Manufacturer: Motech Industries Inc.

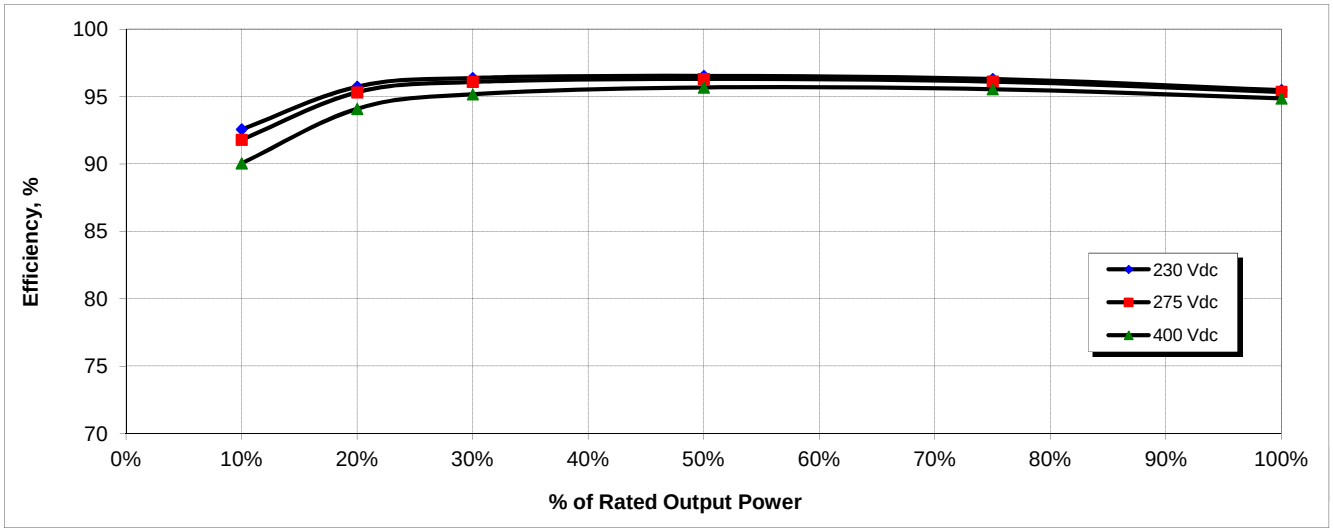
Model #: PVMate 4000U, PVMate 4000U-PG (240Vac)

Rated Maximum Continuous Output Power: 4.02 kW Night Tare Loss: 0.47 W

Vmin: 230 Vdc Vnom: 275 Vdc Vmax: 400 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.40	0.80	1.21	2.01	3.02	4.02	Wtd
Vmin	230	92.6	95.7	96.4	96.5	96.3	95.5	96.1
Vnom	275	91.8	95.3	96.1	96.3	96.1	95.4	95.9
Vmax	400	90.0	94.1	95.2	95.7	95.5	94.9	95.2

CEC Efficiency = 96.0%



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	0.38	230.05	92.57	0.38	230.04	92.57	0.38	230.03	92.57	0.38	230.04	92.57	0.38	230.03	92.58
20%	Vmin	0.88	230.08	95.73	0.88	230.06	95.74	0.88	230.07	95.74	0.88	230.05	95.74	0.88	230.07	95.74
30%	Vmin	1.31	230.17	96.38	1.31	230.18	96.39	1.31	230.15	96.39	1.31	230.17	96.39	1.31	230.16	96.39
50%	Vmin	2.03	230.22	96.54	2.03	230.21	96.54	2.03	230.21	96.54	2.03	230.22	96.55	2.03	230.21	96.54
75%	Vmin	2.86	230.28	96.31	2.86	230.28	96.31	2.86	230.28	96.31	2.86	230.29	96.31	2.86	230.27	96.31
100%	Vmin	4.04	230.34	95.49	4.04	230.35	95.49	4.04	230.34	95.49	4.04	230.34	95.49	4.04	230.34	95.49
10%	Vnom	0.38	274.99	91.80	0.38	274.99	91.80	0.38	274.99	91.80	0.38	274.99	91.80	0.38	274.98	91.80
20%	Vnom	0.88	275.00	95.32	0.88	275.00	95.32	0.88	275.00	95.31	0.88	275.01	95.32	0.88	274.98	95.32
30%	Vnom	1.31	275.05	96.09	1.31	275.04	96.09	1.31	275.05	96.09	1.31	275.04	96.09	1.31	275.04	96.09
50%	Vnom	2.02	275.09	96.31	2.02	275.10	96.31	2.02	275.10	96.32	2.02	275.11	96.31	2.02	275.11	96.32
75%	Vnom	2.86	275.15	96.12	2.86	275.15	96.12	2.86	275.14	96.12	2.86	275.14	96.11	2.86	275.15	96.11
100%	Vnom	4.03	275.21	95.36	4.03	275.21	95.36	4.03	275.21	95.36	4.03	275.21	95.35	4.03	275.21	95.35
10%	Vmax	0.37	399.81	90.04	0.37	399.79	90.04	0.37	399.78	90.04	0.37	399.78	90.04	0.37	399.78	90.06
20%	Vmax	0.87	399.78	94.08	0.87	399.77	94.08	0.87	399.78	94.08	0.87	399.76	94.08	0.87	399.78	94.08
30%	Vmax	1.30	399.80	95.17	1.30	399.78	95.17	1.30	399.78	95.17	1.30	399.76	95.17	1.30	399.76	95.17
50%	Vmax	2.01	399.75	95.68	2.01	399.77	95.67	2.01	399.76	95.68	2.01	399.77	95.68	2.01	399.75	95.67
75%	Vmax	2.84	399.80	95.54	2.84	399.78	95.54	2.84	399.77	95.53	2.84	399.79	95.54	2.84	399.79	95.54
100%	Vmax	4.01	399.83	94.85	4.01	399.82	94.86	4.01	399.81	94.85	4.01	399.82	94.86	4.01	399.82	94.85

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															
20%	Vmin															
30%	Vmin															
50%	Vmin															
75%	Vmin															
100%	Vmin															
10%	Vnom															
20%	Vnom															
30%	Vnom															
50%	Vnom															
75%	Vnom															
100%	Vnom															
10%	Vmax															
20%	Vmax															
30%	Vmax															
50%	Vmax															
75%	Vmax															
100%	Vmax															