Manufacturer: Power Electronics

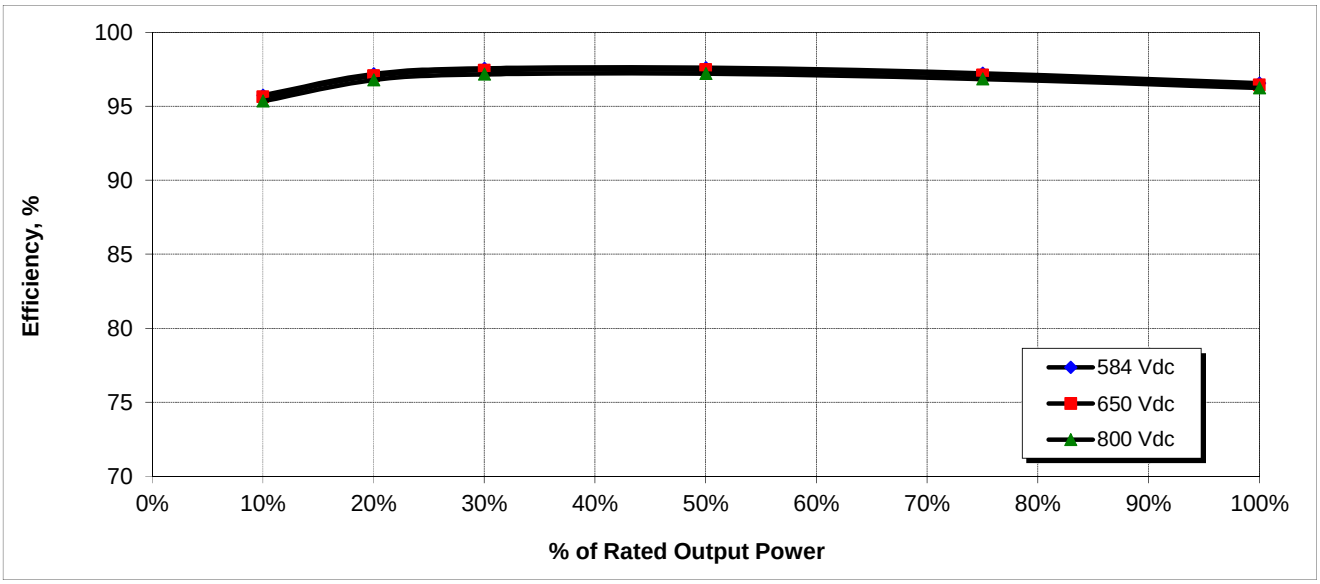
Model #: FS1800CU (400Vac)

Rated Maximum Continuous Output Power: 2000.0 kW Night Tare Loss: -381 W

Vmin: 584 Vdc Vnom: 650 Vdc Vmax: 800 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		200.00	400.00	600.00	1000.00	1500.00	2000.00	Wtd
Vmin	584	95.8	97.2	97.6	97.6	97.2	96.6	97.3
Vnom	650	95.6	97.1	97.4	97.5	97.1	96.4	97.1
Vmax	800	95.4	96.8	97.2	97.2	96.9	96.2	96.9

