Manufacturer: Fronius International GmbH

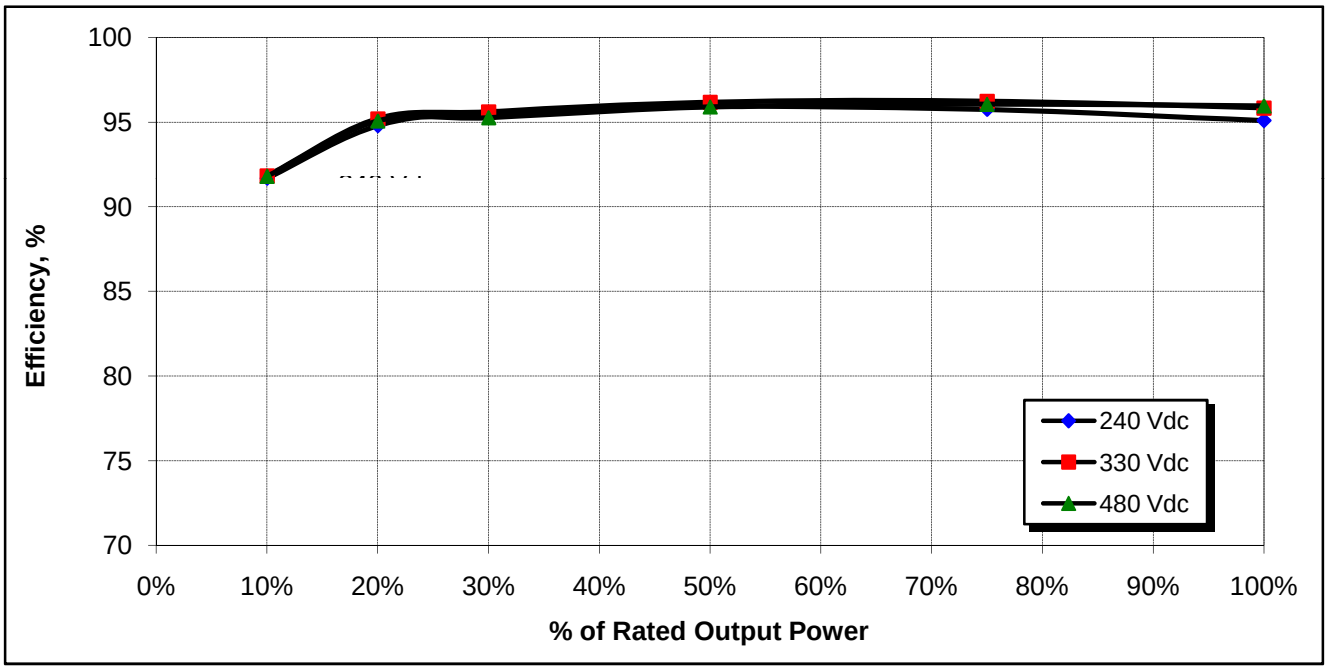
Model #: Fronius IG Plus 3.8-1 UNI (277V)

Rated Maximum Continuous Output Power: 3.80 kW Night Tare Loss: 1.10 W

Vmin: 240 Vdc Vnom: 330 Vdc Vmax: 480 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.38	0.76	1.14	1.90	2.85	3.80	Wtd
Vmin	240	91.7	94.8	95.5	95.9	95.8	95.1	95.5
Vnom	330	91.8	95.2	95.6	96.2	96.2	95.8	95.9
Vmax	480	91.8	95.1	95.3	95.9	96.1	96.0	95.7

