Seasonic Vertex GX-1000

Lab ID SS10002111

Certification ID 252111

Test Result Report ID: 23PS2111A

Certificate Issue Date: Jan 16, 2023

Scheme: ETA-EMI PSU

115V



230V



Scheme: LAMBDA PSU

115V



230V





Outside Validation Scope



General Information

Test Equipment

Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 Chroma 63640-80-80 x10 Chroma 63610-80-20
AC Sources	Chroma 6530, APM SP300VAC4000W-P, GW Instek ASR-3500
Power Analyzers	Rohde & Schwarz HMC8015 & NPA701
Oscilloscopes	Picoscope 4444, Siglent SDS2104X PLUS
Sound Analyzer	Bruel & Kjaer 2270 G4
Microphone	Bruel & Kjaer Type 4955-A
Temperature Logger	Picoscope TC-08
Tachometer	UNI-T UT372
Multimeters	Keysight 34465A
EMI Analyzer	TekBox TBMR-110M-EU
Isolation Transformer	4kVA
UPS	FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA
Testing Methodology	Cybenetics PSU Test Protocol

DUT Information(Non-accredited measurements)

Product Identification Details	
Brand	Seasonic
Model	Vertex GX-1000
OEM/ODM	Seasonic
Serial Number	
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240
□□□□ (Arms)	13-6.5

□□□□ (Hz)	50-60
□□□□ (W)	1000
Operating Temperature (Continuous Full Load) (°C)	
□□	ATX12V
□□□□	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
□□	135mm Fluid Dynamic Bearing Fan (HA13525H12F-Z)
□□□□□	✓ (selectable)
Cybenetics Testing Information	
Lab ID	SS10002111
Date of receipt	Dec 12, 2022
Testing Date	Jan 13, 2023
Report Issued Date	Jan 16, 2023
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□□ (Non-accredited measurements)

□□□□□				
□□	□□□□	□□□□□□	Gauge	In Cable Capacitors
ATX □□ 20+4 pin (620mm)	1	1	16-18AWG	□
4+4 pin EPS 12V □□ (710mm)	2	2	16AWG	□
6+2pin PCIe□□ (760mm)	3	3	16AWG	□
12+4 pin PCIe (760mm) (600W)	1	1	16-28AWG	□
SATA□□ 3.3 (410mm+150mm)	1	2	18AWG	□
SATA□□ (510mm+150mm+150mm+150mm)	4	16	18AWG	□
□ 4pin Molex□□ (460mm+130mm+130mm)	1	3	18AWG	□

AC Power Cord (1380mm) - C13 coupler	1	1	18AWG	-

□□□□

□		3.3V	5V	12V	5VSB	-12V
□□□□	□□	25	25	83	3	0.3
	□	125		996	15	3.6
□□□□□ (W)		1000				

Test Results

Temperature & Compliance Info

□□□□ (°C /°F)	28-32 / 82.4-89.6
□□ ErP Lot3/6□□	✓
□□ (EU) No 617/2013□□	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.0 Compliance	✓

Performance Summary

115V

Accredited	
□□□□ (>1450 load combinations)	89.388%
Average Noise Output (>1450 Load Combinations)	23.92dBA
PF□□□ (>1450 Load Combinations)	0.983
Efficiency With 10W (≤500W) or 2% (>500W) Load	74.411%
□□□□□□	0.0703W
Non-Accredited	
12V Ripple (Full Load)	19.39mV
5V Ripple (Full Load)	12.24mV
3.3V Ripple (Full Load)	19.17mV

5VSB Ripple (Full Load)	25.99mV
12V Load Regulation	0.63%
5V Load Regulation	0.50%
3.3V Load Regulation	1.06%
5VSB Load Regulation	2.42%
Inrush Current	35.310A

230V

Accredited		
□□□□ (>1450 load combinations)		91.420%
Average Noise Output (>1450 Load Combinations)		23.87dBA
PF□□□ (>1450 Load Combinations)		0.952
Efficiency With 10W (≤500W) or 2% (>500W) Load		74.282%
□□□□□□		0.1527W
Non-Accredited		
12V Ripple (Full Load)		19.99mV
5V Ripple (Full Load)		12.94mV
3.3V Ripple (Full Load)		19.59mV
5VSB Ripple (Full Load)		25.75mV
12V Load Regulation		0.63%
5V Load Regulation		0.50%
3.3V Load Regulation		1.09%
5VSB Load Regulation		2.44%
Inrush Current		64.480A
12V Transient Response (200%)		11.42V
5V Transient Response (200%)		4.949V
3.3V Transient Response (200%)		3.206V
5VSB Transient Response (200%)		4.939V
□□□□ & PG□□		21.20ms
AC Loss to PWR_OK Hold Up Time		16.70ms
PWR_OK Inactive to DC Loss Delay		4.50ms
PSU Timings: T1 (20% / 100%)	72.0ms	70.0ms

PSU Timings: T3 (20% / 100%)	130.0ms	128.0ms
OPP (29.18°C / 39.56°C)	138.62%	136.51%

□□□□ & PG□□

Hold-Up Time (ms)	21.2
AC Loss to PWR_OK Hold Up Time (ms)	16.7
PWR_OK Inactive to DC Loss Delay (ms)	4.5

□□□□

Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	114.93 V	114.89 V	113.85 V	114.96 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.98 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.417	1.490	PASS
Mains Voltage THD:	0.14 %	0.12 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.070 W	0.062 W	N/A	0.081 W	N/A	N/A
Apparent Power:	10.477 W	10.457 W	N/A	10.499 W	N/A	N/A
Power Factor:	0.007	N/A	N/A	N/A	N/A	N/A

