Manufacturer: Power Electronics

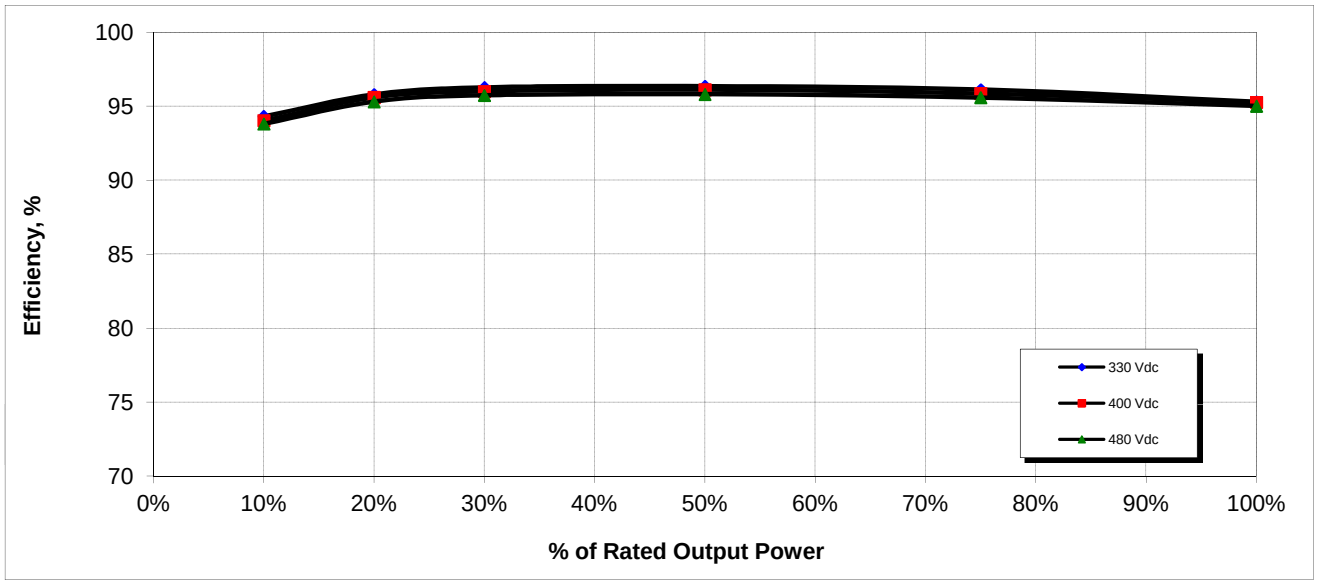
Model #: FS640CU, FS640PU

Rated Maximum Continuous Output Power: 640.00 kW Night Tare Loss: 629 W

Vmin: 330 Vdc Vnom: 400 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		64.00	128.00	192.00	320.00	480.00	640.00	Wtd
Vmin	330	94.31	95.80	96.27	96.36	96.13	95.30	96.06
Vnom	400	94.03	95.59	96.00	96.11	95.86	95.26	95.81
Vmax	480	93.80	95.30	95.73	95.81	95.58	95.01	95.53