CEC Efficiency of Inverter and MV TP1 Transformer = 97.0%



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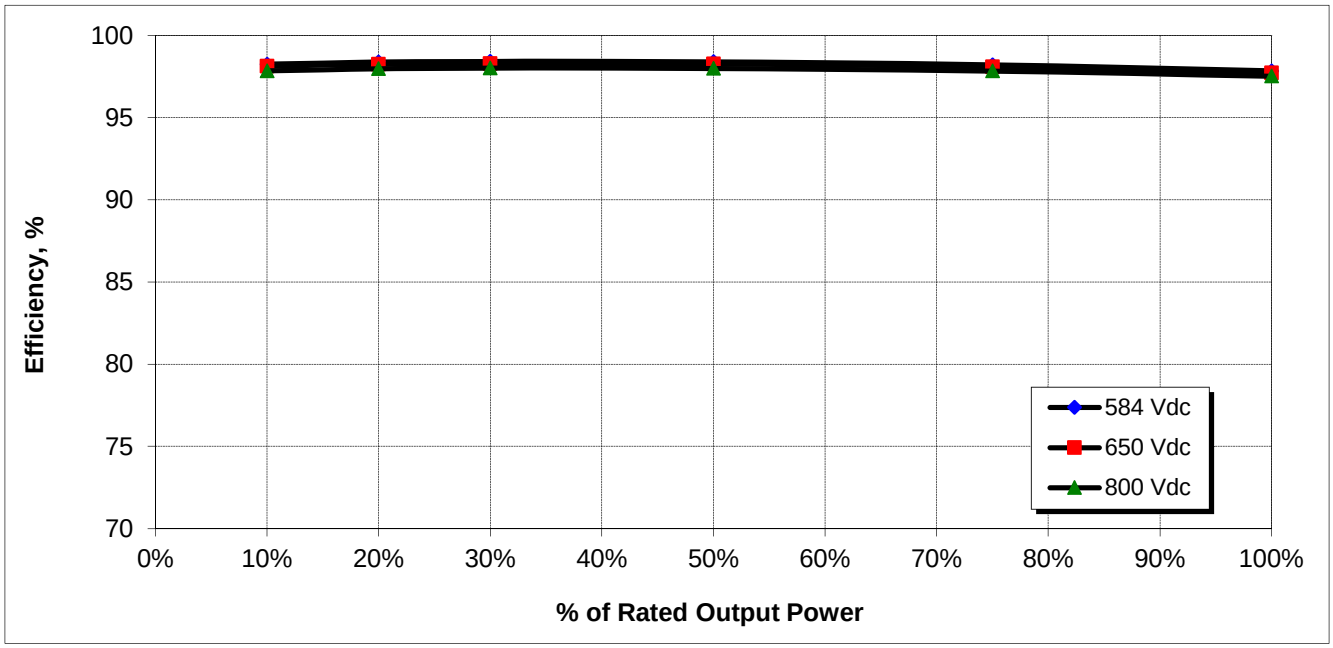
		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		200.00	400.00	600.00	1000.00	1500.00	2000.00	Wtd
Vmin	584	98.3	98.4	98.4	98.4	98.2	97.8	98.3
Vnom	650	98.1	98.2	98.3	98.3	98.1	97.7	98.1
Vmax	800	97.8	98.0	98.0	98.0	97.8	97.5	97.9

Inverter Efficiency only = 98.0%



2000KVA TP1 MV Transformer Efficiency

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		200.00	400.00	600.00	1000.00	1500.00	2000.00	Wtd
Vmin	584	97.45	98.79	99.13	99.20	99.00	98.69	98.97
Vnom	650	97.45	98.79	99.13	99.20	99.00	98.69	98.97
Vmax	800	97.45	98.79	99.13	99.20	99.00	98.69	98.97

