Manufacturer: Canadian Solar

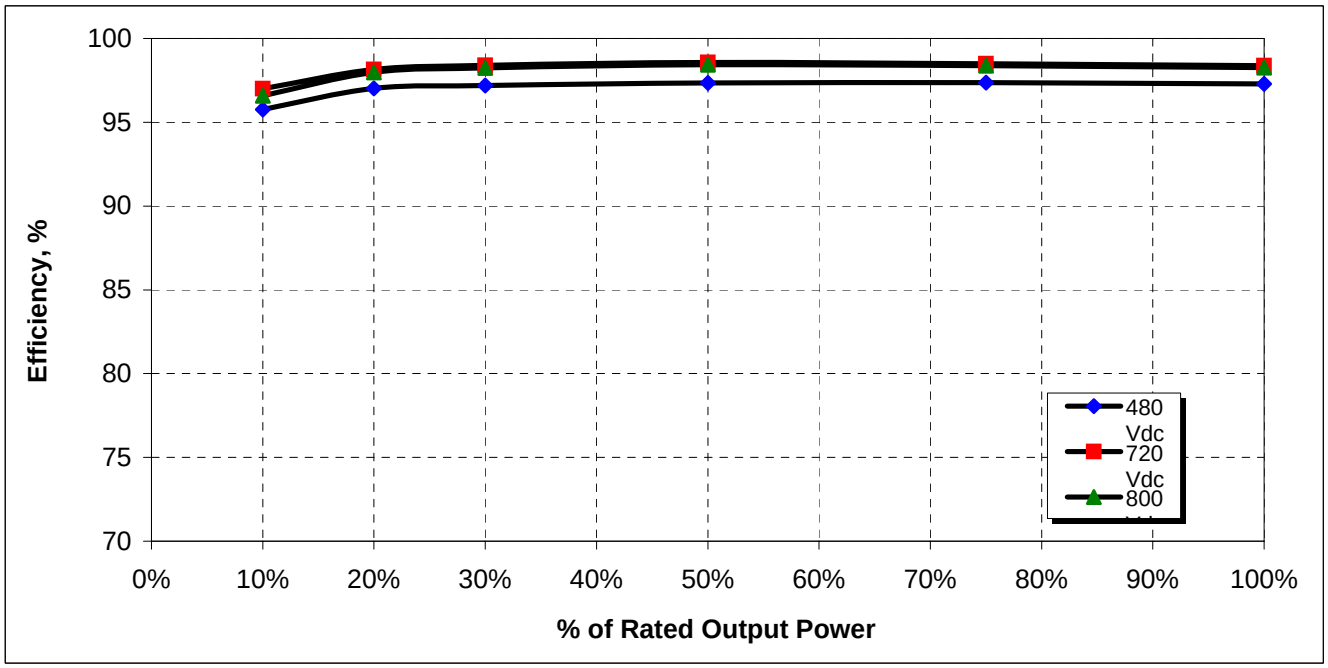
Model #: CSI-23KTL-CT

Rated Maximum Continuous Output Power: 23.00 kW Night Tare Loss: 1.00 W

Vmin: 480 Vdc Vnom: 720 Vdc Vmax: 800 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		2.30	4.60	6.90	11.50	17.25	23.00	Wtd
Vmin	480	95.8	97.0	97.2	97.4	97.4	97.3	97.3
Vnom	720	97.0	98.2	98.4	98.6	98.5	98.4	98.4
Vmax	800	96.6	98.0	98.2	98.4	98.4	98.3	98.3

