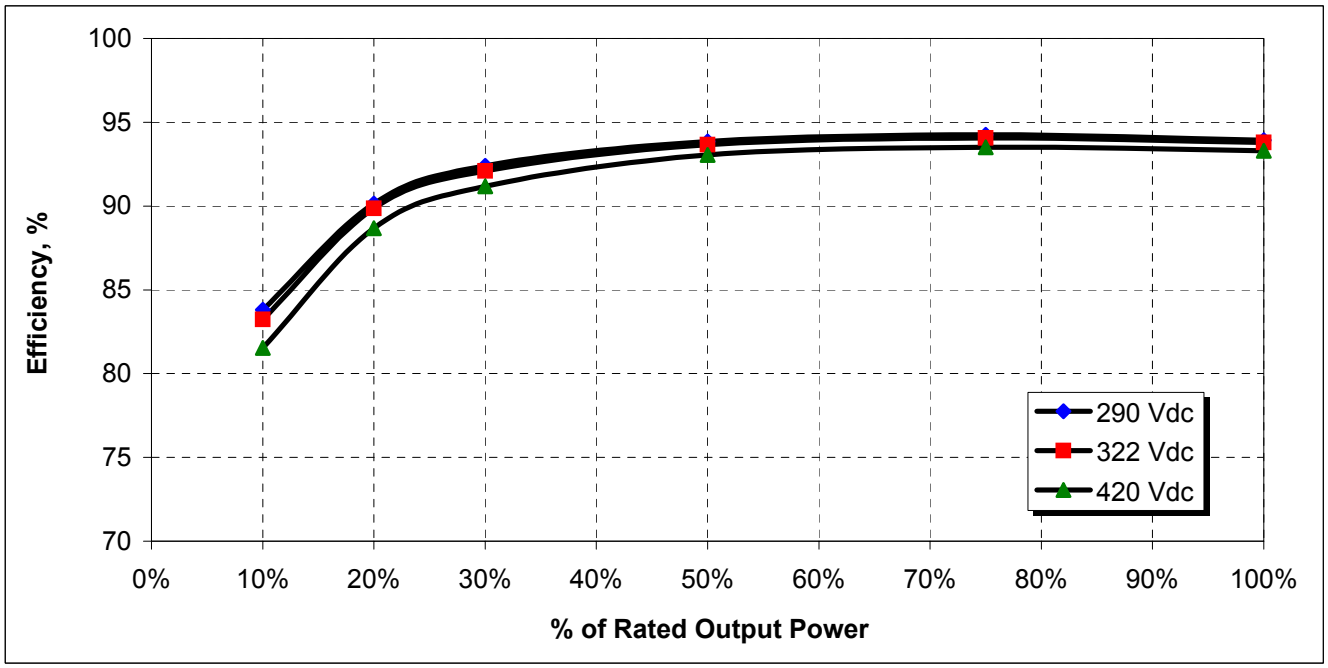
Model #: EPC-PV-480-30KW

Rated Maximum Continuous Output Power: 30.00 kW Night Tare Loss: 27.00 W

Vmin: 290 Vdc Vnom: 322 Vdc Vmax: 420 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		3.00	6.00	9.00	15.00	22.50	30.00	Wtd
Vmin	290	83.80	90.14	92.40	93.85	94.24	93.93	93.30
Vnom	322	83.23	89.86	92.10	93.66	94.07	93.80	93.09
Vmax	420	81.53	88.67	91.17	93.05	93.50	93.30	92.39