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	198063.3	585.9	98.3	198022.3	585.9	98.3	198191.7	585.8	98.3	197606.7	585.8	98.2	198403.7	585.9	98.3
20%	Vmin	403292.7	585.6	98.4	402388.3	585.7	98.4	403539.3	585.7	98.4	402389.0	585.7	98.4	402676.7	585.7	98.4
30%	Vmin	609228.3	584.6	98.4	611909.3	584.5	98.4	611889.7	584.5	98.4	610265.7	584.6	98.4	609069.7	584.5	98.4
50%	Vmin	1013373.3	584.4	98.4	1016343.3	584.4	98.4	1020246.7	584.3	98.4	1020603.3	584.4	98.4	1020576.7	584.3	98.4
75%	Vmin	1505920.0	585.0	98.2	1503220.0	585.1	98.2	1507540.0	585.0	98.2	1503450.0	585.0	98.2	1507026.7	585.0	98.2
100%	Vmin	2074526.7	585.5	97.9	2073090.0	585.6	97.9	2069586.7	585.5	97.8	2068063.3	585.4	97.8	2067340.0	585.5	97.8
10%	Vnom	198309.7	650.6	98.1	197667.7	650.6	98.1	197781.3	650.6	98.1	198061.0	650.6	98.1	197574.3	650.6	98.1
20%	Vnom	402179.7	650.4	98.2	402458.0	650.4	98.2	402676.7	650.4	98.3	401136.0	650.5	98.2	402991.7	650.4	98.2
30%	Vnom	606226.3	650.4	98.3	609238.3	650.4	98.3	608008.0	650.4	98.3	610141.3	650.3	98.3	609860.7	650.3	98.3
50%	Vnom	1013250.0	650.1	98.3	1013320.0	650.2	98.3	1013200.0	650.2	98.3	1016256.7	650.1	98.3	1011986.7	650.2	98.3
75%	Vnom	1502850.0	649.9	98.1	1502196.7	649.9	98.1	1503746.7	649.8	98.1	1499133.3	649.9	98.1	1505780.0	649.9	98.1
100%	Vnom	2063263.3	651.4	97.7	2063490.0	651.4	97.7	2064393.3	651.4	97.7	2064180.0	651.4	97.7	2062840.0	651.4	97.7
10%	Vmax	197063.0	800.5	97.8	197711.3	800.5	97.8	197450.3	800.5	97.9	197910.7	800.5	97.9	198238.0	800.5	97.9
20%	Vmax	403415.7	800.3	98.0	400947.7	800.3	98.0	402455.7	800.2	98.0	401618.7	800.3	98.0	402996.0	800.3	98.0
30%	Vmax	609342.7	800.3	98.0	608526.0	800.3	98.0	607101.0	800.3	98.0	607885.7	800.2	98.0	609091.7	800.3	98.0
50%	Vmax	1010623.3	802.1	98.0	1008193.3	802.2	98.0	1011176.7	802.1	98.0	1013193.3	802.1	98.0	1014680.0	802.1	98.0
75%	Vmax	1496170.0	801.9	97.8	1497646.7	801.9	97.8	1495263.3	801.9	97.8	1497346.7	801.8	97.8	1497740.0	801.8	97.8
100%	Vmax	2064700.0	801.4	97.5	2063246.7	801.5	97.5	2064376.7	801.4	97.5	2063046.7	801.5	97.5	2063900.0	801.4	97.5

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	198276.3	585.9	98.3	197944.3	585.9	98.3									
20%	Vmin	403795.7	585.7	98.4	403149.0	585.7	98.4									
30%	Vmin	610714.3	584.6	98.4	610955.7	584.5	98.4									
50%	Vmin	1016863.3	584.3	98.4	1016010.0	584.3	98.4									
75%	Vmin	1510276.7	584.9	98.2	1503766.7	585.0	98.2									
100%	Vmin	2067313.3	585.5	97.8	2068246.7	585.4	97.8									
10%	Vnom	197306.0	650.6	98.1	198185.0	650.6	98.1									
20%	Vnom	402458.0	650.5	98.3	403343.3	650.4	98.2									
30%	Vnom	606693.7	650.3	98.3	609920.7	650.4	98.3									
50%	Vnom	1014393.3	650.2	98.3	1014643.3	650.2	98.3									
75%	Vnom	1501393.3	649.9	98.1	1503483.3	649.9	98.1									
100%	Vnom	2063936.7	651.4	97.7	2064133.3	651.4	97.7									
10%	Vmax	197697.0	800.5	97.8	198236.3	800.5	97.8									
20%	Vmax	401209.7	800.2	98.0	402402.7	800.2	98.0									
30%	Vmax	609844.7	800.3	98.0	609086.0	800.3	98.0									
50%	Vmax	1016656.7	802.1	98.0	1010463.3	802.1	98.0									
75%	Vmax	1496203.3	802.0	97.8	1499893.3	801.9	97.8									
100%	Vmax	2064203.3	801.5	97.5	2065130.0	801.5	97.5									