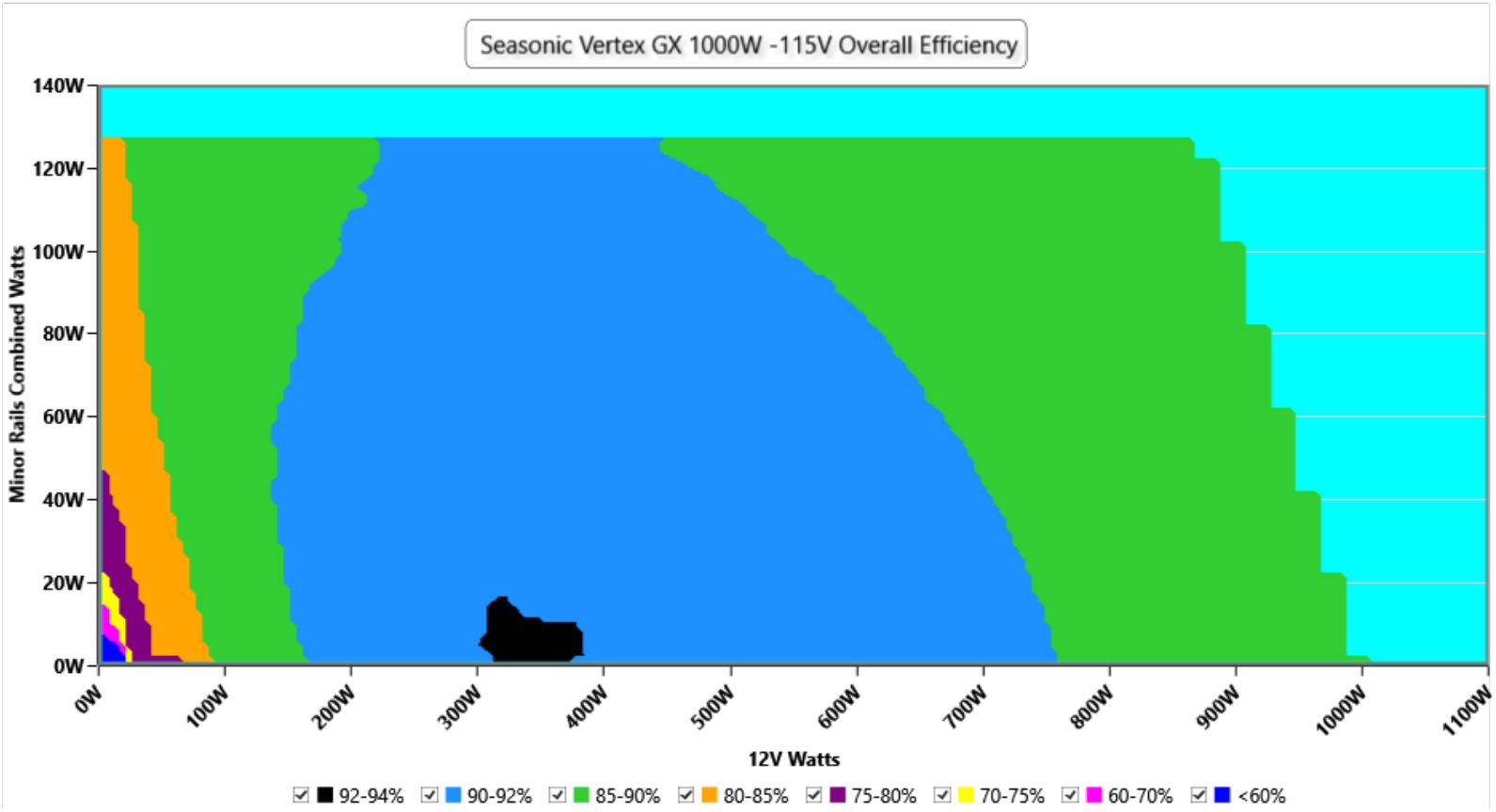
230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	229.88 V	229.85 V	227.70 V	229.94 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	50.00 Hz	49.50 Hz	50.01 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.417	1.490	PASS

Mains Voltage THD:	0.14 %	0.12 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.153 W	0.129 W	N/A	0.188 W	N/A	N/A
Apparent Power:	36.060 W	36.029 W	N/A	36.101 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

