Manufacturer: Motech Industries Inc.

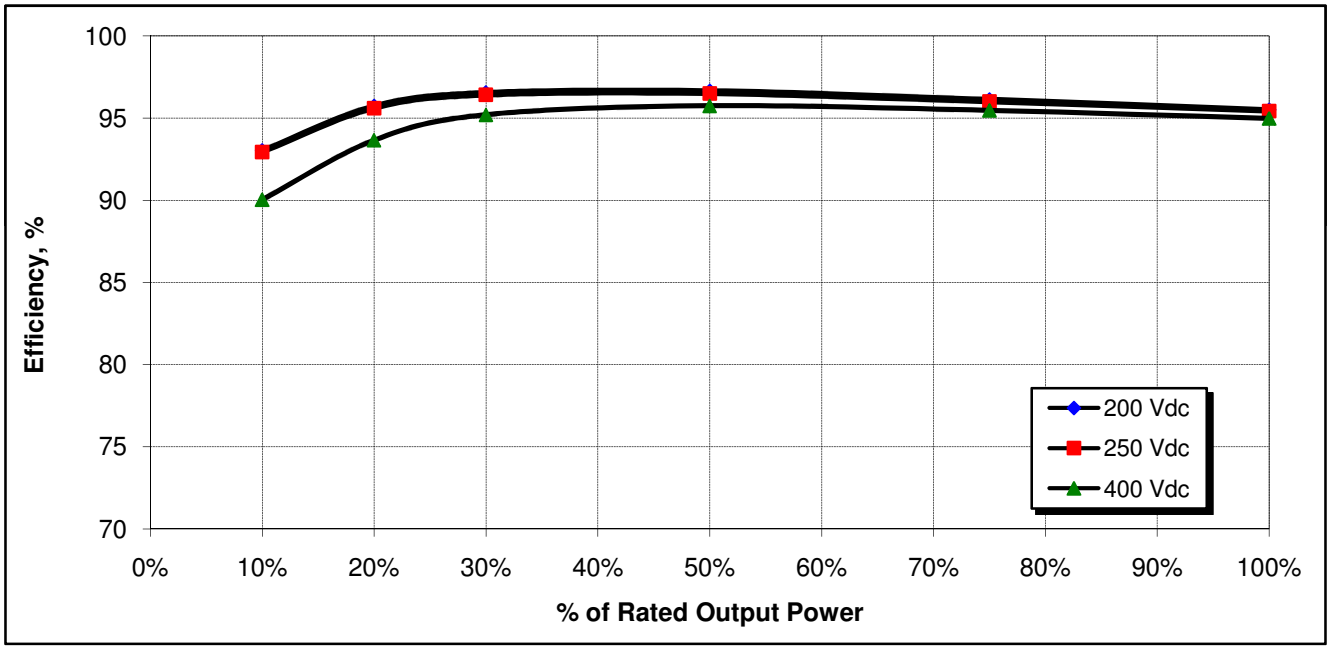
Model #: PVMate 3900U (240V)

Rated Maximum Continuous Output Power: 3.90 kW Night Tare Loss: 11.00 W

Vmin: 200 Vdc Vnom: 250 Vdc Vmax: 400 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.39	0.78	1.17	1.95	2.93	3.90	Wtd
Vmin	200	93.0	95.7	96.5	96.7	96.1	95.5	96.1
Vnom	250	92.9	95.6	96.4	96.5	96.0	95.4	96.0
Vmax	400	90.0	93.7	95.2	95.7	95.5	95.0	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)	(%)	(W)	(Vdc)	(%)
10%	Vmin	392.33	199.87	93.045	392.37	199.87	93.036	392.46	199.87	93.051	392.35	199.87	93.032	392.40	199.87	93.046
20%	Vmin	781.83	199.91	95.736	781.76	199.90	95.733	781.70	199.90	95.722	781.63	199.90	95.724	781.66	199.90	95.730
30%	Vmin	1170.98	199.97	96.546	1171.03	199.97	96.549	1171.05	199.97	96.553	1171.03	199.97	96.546	1170.95	199.97	96.545
50%	Vmin	1952.00	200.04	96.654	1952.08	200.05	96.652	1952.11	200.05	96.653	1952.09	200.05	96.657	1952.11	200.05	96.654
75%	Vmin	2926.13	200.15	96.136	2926.01	200.15	96.133	2926.05	200.16	96.134	2926.12	200.16	96.134	2925.94	200.15	96.131
100%	Vmin	3900.23	200.11	95.516	3899.86	200.10	95.512	3899.76	200.11	95.510	3899.76	200.11	95.509	3899.71	200.11	95.507
10%	Vnom	391.93	249.61	92.930	392.02	249.56	92.933	392.08	249.64	92.920	392.08	249.64	92.922	392.33	249.67	92.937
20%	Vnom	780.82	249.56	95.596	781.06	249.58	95.601	249.61	781.17	95.600	249.62	781.21	95.596	781.25	249.63	95.597
30%	Vnom	1169.93	249.56	96.410	1169.87	249.55	96.409	1169.73	249.54	96.405	1169.50	249.52	96.400	1169.27	249.49	96.399
50%	Vnom	1952.49	249.55	96.481	1952.16	249.53	96.486	1951.91	249.53	96.489	1951.55	249.51	96.497	1951.05	249.50	96.503
75%	Vnom	2925.56	249.58	95.993	2926.02	249.59	95.997	2926.40	249.59	95.999	2926.39	249.59	96.003	2926.43	249.59	96.003
100%	Vnom	3897.49	249.71	95.431	3897.16	249.71	95.428	3897.20	249.72	95.423	3897.13	249.72	95.423	3896.84	249.71	95.420
10%	Vmax	379.68	400.17	90.032	379.65	400.17	90.036	379.61	400.16	90.044	379.64	400.18	90.025	379.99	400.19	90.038
20%	Vmax	778.99	400.14	93.854	779.04	400.14	92.856	779.26	400.15	93.851	779.27	400.16	93.848	779.21	400.15	93.851
30%	Vmax	1174.06	400.11	95.202	1174.17	400.12	95.206	1174.19	400.14	95.198	1174.36	400.13	95.200	1174.38	400.14	95.201
50%	Vmax	1953.15	400.13	95.745	1953.14	400.13	95.748	1953.23	400.13	95.746	1953.28	400.14	95.747	1953.36	400.14	95.747
75%	Vmax	2921.99	399.12	95.477	2921.76	399.12	95.472	2921.85	399.12	95.468	2921.93	399.12	95.466	2921.89	399.12	95.463
100%	Vmax	3898.84	399.49	94.977	3898.62	399.48	94.978	3898.55	399.47	94.976	3898.43	399.47	94.975	3898.26	399.46	94.974

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															