CEC Efficiency = 98.0%



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)	(%)	(W)	(Vdc)	(%)
10%	Vmin	2243.33	483.1	95.637	2246.67	483.07	95.779	2246.67	483.1	95.766	2250	483.1	95.881	2246.7	483.1	95.752
20%	Vmin	4590	483.6	97.027	4590	483.5	97.040	4590	483.53	97.033	4590	483.5	97.020	4590	483.53	97.020
30%	Vmin	6970	481.63	97.197	6970	481.6	97.183	6970	481.6	97.202	6970	481.63	97.206	6970	481.63	97.193
50%	Vmin	11293.3	482.1	97.334	11296.7	482.1	97.368	11296.7	482.17	97.351	11290	482.13	97.328	11300	482.13	97.380
75%	Vmin	17153.3	482.5	97.348	17150	482.5	97.364	17153.3	482.5	97.357	17153	482.5	97.366	17160	482.5	97.362
100%	Vmin	22473.3	482.5	97.282	22473.3	482.5	97.294	22470	482.5	97.284	22470	482.47	97.271	22470	482.5	97.269
10%	Vnom	2220	717.87	96.986	2226.67	717.83	97.164	2220	717.8	96.986	2223.3	717.8	97.018	2220	717.8	97.014
20%	Vnom	4660	717.9	98.167	4660	717.93	98.140	4660	717.9	98.140	4660	717.9	98.140	4660	717.9	98.147
30%	Vnom	6800	717.93	98.380	6800	718	98.394	6800	718	98.365	6800	717.97	98.389	6800	718	98.394
50%	Vnom	11610	719	98.562	11610	719.1	98.551	11610	719.03	98.571	11610	719	98.562	11610	719.03	98.565
75%	Vnom	17206.7	718.13	98.504	17193.3	718.1	98.490	17206.7	718.17	98.498	17197	718.1	98.486	17203	718.1	98.519
100%	Vnom	22620	718.13	98.385	22616.7	718.1	98.380	22616.7	718.13	98.370	22623	718.13	98.384	22617	718.13	98.379
10%	Vmax	2143.33	794.83	96.590	2143.33	794.87	96.546	2140	794.8	96.469	2143.3	794.8	96.663	2140	794.87	96.711
20%	Vmax	4620	794.9	97.978	4620	794.9	97.992	4620	794.9	97.978	4620	794.9	97.978	4620	794.9	97.978
30%	Vmax	6830	794.97	98.240	6830	794.9	98.240	6830	795	98.250	6830	794.97	98.222	6833.3	794.97	98.251
50%	Vmax	11723.3	795	98.435	11723.3	795	98.430	11726.7	795	98.455	11723	795	98.430	11723	795	98.424
75%	Vmax	17230	795.13	98.375	17230	795.17	98.393	17230	795.13	98.397	17230	795.17	98.382	17230	795.2	98.375
100%	Vmax	22606.7	795.13	98.273	22606.7	795.1	98.260	22606.7	795.1	98.268	22610	795.1	98.270	22613	795.1	98.282

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	2250	483.1	95.894	2243.33	483.1	95.651									
20%	Vmin	4590	483.57	97.006	4590	483.57	97.006									
30%	Vmin	6970	481.63	97.215	6970	481.6	97.211									
50%	Vmin	11293.3	482.1	97.342	11300	482.13	97.363									
75%	Vmin	17156.7	482.5	97.380	17153.3	482.5	97.357									
100%	Vmin	22476.7	482.5	97.290	22473.3	482.5	97.276									
10%	Vnom	2220	717.8	96.971	2220	717.83	96.915									
20%	Vnom	4660	717.9	98.160	4660	717.9	98.167									
30%	Vnom	6800	718	98.384	6800	717.97	98.408									
50%	Vnom	11610	719.03	98.579	11610	719.03	98.574									
75%	Vnom	17203.3	718.1	98.504	17200	718.17	98.500									
100%	Vnom	22620	718.17	98.386	22610	718.17	98.387									
10%	Vmax	2143.33	794.9	96.604	2140	794.87	96.454									
20%	Vmax	4616.67	794.87	97.985	4616.67	794.87	97.935									
30%	Vmax	6830	794.9	98.207	6830	794.97	98.231									
50%	Vmax	11723.3	795	98.427	11726.7	795	98.450									
75%	Vmax	17230	795.2	98.369	17226.7	795.13	98.389									
100%	Vmax	22603.3	795.1	98.263	22606.7	795.13	98.281									