Manufacturer: INGETEAM ENERGY SA

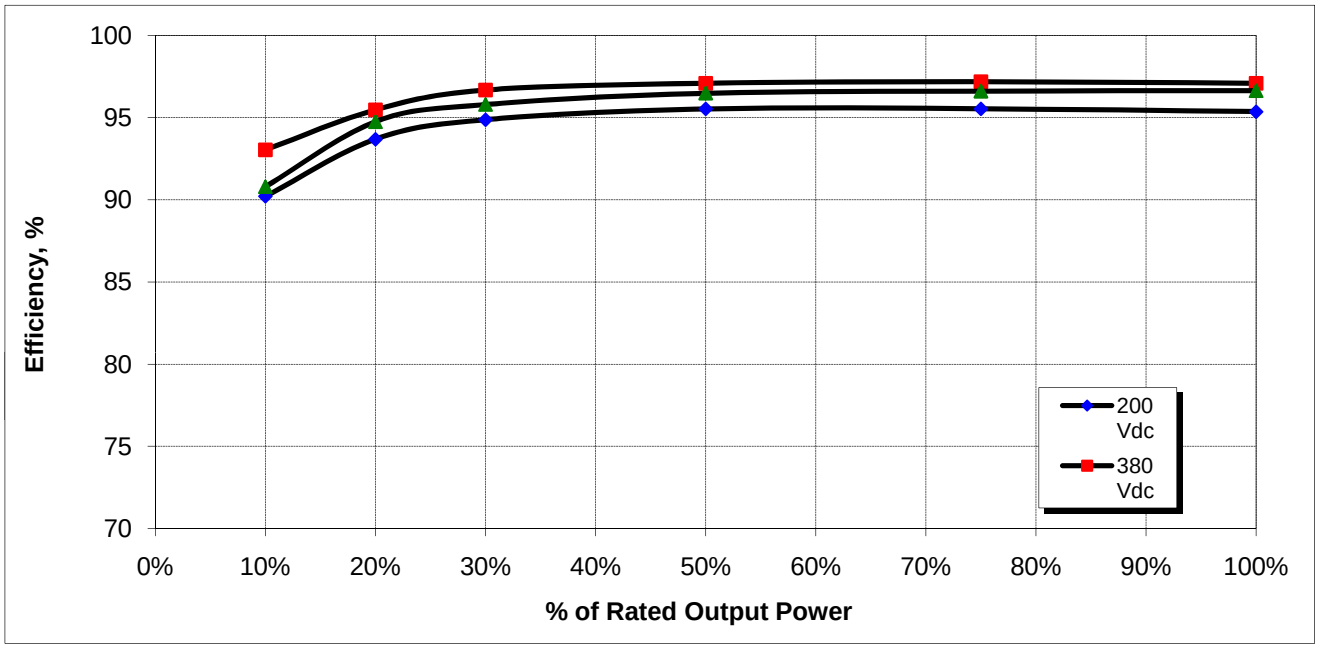
Model #: Ingecon Sun 5TL U (277V)

Rated Maximum Continuous Output Power: 5.00 kW Night Tare Loss: 0.50 W

Vmin: 200 Vdc Vnom: 380 Vdc Vmax: 450 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		0.50	1.00	1.50	2.50	3.75	5.00	Wtd
Vmin	200	90.2	93.7	94.9	95.5	95.5	95.4	95.1
Vnom	380	93.0	95.5	96.7	97.1	97.2	97.1	96.8
Vmax	450	90.8	94.7	95.8	96.5	96.6	96.6	96.1