□□□□□□

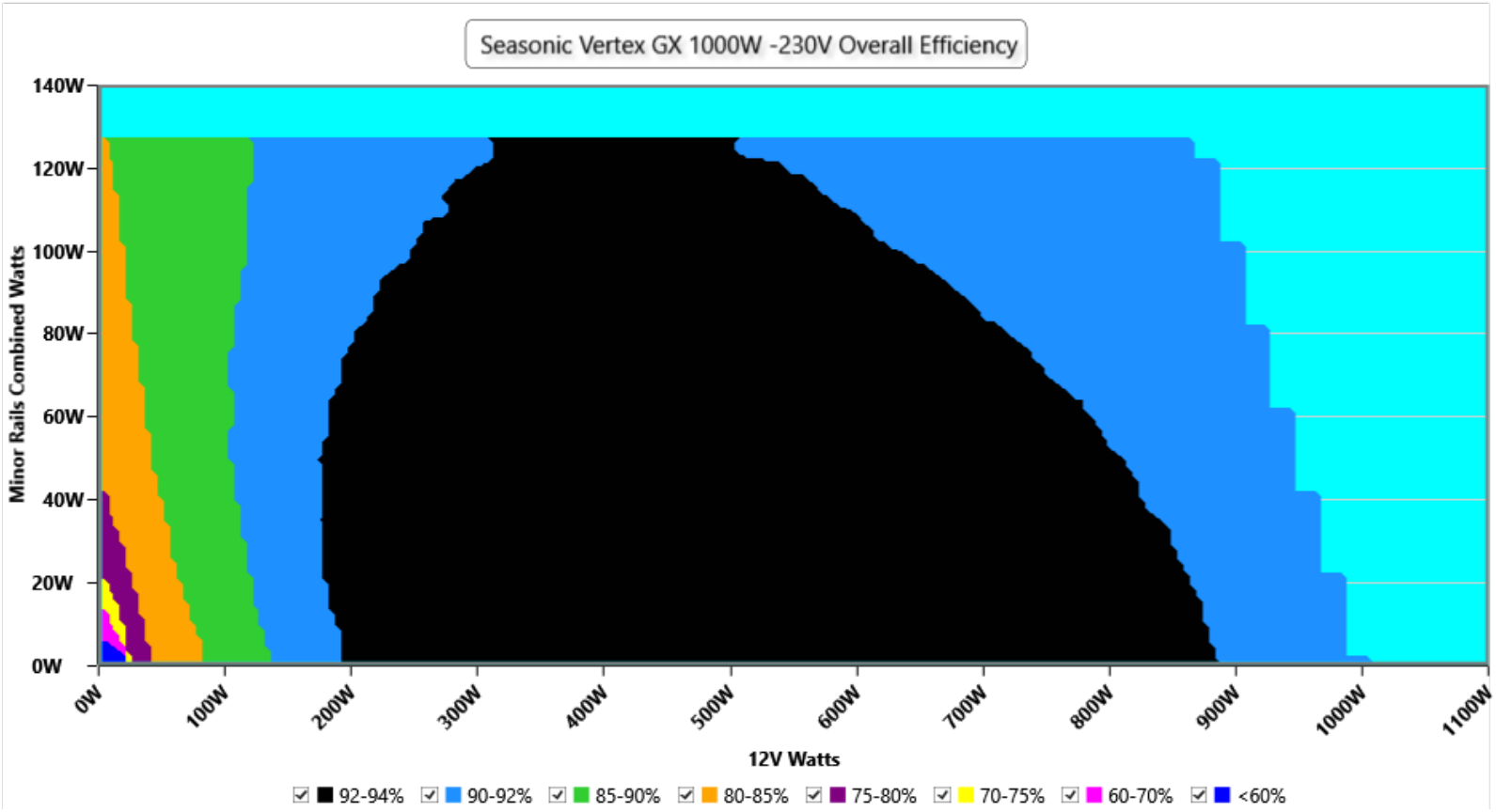
115V



□□

This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V



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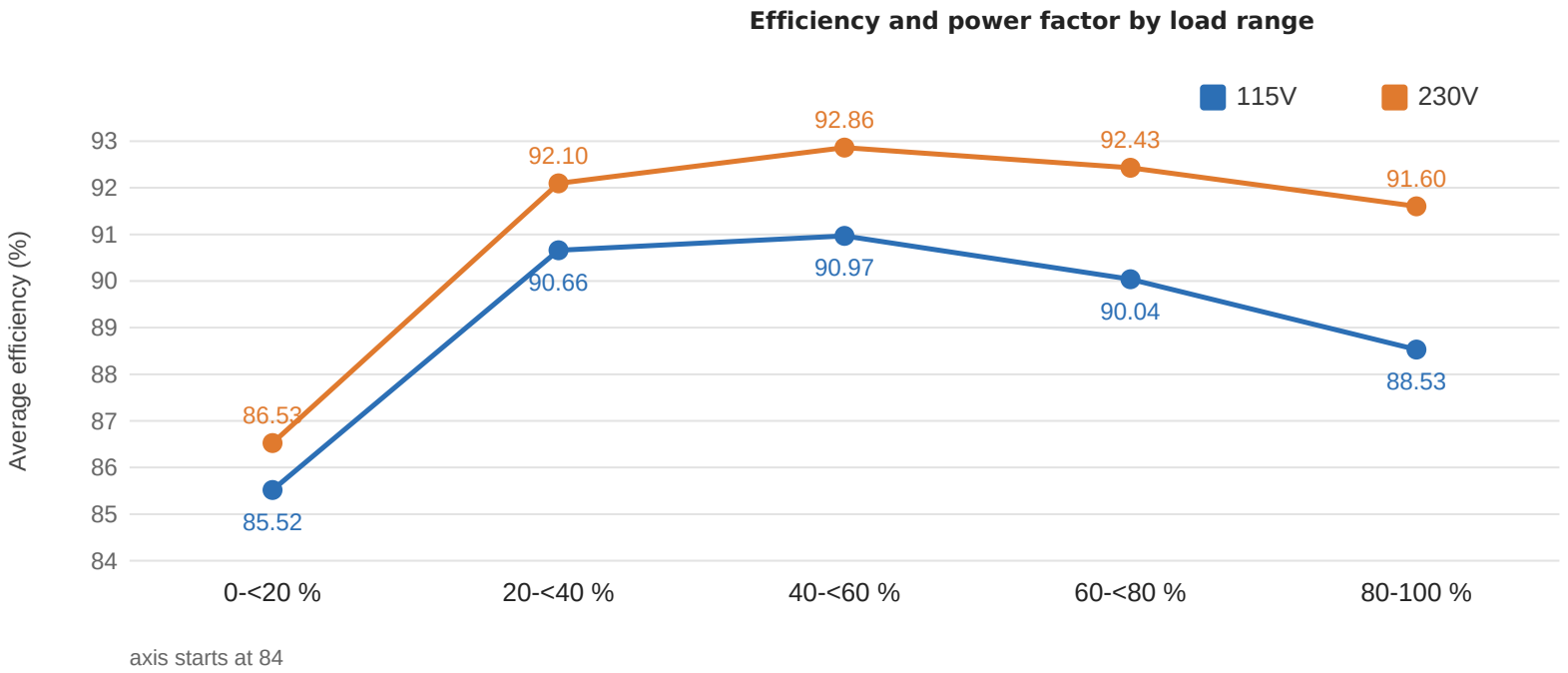
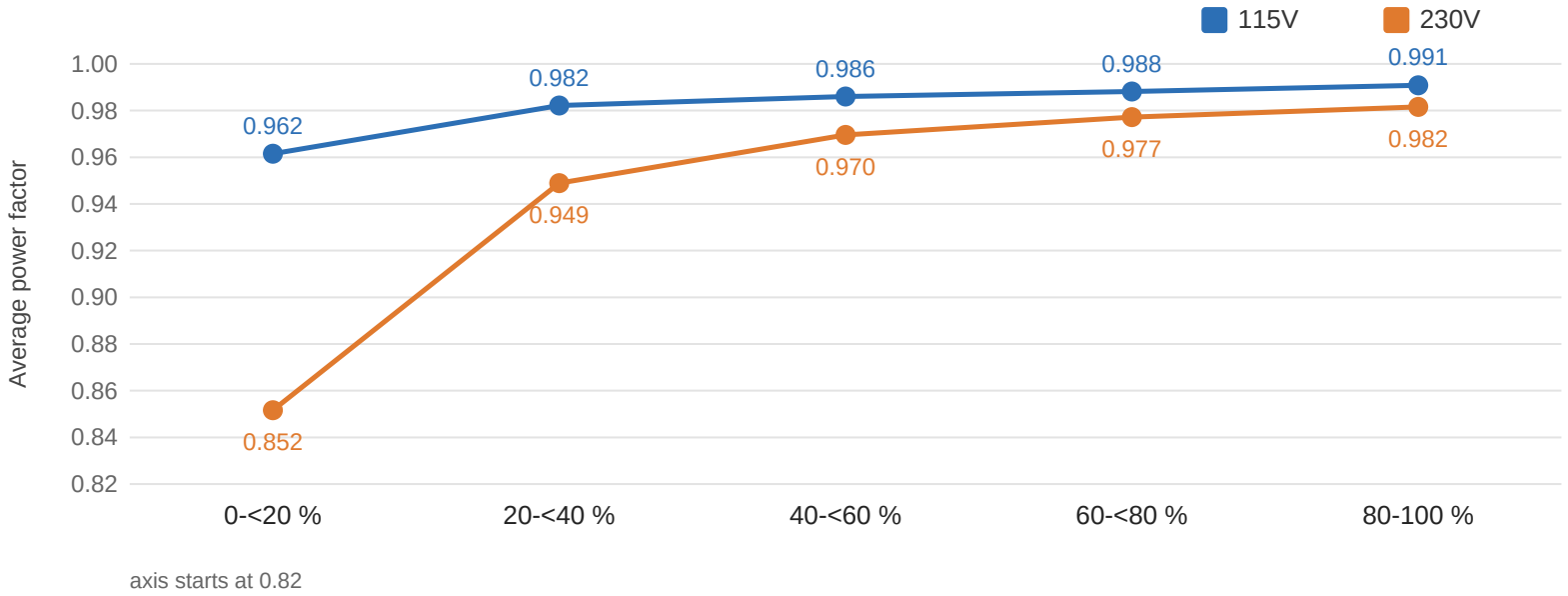