CEC Efficiency = 95.5%



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	367.31	237.63	91.636	367.7	237.63	91.716	367.5	237.64	91.665	367.5	237.64	91.677	367.3	237.64	91.694
20%	Vmin	827.09	237.61	94.724	826.9	237.61	94.713	828.1	237.61	94.848	827.8	237.61	94.843	828.1	237.62	94.834
30%	Vmin	1220.3	237.62	95.517	1220	237.62	95.522	1220	237.62	95.517	1220	237.62	95.526	1220	237.62	95.516
50%	Vmin	1998.3	237.52	95.934	1998	237.52	95.945	1998	237.52	95.935	1998	237.52	95.937	1998	237.52	95.917
75%	Vmin	2676.7	237.47	95.750	2677	237.47	95.749	2677	237.47	95.753	2677	237.47	95.751	2677	237.47	95.753
100%	Vmin	3629.2	237.44	95.101	3630	237.45	95.102	3629	237.44	95.096	3630	237.45	95.106	3629	237.44	95.095
10%	Vnom	353.93	327.14	92.426	351.3	327.12	91.385	353.1	327.13	92.016	353	327.13	92.031	353	327.13	91.425
20%	Vnom	806.65	327.04	95.209	806.6	327.04	95.204	806.2	327.05	95.201	805.9	327.05	95.196	806.7	327.05	95.217
30%	Vnom	1210.5	326.99	95.597	1210	326.98	95.612	1211	326.98	95.611	1210	326.99	95.613	1210	326.98	95.612
50%	Vnom	2006.7	326.99	96.182	2006	326.98	96.166	2007	326.98	96.191	2007	326.98	96.182	2007	326.98	96.186
75%	Vnom	2697.6	326.92	96.242	2697	326.92	96.242	2697	326.93	96.242	2698	326.92	96.246	2697	326.92	96.238
100%	Vnom	3687.4	326.93	95.839	3687	326.92	95.837	3687	326.92	95.837	3688	326.91	95.841	3688	326.92	95.836
10%	Vmax	336.55	471.72	91.806	335.9	471.72	91.801	336.2	471.72	91.760	336.3	471.73	91.748	336.7	471.73	91.807
20%	Vmax	801.11	471.7	95.105	800.5	471.72	95.059	801.1	471.72	95.101	800.5	471.72	95.115	800.2	471.73	95.079
30%	Vmax	1207.1	471.72	95.270	1207	471.72	95.263	1207	471.72	95.269	1207	471.72	95.269	1207	471.72	95.267
50%	Vmax	2029	471.69	95.900	2029	471.69	95.891	2029	471.68	95.897	2029	471.69	95.898	2029	471.68	95.898
75%	Vmax	2710.8	471.65	96.061	2711	471.65	96.059	2711	471.65	96.060	2711	471.64	96.062	2711	471.64	96.064
100%	Vmax	3655.6	471.68	95.950	3656	471.68	95.955	3655	471.66	95.953	3655	471.68	95.954	3655	471.67	95.954

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	367.62	237.64	91.718	367.3	237.64	91.709									
20%	Vmin	828.45	237.62	94.843	827.8	237.63	94.760									
30%	Vmin	1219.8	237.62	95.516	1220	237.62	95.511									
50%	Vmin	1997.4	237.53	95.906	1997	237.53	95.904									
75%	Vmin	2676.7	237.47	95.755	2677	237.47	95.749									
100%	Vmin	3629	237.45	95.101	3629	237.44	95.094									
10%	Vnom	351.27	327.12	91.312	354	327.12	92.155									
20%	Vnom	806.65	327.05	95.237	805.4	327.05	95.122									
30%	Vnom	1210.4	326.98	95.611	1210	326.99	95.610									
50%	Vnom	2006.6	326.98	96.170	2007	326.98	96.181									
75%	Vnom	2697.4	326.92	96.233	2696	326.93	96.207									
100%	Vnom	3688.2	326.92	95.840	3688	326.91	95.839									
10%	Vmax	336.5	471.73	91.842	335.7	471.73	91.810									
20%	Vmax	800.38	471.73	95.102	798.5	471.73	94.906									
30%	Vmax	1207.5	471.72	95.259	1208	471.72	95.261									
50%	Vmax	2028.7	471.69	95.896	2029	471.68	95.906									
75%	Vmax	2711.5	471.64	96.061	2712	471.64	96.060									
100%	Vmax	3655.9	471.68	95.958	3655	471.67	95.956									