Manufacturer: ETM Electromatic Inc.

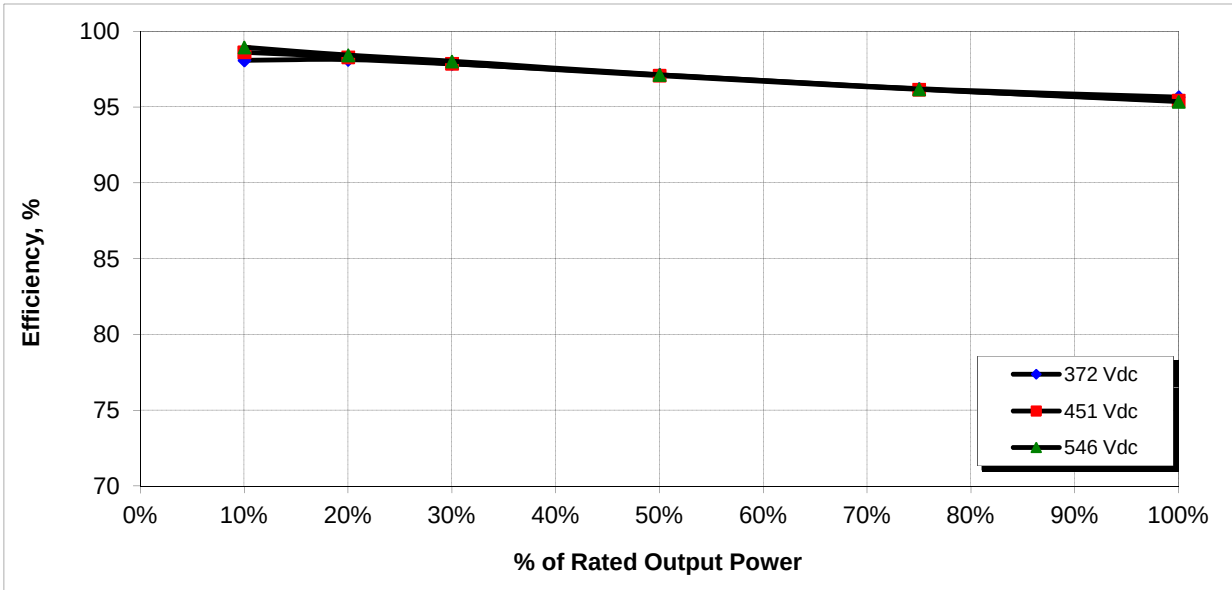
Model #: 290-480-60 for use with battery management systems (US

Rated Maximum Continuous Output Power : 279.286 kW Night Tare Loss: 900.00 W

Vmin: 372 Vdc Vnom: 451 Vdc Vmax: 546 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		27.93	55.86	83.79	139.64	209.46	279.29	Wtd
Vmin	372	98.1	98.1	97.8	97.1	96.2	95.7	96.7
Vnom	451	98.6	98.3	97.9	97.1	96.2	95.4	96.7
Vmax	546	98.9	98.4	98.0	97.1	96.2	95.3	96.8

