Manufacturer: ABB

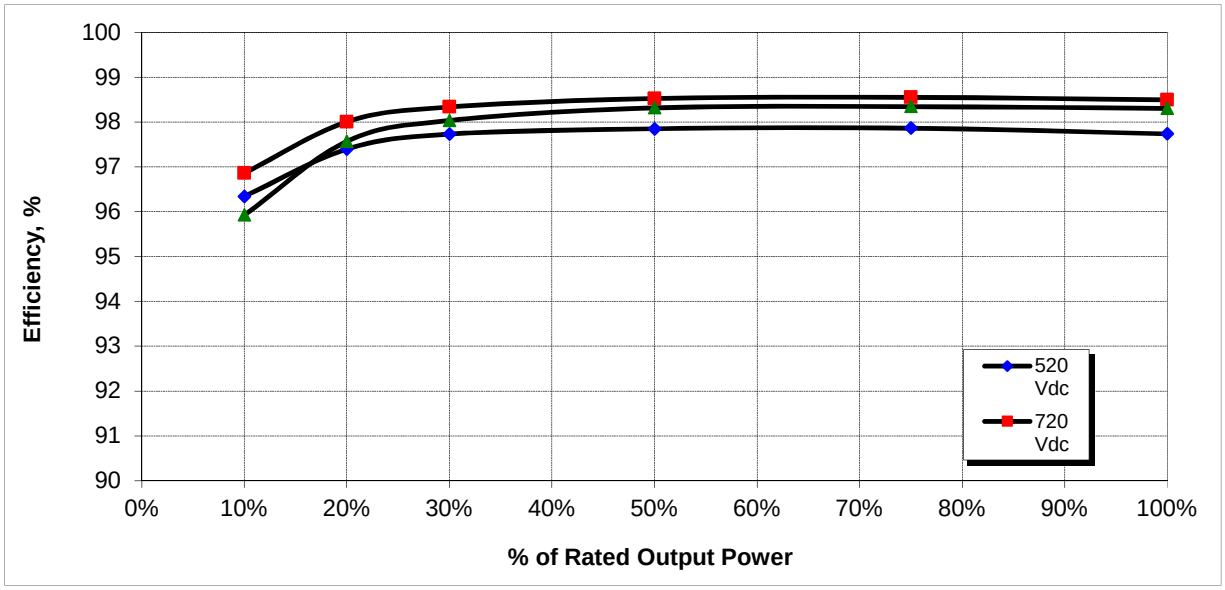
Model #: TRIO-50.0-US

Rated Maximum Continuous Output Power @25°C: 50.0 kW Night Tare Loss: -1.0 W
Rated Maximum Continuous Output Power @40°C: 50.0 kW Night Tare Loss: -1.0 W

Vmin: 520 Vdc Vnom: 720 Vdc Vmax: 800 Vdc

		Power Level (%; kW)						
		10%	20%	30%	50%	75%	100%	
Input Voltage (Vdc)		5.00	10.00	15.00	25.00	37.50	50.00	Wtd
Vmin	520	96.3	97.4	97.7	97.8	97.9	97.7	97.8
Vnom	720	96.9	98.0	98.3	98.5	98.6	98.5	98.4
Vmax	800	95.9	97.6	98.0	98.3	98.3	98.3	98.2

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)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)	(W)	(Vdc)	(%)
10%	Vmin	4993	521	96.34	4993	521	96.34	4994	521	96.35	4993	521	96.35	4995	521	96.34
20%	Vmin	10989	521	97.40	10988	521	97.40	10989	521	97.39	10989	521	97.39	10989	521	97.39
30%	Vmin	16240	521	97.73	16241	521	97.73	16240	521	97.73	16240	521	97.73	16239	521	97.73
50%	Vmin	27494	522	97.84	27494	522	97.84	27493	522	97.85	27494	522	97.84	27493	522	97.85
75%	Vmin	35012	521	97.88	35012	521	97.87	35018	521	97.87	35012	521	97.86	35007	521	97.86
100%	Vmin	47508	521	97.73	47509	521	97.74	47512	521	97.75	47509	521	97.74	47509	521	97.74
10%	Vnom	4998	721	96.85	4998	721	96.86	4997	721	96.86	4996	721	96.86	4998	721	96.86
20%	Vnom	10985	721	98.00	10987	721	98.01	10986	721	98.00	10984	721	98.01	10984	721	98.00
30%	Vnom	16231	722	98.34	16230	722	98.33	16229	722	98.33	16230	722	98.34	16231	722	98.34
50%	Vnom	27474	720	98.53	27477	720	98.53	27476	720	98.52	27475	720	98.53	27477	720	98.53
75%	Vnom	35002	721	98.54	35005	721	98.55	35010	721	98.56	35006	721	98.55	35009	721	98.55
100%	Vnom	47512	720	98.49	47512	720	98.49	47513	720	98.49	47513	720	98.49	47513	720	98.49
10%	Vmax	4998	800	95.92	4998	800	95.93	4998	800	95.92	4998	800	95.93	4999	800	95.93
20%	Vmax	10997	800	97.57	10997	800	97.57	10996	800	97.57	10998	800	97.57	10999	800	97.57
30%	Vmax	16223	798	98.04	16224	798	98.03	16225	798	98.03	16222	798	98.04	16222	798	98.03
50%	Vmax	27467	800	98.31	27468	800	98.31	27470	800	98.31	27472	800	98.32	27475	800	98.33
75%	Vmax	35034	800	98.35	35027	800	98.33	35021	801	98.32	35035	801	98.36	35031	801	98.34
100%	Vmax	47524	800	98.29	47536	801	98.31	47545	801	98.33	47534	801	98.32	47524	801	98.29

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	4994	521	96.34	4995	521	96.34									
20%	Vmin	10990	521	97.39	10989	521	97.39									
30%	Vmin	16240	521	97.73	16239	521	97.73									
50%	Vmin	27493	522	97.85	27495	522	97.86									
75%	Vmin	35006	521	97.84	35009	521	97.87									
100%	Vmin	47509	521	97.74	47503	521	97.72									
10%	Vnom	4997	721	96.86	4997	721	96.86									
20%	Vnom	10984	721	98.00	10984	721	98.00									
30%	Vnom	16229	722	98.33	16230	722	98.33									
50%	Vnom	27477	720	98.53	27477	720	98.53									
75%	Vnom	35006	721	98.55	35008	721	98.55									
100%	Vnom	47515	720	98.50	47514	721	98.50									
10%	Vmax	4998	800	95.92	4998	800	95.92									
20%	Vmax	10997	800	97.57	10999	800	97.57									
30%	Vmax	16223	798	98.03	16224	798	98.03									
50%	Vmax	27474	800	98.33	27471	800	98.32									
75%	Vmax	35042	800	98.35	35042	800	98.37									
100%	Vmax	47525	801	98.29	47524	801	98.30									