Manufacturer: Fronius International GmbH

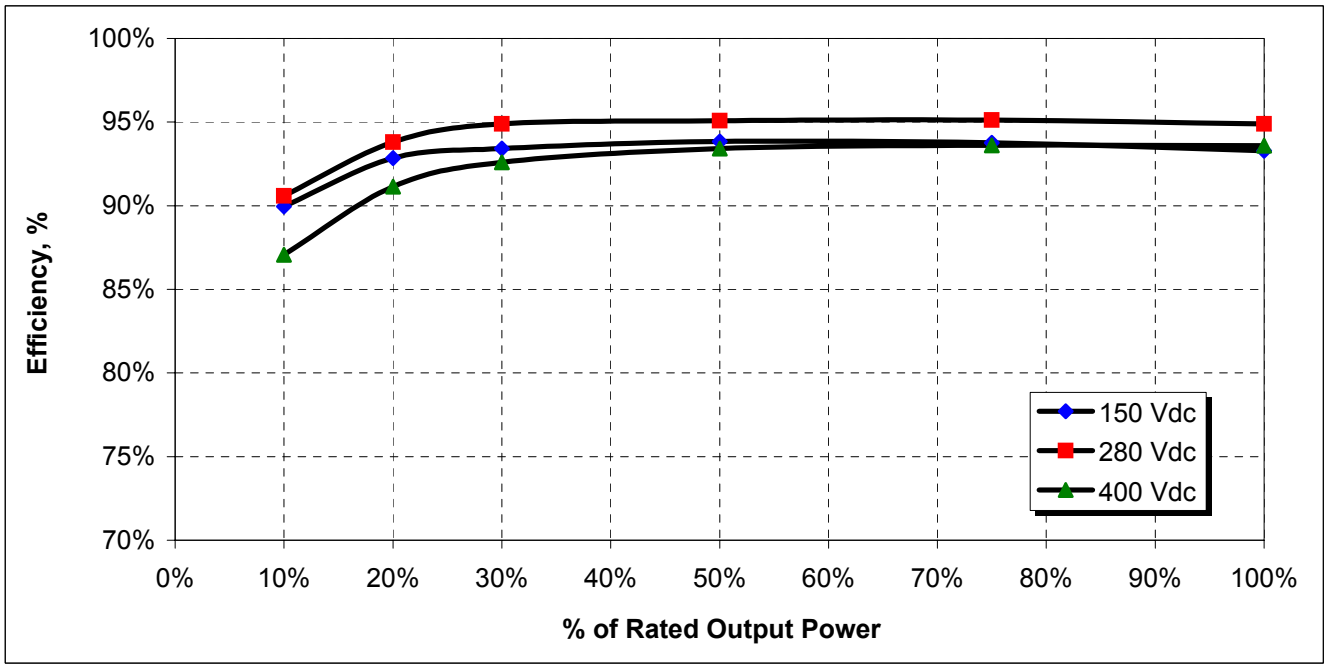
Model #: IG 4000

Rated Maximum Continuous Output Power: 4.00 kW Night Tare Loss: 0.90 W

Vmin: 150 Vdc Vnom: 280 Vdc Vmax: 400 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.40	0.80	1.20	2.00	3.00	4.00	Wtd
Vmin	150	90.0%	92.9%	93.4%	93.8%	93.8%	93.3%	93.5%
Vnom	280	90.6%	93.8%	94.9%	95.1%	95.1%	94.9%	94.8%
Vmax	400	87.1%	91.1%	92.6%	93.4%	93.6%	93.6%	93.1%