CEC Efficiency = 96.5%



Inverter Efficiency Data

Minimum of 5 samples required

Specified		Sample #1			Sample #2			Sample #3			Sample #4			Sample #5		
Input Voltage	Output Power	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
(Vdc)	(% of rated)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
Vmin	10%	26599.00	373.71	98.16	26574.30	373.41	98.17	25925.70	373.50	97.91	26877.60	373.53	97.96	26495.00	373.75	98.25
	20%	59494.60	373.72	98.21	58527.80	373.69	98.29	59656.80	373.62	98.27	59338.60	374.33	98.09	58786.80	373.94	97.92
	30%	90137.80	373.01	97.94	89183.00	372.86	97.79	90141.20	373.25	97.80	90100.50	372.65	97.85	89179.80	372.44	97.77
	50%	152636	375.91	97.03	151714	376.48	97.17	150891	375.59	97.04	151758	376.41	97.18	152523	375.44	97.34
	75%	223060	372.01	96.11	221977	372.04	96.26	219943	371.25	96.15	221826	372.13	96.19	223406	371.60	96.29
	100%	270163	368.11	95.82	266980	367.82	95.59	268956	368.63	95.58	271408	368.58	95.77	264689	367.18	95.54
Vnom	10%	26587.40	451.77	98.73	26510.00	452.05	98.48	26108.10	451.90	98.58	26906.70	451.92	98.54	26595.30	451.29	98.71
	20%	59228.90	452.08	98.31	58671.00	452.24	98.25	59837.40	451.95	98.37	59470.10	452.04	98.34	58779.60	452.00	98.25
	30%	90230.80	451.91	97.86	89167.10	451.49	97.82	90172.80	452.14	97.92	89493.30	451.40	97.82	90485.60	452.25	97.86
	50%	152428	450.67	97.07	151662	450.28	97.33	151473	449.64	96.98	151752	450.82	97.01	150940	449.90	97.02
	75%	222578	451.86	96.14	219832	450.55	96.26	221993	450.14	96.12	221589	451.56	96.17	220647	450.33	96.09
	100%	282479	450.32	95.66	279634	448.69	95.37	281364	450.60	95.43	281442	448.70	95.45	280853	448.98	95.37
Vmax	10%	26820.10	544.58	99.02	26408.10	545.03	99.17	26109.70	544.39	99.00	26559.30	543.88	98.80	26485.70	543.77	98.97
	20%	58878.90	545.75	98.52	59731.70	545.55	98.44	59352.40	546.94	98.41	58712.40	545.85	98.25	59887.90	546.16	98.43
	30%	91144.60	545.92	98.09	90111.90	545.00	97.89	91134.30	546.23	98.00	90981.70	546.01	98.06	90354.30	545.66	98.01
	50%	150261	543.06	97.09	152041	544.19	97.11	152156	543.21	97.36	150702	542.06	97.03	151533	543.30	97.13
	75%	220069	545.22	96.09	221351	546.87	96.15	221081	545.67	96.29	221269	545.36	96.16	223227	546.95	96.19
	100%	283940	543.70	95.36	278585	541.87	95.37	279244	541.36	95.33	282539	542.91	95.36	279826	541.27	95.38

Specified		Sample #6			Sample #7			Sample #8			Sample #9			Sample #10		
Input Voltage	Output Power	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
(Vdc)	(% of rated)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
Vmin	10%	26122.20	373.66	98.02	26107.20	373.48	98.06	26570.80	374.05	98.24	26571.50	373.35	97.97			
	20%	59772.00	373.97	98.04	59442.50	374.35	98.10	58849.80	374.06	98.07	59744.60	374.12	98.08			
	30%	90148.40	372.58	97.82	89024.80	372.46	97.80	90735.10	372.40	97.90	90013.90	372.67	97.85			
	50%	150407	375.45	97.03	152323	375.89	97.09	152365	375.51	97.18	150325	374.77	97.09			
	75%	219332	370.96	96.12	221612	372.16	96.21	222544	371.84	96.41	219181	371.24	96.19			
	100%	270285	368.43	95.60	269782	368.47	95.87	266593	367.13	95.54	268840	368.81	95.64			
Vnom	10%	26906.70	451.92	98.54	26595.30	451.29	98.71	26266.00	451.03	98.66	26459.00	451.08	98.56			
	20%	59935.60	452.60	98.29	59255.90	452.48	98.25	58739.30	451.62	98.23	59934.10	452.65	98.30			
	30%	90118.30	452.03	97.87	89236.10	451.41	97.87	90324.60	452.02	97.89	90204.10	452.03	97.87			
	50%	152006	450.24	97.01	152439	450.14	97.12	150594	449.77	97.03	151847	450.69	97.11			
	75%	221545	451.22	96.12	223334	451.07	96.26	218629	450.07	96.10	222300	451.30	96.13			
	100%	284268	450.15	95.39	277924	448.53	95.35	283156	448.95	95.30	283708	448.85	95.50			
Vmax	10%	26536.20	546.61	98.85	26890.30	546.96	98.84	26139.20	547.22	99.00	25806.70	547.13	98.82			
	20%	58989.90	546.05	98.61	58844.10	545.71	98.19	59778.30	546.06	98.40	59256.70	546.60	98.50			
	30%	91324.70	545.77	98.03	90802.80	545.35	98.20	90695.90	545.08	97.89	90847.10	545.51	97.97			
	50%	151058	542.04	97.19	151487	542.15	97.06	152261	543.45	97.07	150371	542.15	97.06			
	75%	219176	545.83	96.17	222162	546.87	96.12	222991	546.37	96.35	218844	545.05	96.08			
	100%	281041	540.63	95.34	282401	542.83	95.38	280300	540.52	95.33	281294	541.47	95.29			