axis starts at 84



axis starts at 0.82

Load range	Points	Efficiency 115V	Efficiency 230V	PF 115V	PF 230V
0-<20 %	210 / 210	85.52%	86.53%	0.962	0.852
20-<40 %	310 / 310	90.66%	92.10%	0.982	0.949
40-<60 %	310 / 310	90.97%	92.86%	0.986	0.970
60-<80 %	310 / 310	90.04%	92.43%	0.988	0.977
80-100 %	318 / 318	88.53%	91.60%	0.991	0.982
70-100 % (High-Load)	473 / 473	88.92%	91.82%	0.990	0.981
All (published average)	1458 / 1458	89.39%	91.42%	0.983	0.952

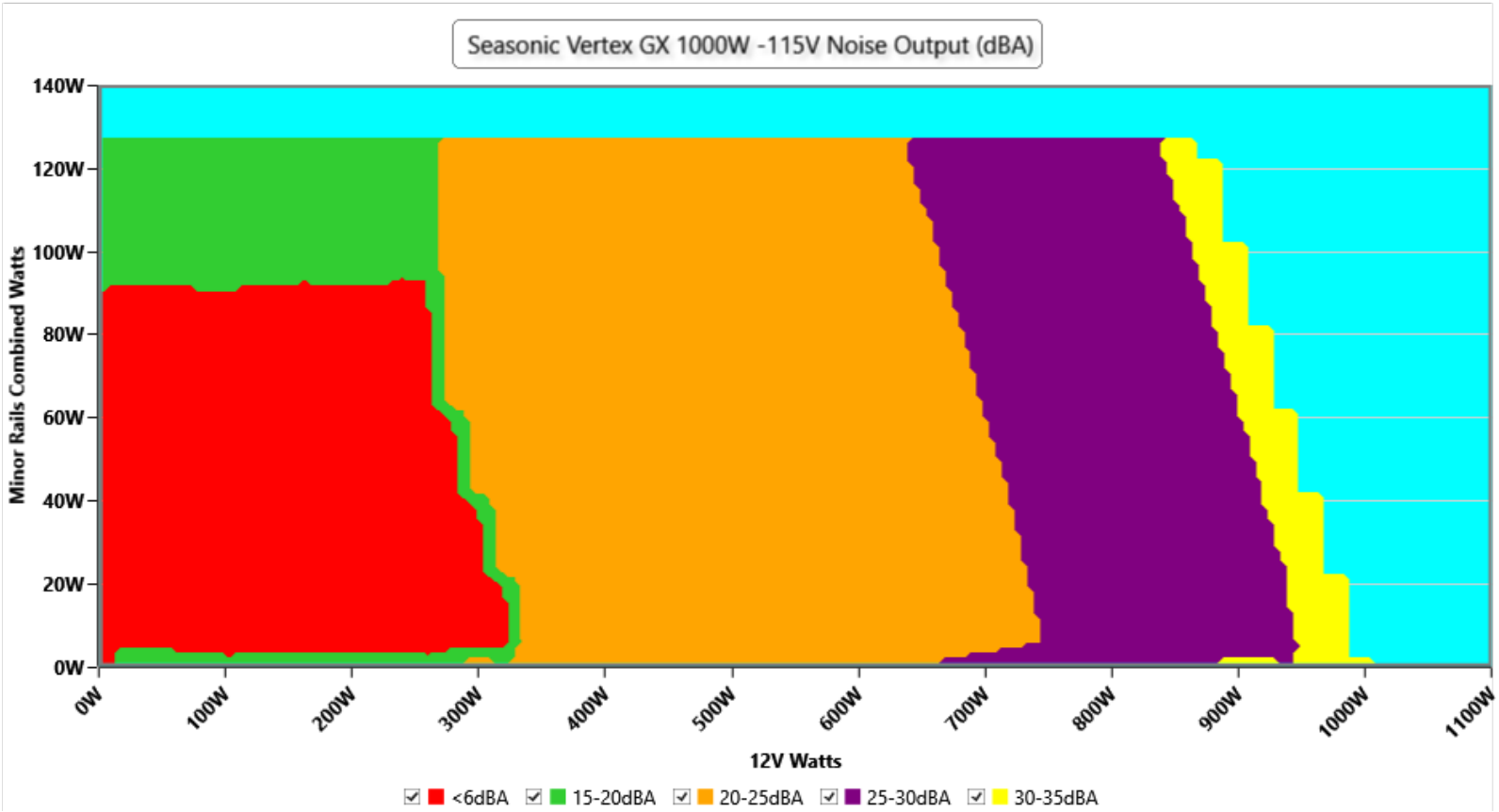
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1458 (115V) and 1458 (230V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 1000 W. These are plain averages of the valid readings, as for the ETA rating, so the ranges combined give back the published averages.

Informational. Not part of the ETA or LAMBDA rating.