CEC Efficiency = 94.0%



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)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin	400.936	150.2	0.900	400.94	150.3	0.901	400.94	150.29	0.900	400.96	150.24	0.901	400.95	150.19	0.898
20%	Vmin	801.158	150.08	0.928	801.14	150.05	0.928	801.17	150.15	0.929	801.13	150.09	0.929	801.16	150.12	0.928
30%	Vmin	1200.22	149.93	0.934	1201.7	150.13	0.933	1201.7	150	0.934	1201.7	149.95	0.934	1201.7	149.95	0.935
50%	Vmin	2003.83	150.23	0.938	2005.2	150.1	0.940	2003.8	150.18	0.939	2003.8	150.07	0.937	2003.8	150.24	0.937
75%	Vmin	3005.44	149.99	0.938	3006.9	149.95	0.938	3006.7	150.15	0.938	3006.7	150.24	0.937	3008.2	150.15	0.939
100%	Vmin	4007.82	153.1	0.933	4010.8	153.22	0.933	4009.3	152.8	0.932	4007.7	152.72	0.933	4007.8	152.73	0.934
10%	Vnom	398.291	278.2	0.904	398.28	278.05	0.903	398.29	278.02	0.907	398.29	277.99	0.908	398.28	278.03	0.906
20%	Vnom	804.142	277.98	0.938	804.13	277.95	0.938	804.14	277.76	0.940	804.14	277.99	0.936	805.57	278.12	0.939
30%	Vnom	1201.76	277.82	0.947	1201.7	277.75	0.951	1201.8	277.86	0.948	1200.3	277.93	0.946	1201.8	277.96	0.950
50%	Vnom	1997.97	277.86	0.952	1998	278	0.953	1998	277.85	0.952	1998	277.82	0.951	1998	278.14	0.950
75%	Vnom	3007.21	277.96	0.950	3006.9	278	0.951	3006.9	277.93	0.952	3006.8	278.01	0.950	3008.3	277.91	0.953
100%	Vnom	3994.67	277.92	0.949	3996.1	277.76	0.951	3994.7	277.88	0.948	3994.7	278.09	0.948	3994.7	277.87	0.950
10%	Vmax	400.97	395.81	0.870	400.98	395.81	0.870	400.98	395.81	0.872	400.97	395.81	0.871	400.97	395.81	0.871
20%	Vmax	801.187	395.73	0.912	801.2	395.73	0.911	801.18	395.73	0.912	801.19	395.73	0.912	801.21	395.73	0.911
30%	Vmax	1204.64	395.7	0.926	1204.6	395.7	0.926	1204.6	395.7	0.926	1204.7	395.7	0.925	1204.6	395.7	0.926
50%	Vmax	2000.81	395.78	0.934	1999.4	395.78	0.934	2000.8	395.78	0.934	2000.8	395.78	0.934	2000.8	395.78	0.935
75%	Vmax	3009.79	395.77	0.936	3009.8	395.77	0.937	3009.8	395.77	0.936	3009.7	395.77	0.936	3009.8	395.77	0.935
100%	Vmax	3993.36	395.83	0.935	3994.8	395.83	0.935	3994.7	395.83	0.936	3993.4	395.83	0.935	3996.1	395.83	0.937

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	400.939	150.25	0.899	400.96	150.29	0.899									
20%	Vmin	801.151	150.12	0.929	801.16	150.16	0.929									
30%	Vmin	1200.23	150.09	0.933	1201.7	150.02	0.935									
50%	Vmin	2006.55	150.11	0.938	2005.2	150.11	0.940									
75%	Vmin	3008.17	150.41	0.936	3005.4	150.14	0.937									
100%	Vmin	4007.83	153.14	0.932	4007.8	152.95	0.933									
10%	Vnom	398.288	277.89	0.908	3996.1	278.13	0.905									
20%	Vnom	804.136	277.86	0.938	804.14	277.91	0.936									
30%	Vnom	1201.77	277.85	0.949	1201.8	277.84	0.952									
50%	Vnom	1997.95	277.85	0.950	1998	277.65	0.949									
75%	Vnom	3006.84	278.11	0.950	3006.8	277.92	0.952									
100%	Vnom	3996.06	278.03	0.947	3996.1	277.93	0.950									
10%	Vmax	400.975	395.81	0.869	3996.1	395.81	0.871									
20%	Vmax	801.2	395.73	0.912	801.18	395.73	0.912									
30%	Vmax	1204.64	395.7	0.927	1204.6	395.7	0.925									
50%	Vmax	2000.82	395.78	0.935	2000.8	395.78	0.934									
75%	Vmax	3009.8	395.77	0.936	3009.8	395.77	0.936									
100%	Vmax	3994.75	395.83	0.937	3994.8	395.83	0.936									