CEC Efficiency = 96.0%



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)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	0.4914	201.87	90.722	0.484	202.05	90.386	0.485	202.05	90.040	0.48	202.08	89.831	0.49	202.02	90.046
20%	Vmin	1.0189	201.4	93.776	1.018	201.57	93.747	1.018	201.4	93.505	1.019	201.13	93.522	1.016	201.39	93.497
30%	Vmin	1.5871	201.55	94.801	1.588	201.19	94.819	1.586	201.21	94.795	1.59	201.3	94.897	1.588	201.46	94.940
50%	Vmin	2.7123	201.17	95.508	2.713	201.05	95.539	2.713	201.12	95.585	2.709	201.84	95.583	2.709	202.14	95.543
75%	Vmin	3.5474	200.98	95.525	3.549	200.88	95.498	3.554	200.73	95.506	3.55	200.77	95.542	3.551	200.99	95.571
100%	Vmin	4.7848	201.7	95.405	4.784	200.66	95.390	4.784	200.24	95.374	4.79	200.43	95.311	4.789	200.78	95.310
10%	Vnom	0.4761	381.43	92.770	0.474	381.49	92.940	0.485	382.13	93.167	0.485	382.13	93.066	0.48	382.18	93.085
20%	Vnom	1.0446	380.69	95.534	1.045	380.76	95.593	1.044	380.47	93.066	1.045	380.55	95.822	1.046	380.61	95.834
30%	Vnom	1.6063	382.4	96.730	1.603	382.53	96.730	1.602	382.7	96.705	1.602	382.44	96.632	1.604	382.97	96.555
50%	Vnom	2.5792	380.66	97.065	2.577	380.53	97.100	2.58	379.83	97.119	2.578	379.78	97.114	2.576	379.63	97.123
75%	Vnom	3.5339	382.72	97.146	3.537	381.8	97.146	3.54	381.48	97.136	3.541	381.32	97.181	3.54	381.4	97.203
100%	Vnom	4.7912	380.75	97.105	4.787	380.51	97.069	4.793	380.39	97.047	4.793	380.34	97.052	4.799	380.35	97.054
10%	Vmax	0.4745	447.82	90.866	0.481	449.15	90.637	0.474	449.06	90.767	0.473	449.08	90.618	0.476	448.54	90.877
20%	Vmax	1.0587	448.44	94.781	1.058	448.58	94.707	1.06	448.6	94.745	1.058	448.3	94.751	1.06	448.1	94.713
30%	Vmax	1.6081	449.38	95.750	1.604	449.06	95.804	1.607	449.05	95.759	1.606	-95.797	95.797	1.605	449.03	95.777
50%	Vmax	2.7166	448.8	96.476	2.719	448.99	96.503	2.716	449.34	96.516	2.721	450.22	96.453	2.716	450.09	96.486
75%	Vmax	3.5197	449.71	96.608	3.516	449.88	96.600	3.518	449.91	96.619	3.519	450.02	96.584	3.521	450.67	96.584
100%	Vmax	4.7717	449.88	96.654	4.775	445.86	96.615	4.775	446.85	96.665	4.777	447.65	96.629	4.77	447.75	96.593

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)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)	(kW)	(Vdc)	(%)
10%	Vmin	0.4917	201.91	90.135	0.489	201.71	89.892	0.488	201.64	90.248	0.491	201.59	90.451	0.489	201.89	90.322
20%	Vmin	1.0197	202.01	93.655	1.02	202.52	93.730	1.02	202.38	93.826	1.018	202.39	93.793	1.02	202.31	93.789
30%	Vmin	1.5886	201.48	94.980	1.585	201.42	94.921	1.586	201.46	94.860	1.584	201.28	94.830	1.589	201.58	94.789
50%	Vmin	2.7097	202.24	95.506	2.712	202.24	95.464	2.711	202.29	95.476	2.716	202.58	95.492	2.712	202.71	95.556
75%	Vmin	3.5519	200.8	95.573	3.549	200.86	95.546	3.548	201.11	95.563	3.55	200.96	95.490	3.551	200.56	95.490
100%	Vmin	4.7892	200.69	95.297	4.789	200.47	95.354	4.79	200.15	95.375	4.788	200.04	95.380	4.789	201.12	95.356
10%	Vnom	0.4895	382.41	93.035	0.482	382.44	93.111	0.484	382.61	93.020	0.486	382.17	93.139	0.487	382.77	92.999
20%	Vnom	1.0447	380.87	96.028	1.041	380.38	95.841	1.044	380.71	95.686	1.044	380.78	95.599	1.046	381.15	95.677
30%	Vnom	1.6051	383.27	96.544	1.605	382.93	96.636	1.605	383.05	96.644	1.606	382.91	96.794	1.603	382.45	96.723
50%	Vnom	2.5749	379.78	97.091	2.579	380.52	97.046	2.579	380.7	97.042	2.581	379.71	97.014	2.579	380.04	97.108
75%	Vnom	3.5366	381.5	97.221	3.539	381.96	97.213	3.539	382.6	97.205	3.537	382.25	97.152	3.539	381.81	97.140
100%	Vnom	4.7949	380.66	97.098	4.795	380.56	97.091	4.789	380.59	97.131	4.791	380.6	97.089	4.788	380.59	97.100
10%	Vmax	0.4825	448.46	90.892	0.473	447.75	90.772	0.472	446.37	90.752	0.479	445.98	90.693	0.477	446	91.041
20%	Vmax	1.058	448.03	94.759	1.06	448.03	94.723	1.056	448.08	94.804	1.056	447.96	94.698	1.054	448.23	94.699
30%	Vmax	1.6063	449.12	95.794	1.605	448.78	95.775	1.607	449.26	95.802	1.604	448.98	95.779	1.608	448.74	95.797
50%	Vmax	2.7199	450.09	96.460	2.717	450.21	96.471	2.719	450.57	96.448	2.716	450.39	96.464	2.72	450.66	96.463
75%	Vmax	3.5162	450.62	96.606	3.52	451.54	96.591	3.518	452.46	96.602	3.52	452.05	96.575	3.516	452.09	96.598
100%	Vmax	4.7797	446.84	96.625	4.773	447.4	96.651	4.775	446.93	96.610	4.773	446.69	96.622	4.773	447.08	96.593