□□□□□

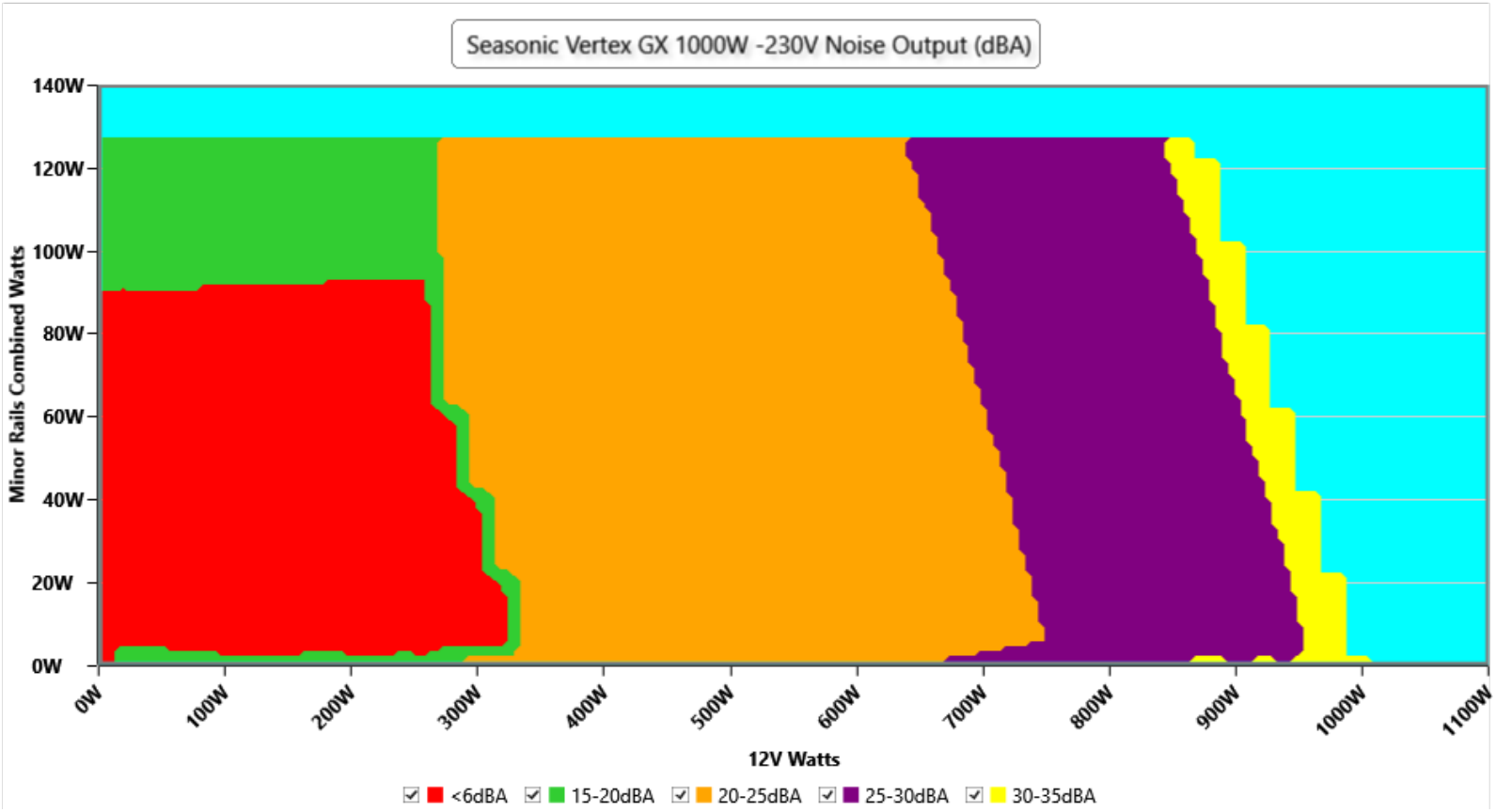
115V



□□

The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

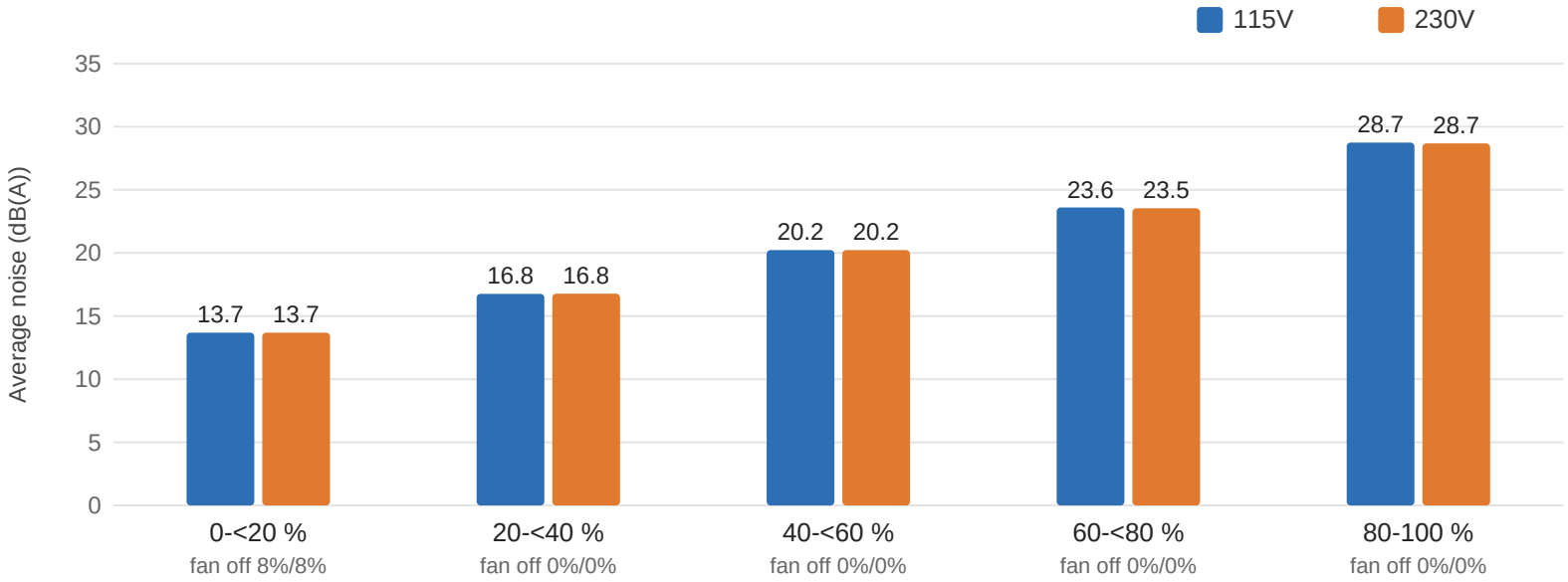
230V



The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Noise by load range

High-Load Index (70-100 % load)
Noise **27.8 dB(A)** at 115V and **27.8 dB(A)** at 230V · loudest point 30.8 dB(A)
Efficiency 88.92% / 91.82% · power factor 0.990 / 0.981 (115V / 230V)



Load range	Noise 115V avg (loudest)	Noise 230V avg (loudest)	Fan off 115V / 230V
0-<20 %	13.7 (18.3)	13.7 (18.3)	8% / 8%
20-<40 %	16.8 (20.2)	16.8 (20.2)	0% / 0%
40-<60 %	20.2 (21.9)	20.2 (21.9)	0% / 0%
60-<80 %	23.6 (27.9)	23.5 (27.9)	0% / 0%
80-100 %	28.7 (30.8)	28.7 (30.8)	0% / 0%
70-100 % (High-Load)	27.8 (30.8)	27.8 (30.8)	0% / 0%
All (published average)	23.9 (30.8)	23.9 (30.8)	1% / 1%

INFO

The average noise in five ranges of load, the share of points with the fan stopped (semi-passive operation), and the High-Load Index: the same figures for all points at 70 % of the rated output and above. Calculated from the 1458 (115V) and 1458 (230V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 1000 W. Noise is averaged on the energy scale, as for LAMBDA, so the ranges combined give back the published average noise. Each load combination is held for about five seconds; the stabilized readings at fixed loads are under "Noise under high ambient temperature".

