Sharkoon Rebel P20 750

Lab ID SK75002392

Certification ID 252392

Test Result Report ID: 24PS2392A

Certificate Issue Date: Mar 15, 2024

Scheme: ETA-EMI PSU

115V



230V

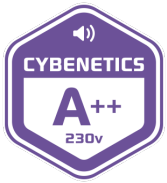


Scheme: LAMBDA PSU

115V



230V





Outside Validation Scope



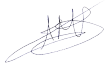
General Information

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	Sharkoon
Model	Rebel P20 750
OEM/ODM	Andyson
Serial Number	
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240
□□□□ (Arms)	9-4.5

□□□□ (Hz)	50-60
□□□□ (W)	750
Operating Temperature (Continuous Full Load) (°C)	
□□	ATX12V
□□□□	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
□□	120mm Fluid Dynamic Bearing Fan (HA1225M12F-Z)
□□□□□	✓ (selectable)
Cybenetics Testing Information	
Lab ID	SK75002392
Date of receipt	Feb 12, 2024
Testing Date	Mar 15, 2024
Report Issued Date	Mar 15, 2024
□□□□□	Applicable to both black and white color models.
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□ (Non-accredited measurements)

□□□□□				
□□	□□□□	□□□□□□	Gauge	In Cable Capacitors
ATX □□ 20+4 pin (600mm)	1	1	18AWG	□
4+4 pin EPS 12V □□ (700mm)	2	2	18AWG	□
6+2pin PCIe□□ (550mm+150mm)	2	4	18AWG	□
12+4 pin PCIe (600mm) (600W)	1	1	16-26AWG	□
SATA□□ (500mm+150mm+150mm)	1	3	18AWG	□
SATA□□ (500mm+150mm+150mm+150mm)	2	8	18AWG	□

4-pin Molex Adapter (+150mm)	1	1	18AWG	□
AC Power Cord (1380mm) - C13 coupler	1	1	18AWG	-

□□□□

□		3.3V	5V	12V	5VSB	-12V
□□□□	□□	20	20	62.5	3	0.3
	□	100		750	15	3.6
□□□□□ (W)		750				

Parts Description

General Data	
Manufacturer (OEM)	Andyson
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor SCK205R0 (5 Ohm @ 25°C) & Relay
Bridge Rectifier(s)	2x GBU1006 (420V, 15A @ 100°C)
APFC MOSFETs	2x Wayon WML28N65F2 (650V, 13A @ 100°C, Rds(on): 0.19Ohm)
APFC Boost Diode	1x WeEn BYC10-600P (600V, 20A @ 127°C)
Bulk Cap(s)	2x Nippon Chemicon (420V, 330uF each or 660uf combined, 2000h @ 105°C,KMR)
Main Switchers	4x Chongqing Pingwei 18N50MF (500V, 18A @ 25°C, Rds(on): 0.3Ohm)
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CU6901VPA
Topology	Primary side: APFC, Full-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	6x Allpower APG013N04G-AU (40V, 100A @ 100°C, Rds(on): 1.3mOhm)
5V & 3.3V	DC-DC Converters: 6x Nexperia PSMN4R0-30YLD (30V, 95A @ 25°C, Rds(on): 4mOhm) PWM Controller(s): ANPEC APW7159C

Filtering Capacitors	Electrolytic: 6x Nippon Chemi-Con (2-5,000 @ 105°C, KZE), 4x Rubycon (6-10000 @ 105°C, ZLH), 1x Nichicon (4-10,000 @ 105°C, HE), Polymer: 24x Polycap, 5x FPCAP, 1x Nippon Chemi-Con LE
Supervisor IC	Weltrend WT7527RA (OCP, OTP, OVP, UVP, SCP, PG)
Micro Controller / Fan Controller	Weltrend WT51F104
Fan Model	Hong Hua HA1225M12F-Z (120mm, 12V, 0.45A, Fluid Dynamic Bearing)
5VSB Circuit	
Rectifier	PJ335M
Standby PWM Controller	Excelliance MOS EM8569C

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 v3.1 PSU Power Excursion	✓

Performance Summary

115V

Accredited	
□□□□ (>1450 load combinations)	88.326%
Average Noise Output (>1450 Load Combinations)	9.21dBA
PF□□□ (>1450 Load Combinations)	0.980
Efficiency With 10W (≤500W) or 2% (>500W) Load	73.586%
□□□□□□	0.0624W
Non-Accredited	
12V Ripple (Full Load)	15.49mV

5V Ripple (Full Load)	13.89mV
3.3V Ripple (Full Load)	15.98mV
5VSB Ripple (Full Load)	23.91mV
12V Load Regulation	0.73%
5V Load Regulation	0.30%
3.3V Load Regulation	0.88%
5VSB Load Regulation	5.05%
Inrush Current	34.280A