CEC Efficiency of Inverter and MV TP1 Transformer = 96.0%



Manufacturer: Power Electronics

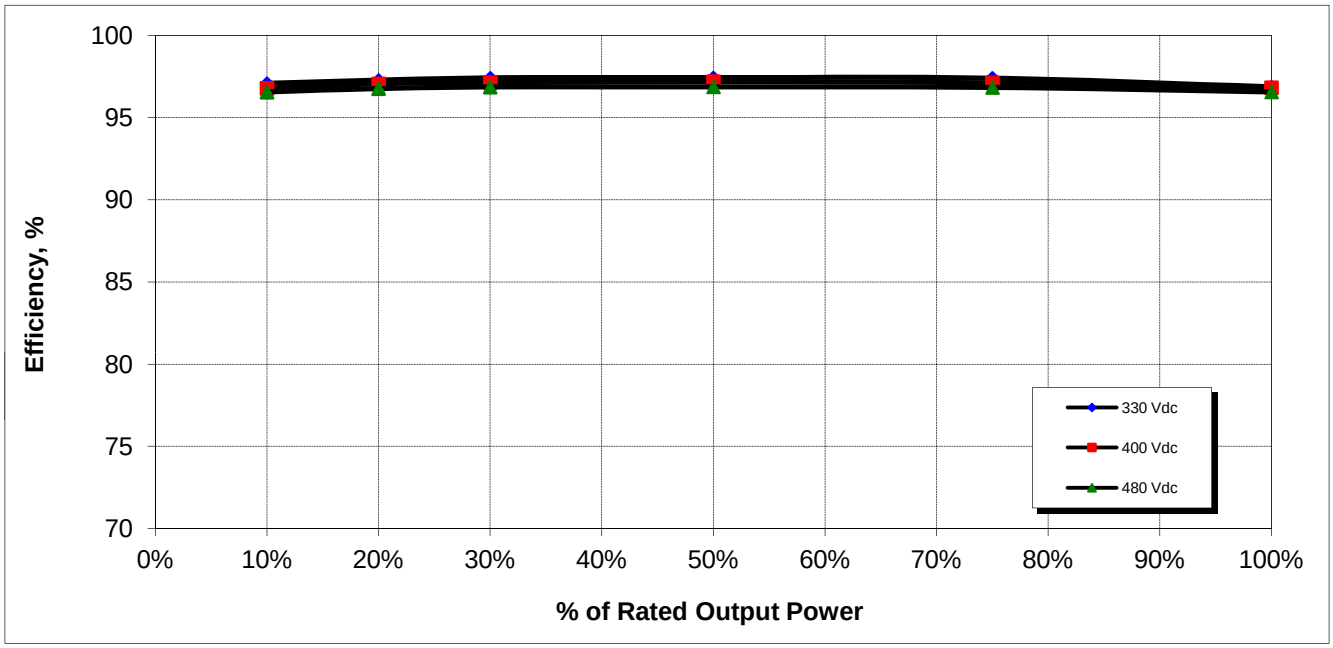
Model #: FS640CU, FS640PU

Rated Maximum Continuous Output Power: 640.00 kW Night Tare Loss: 629 W

Vmin: 330 Vdc Vnom: 400 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		64.00	128.00	192.00	320.00	480.00	640.00	Wtd
Vmin	330	97.08	97.27	97.41	97.43	97.39	96.86	97.36
Vnom	400	96.79	97.06	97.14	97.18	97.12	96.82	97.10
Vmax	480	96.56	96.77	96.86	96.87	96.84	96.56	96.82

Inverter Efficiency only = 97.0%



750kVA TP1 Transformer Efficiency

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		64.00	128.00	192.00	320.00	480.00	640.00	Wtd
Vmin	330	97.15	98.49	98.83	98.9	98.7	98.39	98.67
Vnom	400	97.15	98.49	98.83	98.9	98.7	98.39	98.67
Vmax	480	97.15	98.49	98.83	98.9	98.7	98.39	98.67