Informational. Not part of the ETA or LAMBDA rating.

Noise under high ambient temperature (indicative)

115V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 44.6 °C	0 RPM · <6.0 dB(A) · 44.6 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.5 °C	0 RPM · <6.0 dB(A) · 45.5 °C	fan off in both
50%	745 RPM · 20.0 dB(A) · 42.1 °C	745 RPM · 20.0 dB(A) · 42.1 °C	**+0.0 dB(A)**
100%	1302 RPM · 37.7 dB(A) · 45.7 °C	1302 RPM · 37.7 dB(A) · 45.7 °C	**+0.0 dB(A)**

230V

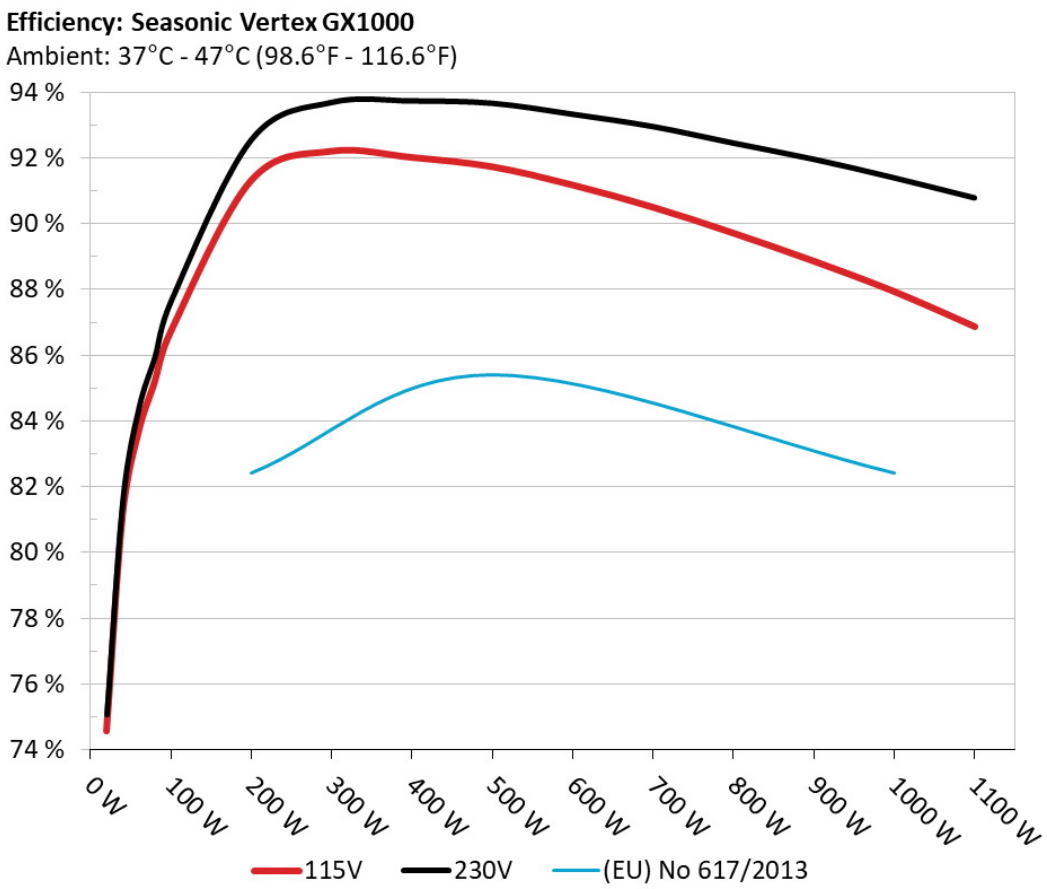
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 44.9 °C	0 RPM · <6.0 dB(A) · 44.9 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.7 °C	0 RPM · <6.0 dB(A) · 45.7 °C	fan off in both
50%	745 RPM · 20.0 dB(A) · 42.5 °C	745 RPM · 20.0 dB(A) · 42.5 °C	**+0.0 dB(A)**
100%	1254 RPM · 36.2 dB(A) · 45.3 °C	1254 RPM · 36.2 dB(A) · 45.3 °C	**+0.0 dB(A)**

INFO

Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative of how the fan behaves when it is hot. "<6.0" is the floor of our sound meter: the fan is stopped or too quiet to measure (the fan speed column says which); with the fan stopped, the intake sensor can read higher than the chamber air.

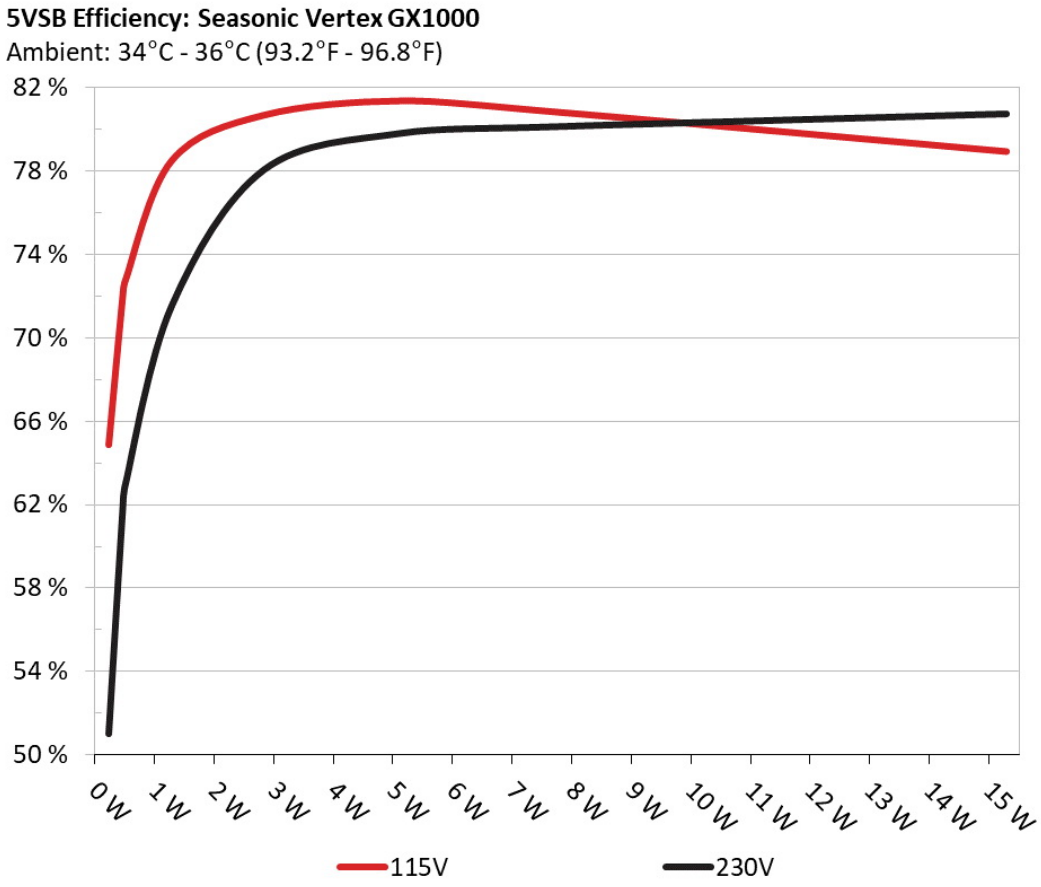
Informational. Not part of the ETA or LAMBDA rating.