230V

Accredited	
□□□□ (>1450 load combinations)	90.737%
Average Noise Output (>1450 Load Combinations)	10.00dBA
PF□□□ (>1450 Load Combinations)	0.940
Efficiency With 10W (≤500W) or 2% (>500W) Load	71.180%
□□□□□□	0.1369W
Non-Accredited	
12V Ripple (Full Load)	15.74mV
5V Ripple (Full Load)	13.66mV
3.3V Ripple (Full Load)	16.21mV
5VSB Ripple (Full Load)	22.57mV
12V Load Regulation	0.96%
5V Load Regulation	0.38%
3.3V Load Regulation	0.73%
5VSB Load Regulation	4.70%
Inrush Current	65.060A
12V Transient Response (200%)	11.58V
5V Transient Response (200%)	4.950V
3.3V Transient Response (200%)	3.172V
5VSB Transient Response (200%)	4.992V
□□□□ & PG□□	22.90ms
AC Loss to PWR_OK Hold Up Time	18.80ms

PWR_OK Inactive to DC Loss Delay		4.10ms
PSU Timings: T1 (20% / 100%)	89.0ms	89.0ms
PSU Timings: T3 (20% / 100%)	118.0ms	121.0ms
OPP (28.47°C / 41.71°C)	147.08%	136.36%

□□□□ & PG□□

Hold-Up Time (ms)	22.9
AC Loss to PWR_OK Hold Up Time (ms)	18.8
PWR_OK Inactive to DC Loss Delay (ms)	4.1

□□□□

Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.04 V	115.01 V	113.85 V	115.09 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.96 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.19 %	2.00 %	PASS
Real Power:	0.062 W	0.011 W	N/A	0.083 W	N/A	N/A
Apparent Power:	7.983 W	7.794 W	N/A	8.182 W	N/A	N/A
Power Factor:	0.008	N/A	N/A	N/A	N/A	N/A

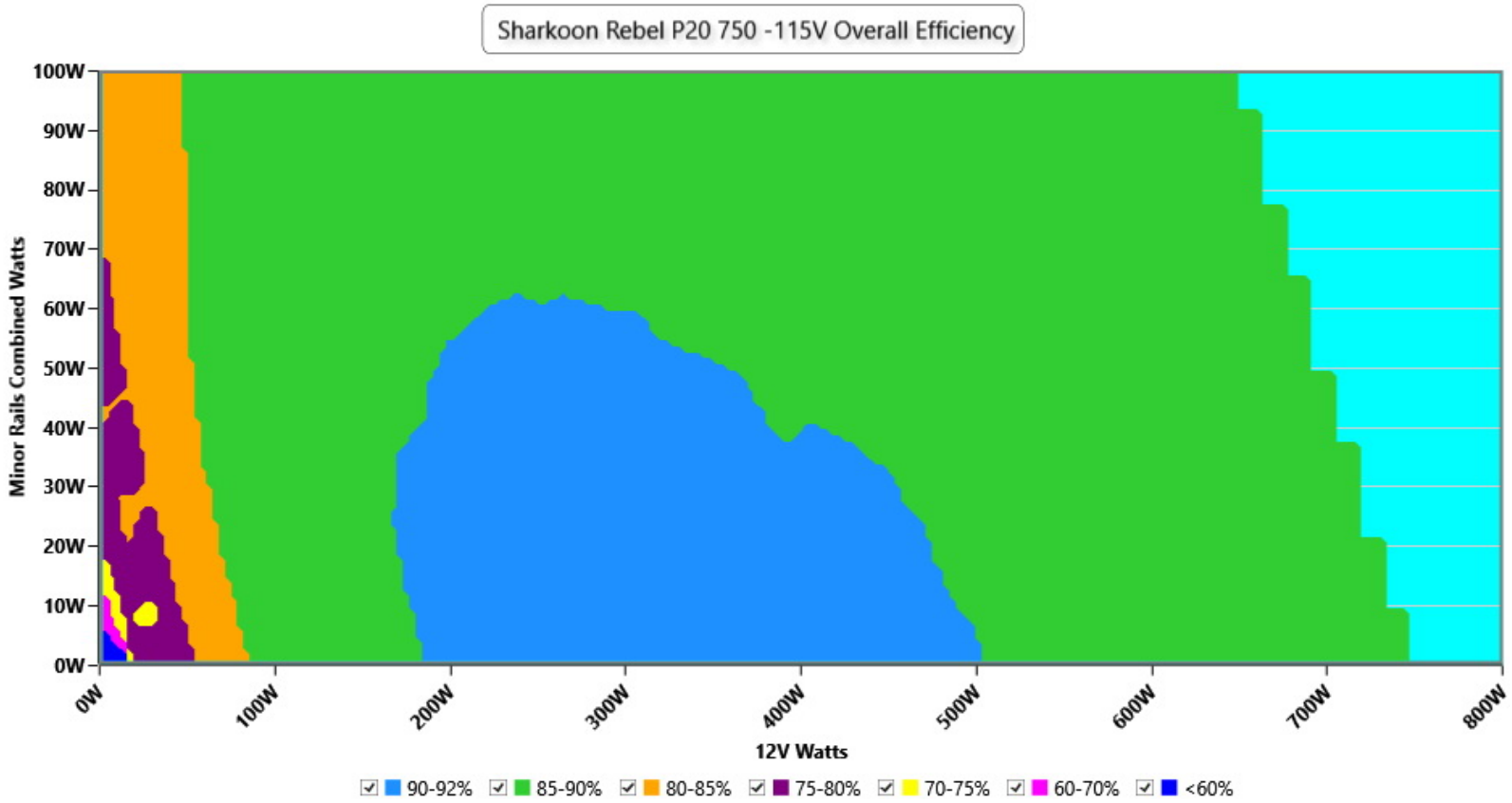
230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.00 V	230.89 V	227.70 V	231.06 V	232.30 V	PASS