CEC Efficiency = 93.0%



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)	(%)	(W)	(Vdc)	(%)
10%	Vmin	3033	290.44	83.738	3028	290.46	83.762	3017	290.48	83.597	3046	290.46	83.889	3065	290.44	83.950
20%	Vmin	6054	290.77	90.156	6073	290.77	90.144	6058	290.79	90.203	6050	290.79	90.124	6049	290.77	90.136
30%	Vmin	9064	290.59	92.414	9038	290.58	92.404	9082	290.59	92.419	9010	290.58	92.401	9089	290.58	92.387
50%	Vmin	15111	291.25	93.834	15116	291.25	93.853	15128	291.24	93.846	15117	291.25	93.830	15130	291.25	93.864
75%	Vmin	22406	290.82	94.238	22414	290.82	94.236	22432	290.83	94.252	22415	290.83	94.228	22429	290.82	94.247
100%	Vmin	30008	290.35	93.922	29995	290.33	93.934	29981	290.33	93.934	30053	290.32	93.939	29984	290.34	93.929
10%	Vnom	2988	322.33	83.208	3000	322.32	83.195	3010	322.32	83.241	2999	322.32	83.167	3011	322.33	83.315
20%	Vnom	6078	322.65	89.871	6099	322.65	89.876	6096	322.65	89.938	6122	322.65	89.897	6070	322.64	89.766
30%	Vnom	9018	322.47	92.114	9021	322.48	92.117	9001	322.5	92.091	9017	322.48	92.085	9016	322.48	92.103
50%	Vnom	15188	322.41	93.643	15192	322.41	93.662	15166	322.4	93.669	15168	322.39	93.682	15151	322.4	93.669
75%	Vnom	22477	322.33	94.078	22481	322.3	94.063	22472	322.31	94.068	22486	322.31	94.064	22493	322.31	94.074
100%	Vnom	30047	321.39	93.800	30081	321.38	93.798	30053	321.4	93.813	30039	321.4	93.790	30041	321.4	93.805
10%	Vmax	2998	419.73	81.556	3013	419.78	81.609	3011	419.78	81.621	2979	419.76	81.505	2986	419.76	81.473
20%	Vmax	6024	419.61	88.758	6027	419.64	88.698	6005	419.64	88.622	6005	419.65	88.635	6010	419.64	88.630
30%	Vmax	9126	419.99	91.169	9129	419.98	91.190	9151	419.98	91.191	9139	419.99	91.117	9100	420.03	91.192
50%	Vmax	15076	419.73	93.056	15078	419.73	93.028	15073	419.72	93.049	15125	419.77	93.065	15086	419.77	93.043
75%	Vmax	22614	420.48	93.489	22632	420.46	93.505	22606	420.45	93.494	22614	420.44	93.508	22605	420.44	93.494
100%	Vmax	30180	420.16	93.301	30192	420.16	93.309	30215	420.13	93.291	30188	420.14	93.297	30184	420.15	93.296

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	3036	290.45	83.775	3049	290.44	83.879									
20%	Vmin	6079	290.77	90.113	6085	290.79	90.121									
30%	Vmin	8986	290.61	92.354	9036	290.6	92.393									
50%	Vmin	15127	291.24	93.857	15107	291.24	93.832									
75%	Vmin	22419	290.82	94.245	22419	290.81	94.257									
100%	Vmin	30025	290.33	93.940	30018	290.34	93.938									
10%	Vnom	3002	322.33	83.296	2995	322.31	83.218									
20%	Vnom	6070	322.64	89.766	6100	322.65	89.931									
30%	Vnom	9010	322.5	92.117	9014	322.49	92.083									
50%	Vnom	15185	322.39	93.636	15150	322.39	93.657									
75%	Vnom	22504	322.32	94.065	22533	322.31	94.076									
100%	Vnom	30048	321.42	93.803	30058	321.4	93.785									
10%	Vmax	2986	419.76	81.473	2987	419.78	81.478									
20%	Vmax	6001	419.61	88.680	5990	419.64	88.649									
30%	Vmax	9107	420.03	91.179	9114	420.02	91.149									
50%	Vmax	15096	419.75	93.059	15064	419.74	93.045									
75%	Vmax	22634	420.46	93.490	22656	420.43	93.512									
100%	Vmax	30202	420.12	93.297	30235	420.1	93.301									