Indicative Performance



The PSU`s efficiency under high ambient temperatures with 115V and 230V input. For this graph the results of the 10-110% load regulation table are used

5Vsb□□□□



□□

This graph depicts the efficiency levels of the 5VSB rail with 115V and 230V input

□□□□ □□ 5Vsb □□ (ErP Lot3/6 & CEC)

115V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	0.045A	0.232W	64.893%	0.034
	5.162V	0.358W		114.93V
2	0.09A	0.464W	71.961%	0.06
	5.161V	0.645W		114.93V
3	0.55A	2.833W	80.698%	0.263
	5.151V	3.511W		114.93V
4	1A	5.141W	81.386%	0.366
	5.141V	6.317W		114.94V
5	1.5A	7.695W	80.861%	0.42
	5.13V	9.516W		114.94V
6	3A	15.289W	78.955%	0.499
	5.096V	19.364W		114.94V

230V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	0.045A	0.232W	51.028%	0.013
	5.161V	0.456W		229.9V
2	0.09A	0.464W	61.724%	0.021
	5.161V	0.752W		229.9V
3	0.55A	2.833W	78.061%	0.097
	5.151V	3.629W		229.9V
4	1A	5.141W	79.82%	0.161
	5.141V	6.439W		229.9V
5	1.5A	7.695W	80.131%	0.211
	5.13V	9.605W		229.9V
6	3A	15.292W	80.744%	0.325
	5.097V	18.938W		229.9V

Supplementary Tests (For Reference)

10-110%□□□□

115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	6.436A	1.971A	1.978A	0.974A	99.981	86.33%	0	<6.0	44.55°C	0.964
	12.180V	5.071V	3.336V	5.131V	115.812				40.25°C	114.9V
20%	13.905A	2.959A	2.971A	1.172A	199.926	90.924%	0	<6.0	45.46°C	0.979
	12.157V	5.069V	3.332V	5.121V	219.875				40.85°C	114.89V
30%	21.715A	3.453A	3.469A	1.37A	299.978	91.813%	0	<6.0	46.13°C	0.985
	12.154V	5.067V	3.329V	5.11V	326.73				41.02°C	114.87V
40%	29.492A	3.949A	3.969A	1.569A	399.559	91.623%	749	20.2	41.93°C	0.986
	12.151V	5.064V	3.325V	5.1V	436.087				47.45°C	114.85V
50%	36.937A	4.939A	4.968A	1.768A	499.264	91.341%	745	20.0	42.12°C	0.987
	12.149V	5.061V	3.321V	5.09V	546.593				48.21°C	114.83V
60%	44.445A	5.93A	5.968A	1.969A	599.801	90.782%	743	20.0	42.75°C	0.988
	12.150V	5.059V	3.318V	5.079V	660.703				49.37°C	114.79V
70%	51.875A	6.922A	6.97A	2.17A	699.532	90.108%	830	23.4	43.3°C	0.989
	12.152V	5.057V	3.314V	5.068V	776.319				50.37°C	114.77V
80%	59.373A	7.916A	7.972A	2.273A	799.568	89.319%	909	26.4	44.27°C	0.991
	12.155V	5.055V	3.311V	5.059V	895.184				52.32°C	114.74V
90%	67.193A	8.412A	8.463A	2.376A	899.326	88.469%	1111	32.3	44.86°C	0.992
	12.157V	5.052V	3.307V	5.051V	1016.55				53.93°C	114.71V
100%	74.823A	8.911A	8.988A	2.981A	999.356	87.544%	1302	37.7	45.69°C	0.993
	12.158V	5.05V	3.304V	5.032V	1141.544				55.73°C	114.68V
110%	82.381A	9.907A	10.089A	2.985A	1099.987	86.472%	1551	42.5	46.53°C	0.993
	12.159V	5.047V	3.3V	5.025V	1272.069				57.41°C	114.65V
CL1	0.115A	14.891A	14.894A	0A	126.303	83.525%	699	18.0	42.36°C	0.975
	12.193V	5.058V	3.33V	5.138V	151.216				47.82°C	114.89V

CL2	0.115A	24.75A	0A	0A	126.418	82.119%	878	25.4	40.99°C	0.973
	12.192V	5.052V	3.336V	5.145V	153.95				48.01°C	114.9V
CL3	0.114A	0A	24.77A	0A	83.876	75.015%	876	25.3	39.81°C	0.964
	12.182V	5.075V	3.33V	5.139V	111.807				48.84°C	114.91V
CL4	82.275A	0A	0A	0A	999.938	88.227%	1210	34.8	56.81°C	0.992
	12.153V	5.064V	3.31V	5.105V	1133.377				45.92°C	114.68V