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)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin	63366.750	330.481	97.077	63336.467	330.453	97.081	63434.000	330.459	97.081	256255.628	404.146	97.051	63413.133	330.436	97.087
20%	Vmin	128165.000	330.352	97.270	128254.333	330.348	97.271	128175.333	330.372	97.267	128141.000	330.367	97.266	128147.667	330.343	97.264
30%	Vmin	193381.500	330.952	97.414	193482.333	330.958	97.385	193278.667	330.736	97.381	193390.333	330.675	97.413	193390.333	330.675	97.413
50%	Vmin	321494.000	330.395	97.421	321667.000	330.374	97.442	321752.000	330.356	97.402	321508.000	330.375	97.423	321640.333	330.370	97.460
75%	Vmin	480546.500	331.577	97.391	479968.000	331.574	97.400	479929.667	331.563	97.398	479997.333	331.566	97.388	480304.000	331.590	97.353
100%	Vmin	640282.500	331.112	96.968	640065.667	331.112	97.082	640130.333	331.121	97.073	639978.667	331.097	97.065	640282.667	331.098	97.081
10%	Vnom	63330.750	400.816	96.800	63379.767	400.793	96.787	63358.300	400.804	96.782	63360.300	400.803	96.782	63325.133	400.795	96.792
20%	Vnom	128024.500	400.536	97.065	128023.667	400.548	97.065	128018.000	400.539	97.062	127999.667	400.509	97.048	127965.333	400.551	97.054
30%	Vnom	193661.000	400.302	97.170	193701.667	400.319	97.164	193759.333	400.334	97.122	193708.667	400.335	97.143	193710.333	400.301	97.163
50%	Vnom	319358.000	400.917	97.188	319658.333	400.919	97.226	320051.000	400.910	97.215	320049.000	400.906	97.100	320096.333	400.897	97.125
75%	Vnom	480519.500	400.199	97.145	480438.667	400.174	97.132	480188.000	400.137	97.102	480571.000	400.148	97.141	480724.000	400.164	97.071
100%	Vnom	643030.000	400.818	96.783	642642.000	400.829	96.845	643013.667	400.824	96.835	643138.333	400.797	96.842	642922.000	400.804	96.762
10%	Vmax	63413.650	480.246	96.571	63419.933	480.288	96.561	63459.033	480.330	96.541	63471.000	480.297	96.542	63479.700	480.290	96.543
20%	Vmax	127871.000	480.126	96.830	127937.000	480.108	96.833	127856.333	480.102	96.675	127895.333	480.140	96.820	127893.000	480.133	96.820
30%	Vmax	193927.500	480.819	96.883	193827.000	480.846	96.885	193800.333	480.837	96.755	193881.000	480.841	96.881	193891.667	480.821	96.881
50%	Vmax	320988.000	480.456	96.807	321179.000	480.458	96.966	321112.000	480.434	96.875	321207.333	480.450	96.940	321131.000	480.441	96.883
75%	Vmax	481497.500	479.945	96.848	481544.667	479.932	96.915	481527.667	479.905	96.772	481655.000	479.889	96.738	481842.000	479.919	96.789
100%	Vmax	642258.500	479.643	96.633	641711.667	479.636	96.592	642776.667	479.658	96.612	641885.333	479.606	96.568	642237.333	479.640	96.607

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	63413.133	330.436	97.087	63426.600	330.451	97.089									
20%	Vmin	128164.000	330.355	97.265	128097.000	330.334	97.269									
30%	Vmin	193317.333	330.962	97.423	193258.000	330.955	97.420									
50%	Vmin	321528.667	330.368	97.435	321797.000	330.401	97.405									
75%	Vmin	480210.667	331.590	97.397	480390.000	331.601	97.414									
100%	Vmin	640155.333	331.100	97.072	640213.000	331.090	97.097									
10%	Vnom	63358.300	400.814	96.795	63303.600	400.767	96.791									
20%	Vnom	127950.667	400.558	97.056	127905.000	400.565	97.053									
30%	Vnom	194490.000	400.299	97.034	193915.000	400.306	97.166									
50%	Vnom	319990.000	400.917	97.226	320308.000	400.901	97.192									
75%	Vnom	481125.000	400.174	97.087	481239.000	400.173	97.168									
100%	Vnom	643352.667	400.838	96.833	642859.000	400.856	96.846									
10%	Vmax	63463.433	480.342	96.533	63464.900	480.370	96.538									
20%	Vmax	127790.000	480.119	96.826	127773.000	480.117	96.558									
30%	Vmax	193865.333	480.801	96.883	193947.000	480.816	96.882									
50%	Vmax	321149.667	480.497	96.794	321146.000	480.499	96.842									
75%	Vmax	481748.000	479.934	96.899	481504.000	479.935	96.917									
100%	Vmax	641911.667	479.642	96.493	642342.000	479.633	96.284									