The results above are not used in the certification process

230V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	6.438A	1.972A	1.979A	0.975A	100.006	87.242%	0	<6.0	44.88°C	0.845
	12.179V	5.071V	3.335V	5.131V	114.633				40.52°C	229.88V
20%	13.909A	2.959A	2.971A	1.172A	199.963	92.146%	0	<6.0	45.72°C	0.925
	12.155V	5.069V	3.332V	5.12V	217.002				40.97°C	229.87V
30%	21.721A	3.454A	3.47A	1.37A	300.026	93.273%	0	<6.0	46.39°C	0.952
	12.153V	5.067V	3.328V	5.109V	321.661				41.31°C	229.86V
40%	29.504A	3.95A	3.97A	1.569A	399.659	93.317%	749	20.2	41.77°C	0.964
	12.150V	5.064V	3.325V	5.099V	428.274				47.31°C	229.85V
50%	36.949A	4.94A	4.969A	1.769A	499.364	93.246%	745	20.0	42.45°C	0.971
	12.148V	5.061V	3.321V	5.089V	535.536				48.46°C	229.83V
60%	44.454A	5.932A	5.97A	1.969A	599.909	92.911%	742	19.9	43.09°C	0.976
	12.149V	5.058V	3.317V	5.078V	645.68				49.79°C	229.82V
70%	51.890A	6.924A	6.972A	2.171A	699.644	92.539%	829	23.4	43.25°C	0.979
	12.151V	5.056V	3.314V	5.067V	756.055				50.26°C	229.81V
80%	59.390A	7.918A	7.975A	2.274A	799.68	92.037%	907	26.4	43.86°C	0.981
	12.153V	5.054V	3.31V	5.059V	868.864				52.07°C	229.8V
90%	67.212A	8.414A	8.466A	2.376A	899.417	91.548%	1073	31.4	44.71°C	0.983
	12.155V	5.052V	3.307V	5.05V	982.46				53.75°C	229.79V
100%	74.836A	8.913A	8.989A	2.982A	999.431	90.983%	1254	36.2	45.34°C	0.984
	12.157V	5.05V	3.303V	5.031V	1098.479				55.39°C	229.78V

110%	82.395A	9.908A	10.09A	2.985A	1100.038	90.372%	1523	42.3	46.98°C	0.985
	12.157V	5.047V	3.3V	5.025V	1217.229				57.91°C	229.76V
CL1	0.115A	14.891A	14.895A	0A	126.306	84.649%	697	17.5	44°C	0.885
	12.193V	5.058V	3.33V	5.138V	149.208				49.49°C	229.88V
CL2	0.115A	24.748A	0A	0A	126.419	83.205%	878	25.4	42.81°C	0.888
	12.192V	5.052V	3.336V	5.145V	151.936				49.83°C	229.87V
CL3	0.114A	0A	24.77A	0A	83.876	75.823%	876	25.3	41.56°C	0.838
	12.184V	5.076V	3.33V	5.139V	110.612				50.61°C	229.88V
CL4	82.274A	0A	0A	0A	999.889	91.606%	1181	34.0	44.66°C	0.983
	12.153V	5.064V	3.31V	5.105V	1091.506				55.61°C	229.77V

The results above are not used in the certification process

20-80□□□□□

115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
20W	1.226A	0.493A	0.494A	0.194A	19.99	74.169%	0	<6.0	39.81°C	0.828
	12.104V	5.075V	3.339V	5.154V	26.956				36.72°C	114.93V
40W	2.699A	0.69A	0.692A	0.291A	39.991	80.771%	0	<6.0	40.75°C	0.916
	12.109V	5.074V	3.339V	5.151V	49.515				37.41°C	114.92V
60W	4.172A	0.886A	0.889A	0.388A	59.99	83.295%	0	<6.0	42.34°C	0.946
	12.108V	5.074V	3.338V	5.147V	72.018				38.54°C	114.92V
80W	5.609A	1.084A	1.087A	0.486A	79.929	84.798%	0	<6.0	43.5°C	0.959
	12.177V	5.073V	3.337V	5.144V	94.263				39.54°C	114.9V

The results above are not used in the certification process

230V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
20W	1.228A	0.493A	0.494A	0.194A	20.001	74.667%	0	<6.0	40.53°C	0.462
	12.103V	5.075V	3.339V	5.154V	26.79				37.43°C	229.89V
40W	2.700A	0.69A	0.692A	0.291A	40.001	81.211%	0	<6.0	41.13°C	0.646
	12.106V	5.074V	3.338V	5.151V	49.251				37.87°C	229.88V
60W	4.174A	0.887A	0.89A	0.389A	60	83.994%	0	<6.0	41.93°C	0.745
	12.106V	5.073V	3.338V	5.147V	71.433				38.44°C	229.88V
80W	5.611A	1.084A	1.088A	0.486A	79.953	85.547%	0	<6.0	42.99°C	0.805
	12.176V	5.073V	3.337V	5.144V	93.462				39.26°C	229.88V

The results above are not used in the certification process

□□□□

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	9.52mV	7.00mV	13.19mV	10.34mV	Pass
20% Load	17.37mV	6.08mV	9.67mV	7.83mV	Pass
30% Load	11.74mV	6.08mV	10.07mV	8.80mV	Pass
40% Load	11.51mV	7.81mV	11.45mV	21.70mV	Pass
50% Load	10.90mV	8.12mV	11.55mV	22.77mV	Pass
60% Load	11.21mV	8.33mV	12.68mV	23.44mV	Pass
70% Load	11.67mV	8.73mV	12.89mV	23.85mV	Pass
80% Load	12.33mV	9.04mV	15.60mV	23.23mV	Pass
90% Load	13.10mV	9.65mV	16.11mV	24.62mV	Pass
100% Load	19.39mV	12.24mV	19.17mV	25.99mV	Pass
110% Load	20.23mV	14.51mV	21.56mV	27.00mV	Pass
Crossload1	27.07mV	10.04mV	16.68mV	22.20mV	Pass
Crossload2	26.02mV	10.01mV	13.19mV	20.88mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	8.08mV	7.86mV	19.74mV	21.44mV	Pass
Crossload4	18.85mV	11.31mV	16.58mV	26.33mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	7.98mV	6.69mV	11.30mV	9.42mV	Pass
20% Load	18.81mV	5.92mV	9.10mV	7.52mV	Pass
30% Load	12.46mV	6.23mV	9.82mV	8.55mV	Pass
40% Load	12.15mV	8.07mV	11.00mV	19.81mV	Pass
50% Load	11.23mV	7.46mV	11.20mV	20.47mV	Pass
60% Load	11.38mV	7.71mV	11.15mV	21.39mV	Pass
70% Load	11.79mV	7.92mV	12.88mV	21.39mV	Pass
80% Load	12.05mV	8.79mV	14.42mV	21.80mV	Pass
90% Load	12.28mV	9.40mV	16.16mV	22.21mV	Pass
100% Load	19.99mV	12.94mV	19.59mV	25.75mV	Pass
110% Load	20.65mV	14.83mV	21.49mV	26.93mV	Pass
Crossload1	31.77mV	9.74mV	15.90mV	21.61mV	Pass
Crossload2	26.63mV	10.01mV	12.88mV	20.57mV	Pass
Crossload3	7.62mV	7.51mV	18.26mV	21.29mV	Pass
Crossload4	20.16mV	12.71mV	18.60mV	26.76mV	Pass

The results above are not used in the certification process





Seasonic Vertex GX-1000

Top side

Power specifications label

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