Mains Frequency:	50.00 Hz	49.99 Hz	49.50 Hz	50.01 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.417	1.416	1.340	1.419	1.490	PASS
Mains Voltage THD:	0.17 %	0.14 %	N/A	0.26 %	2.00 %	PASS
Real Power:	0.137 W	0.118 W	N/A	0.171 W	N/A	N/A
Apparent Power:	26.154 W	25.880 W	N/A	26.442 W	N/A	N/A
Power Factor:	0.005	N/A	N/A	N/A	N/A	N/A

□□□□□□

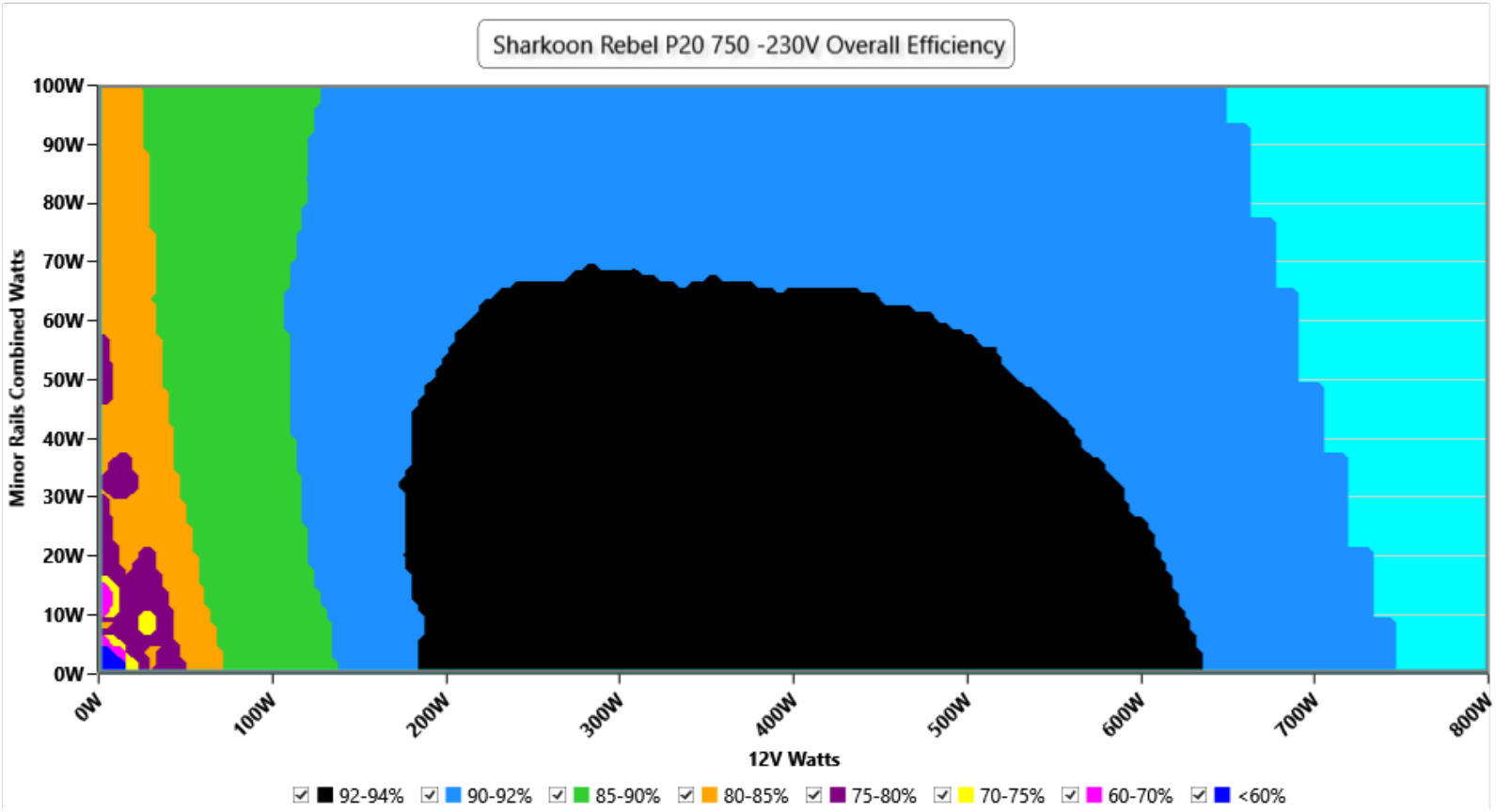
115V



□□

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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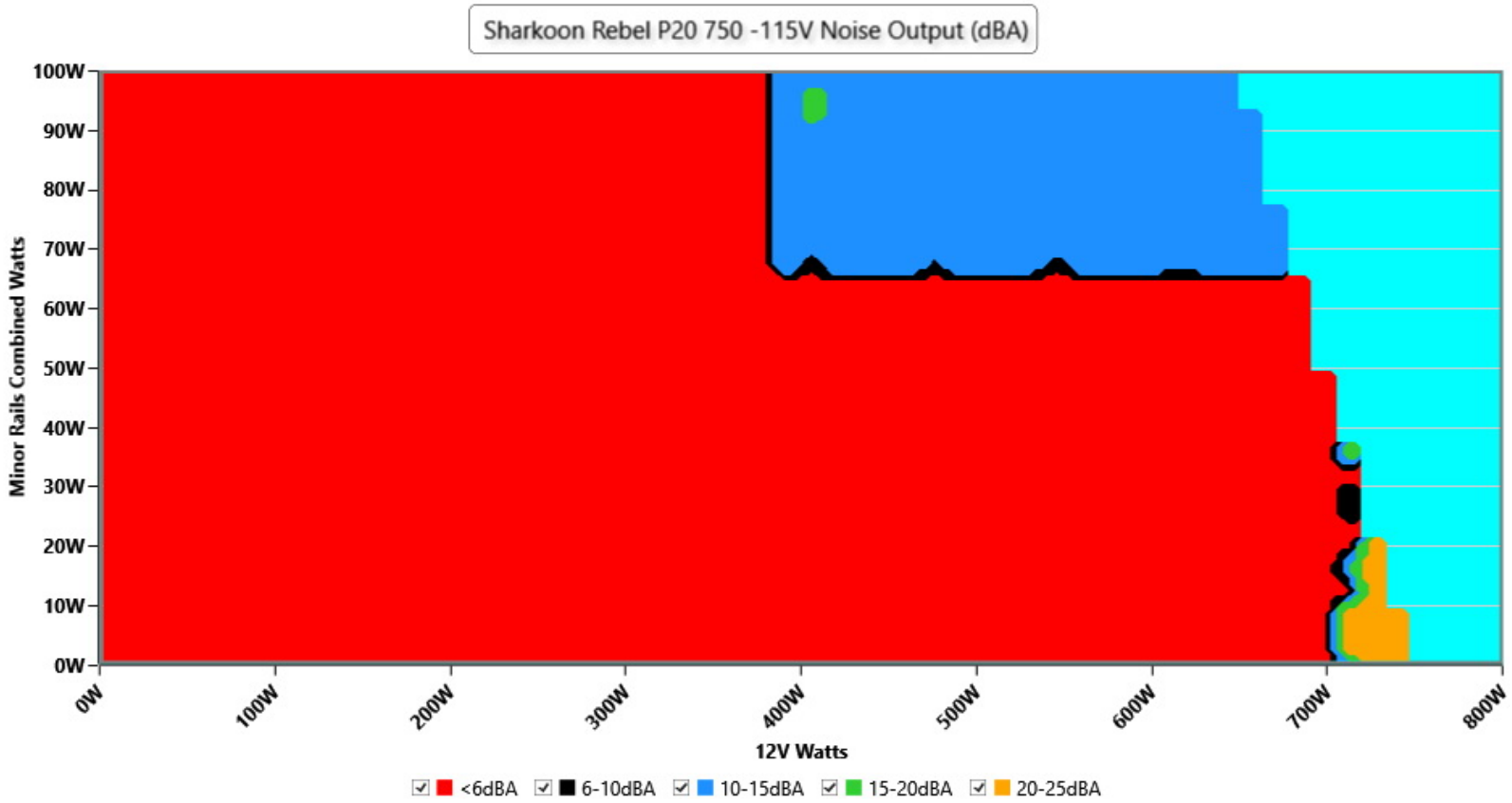
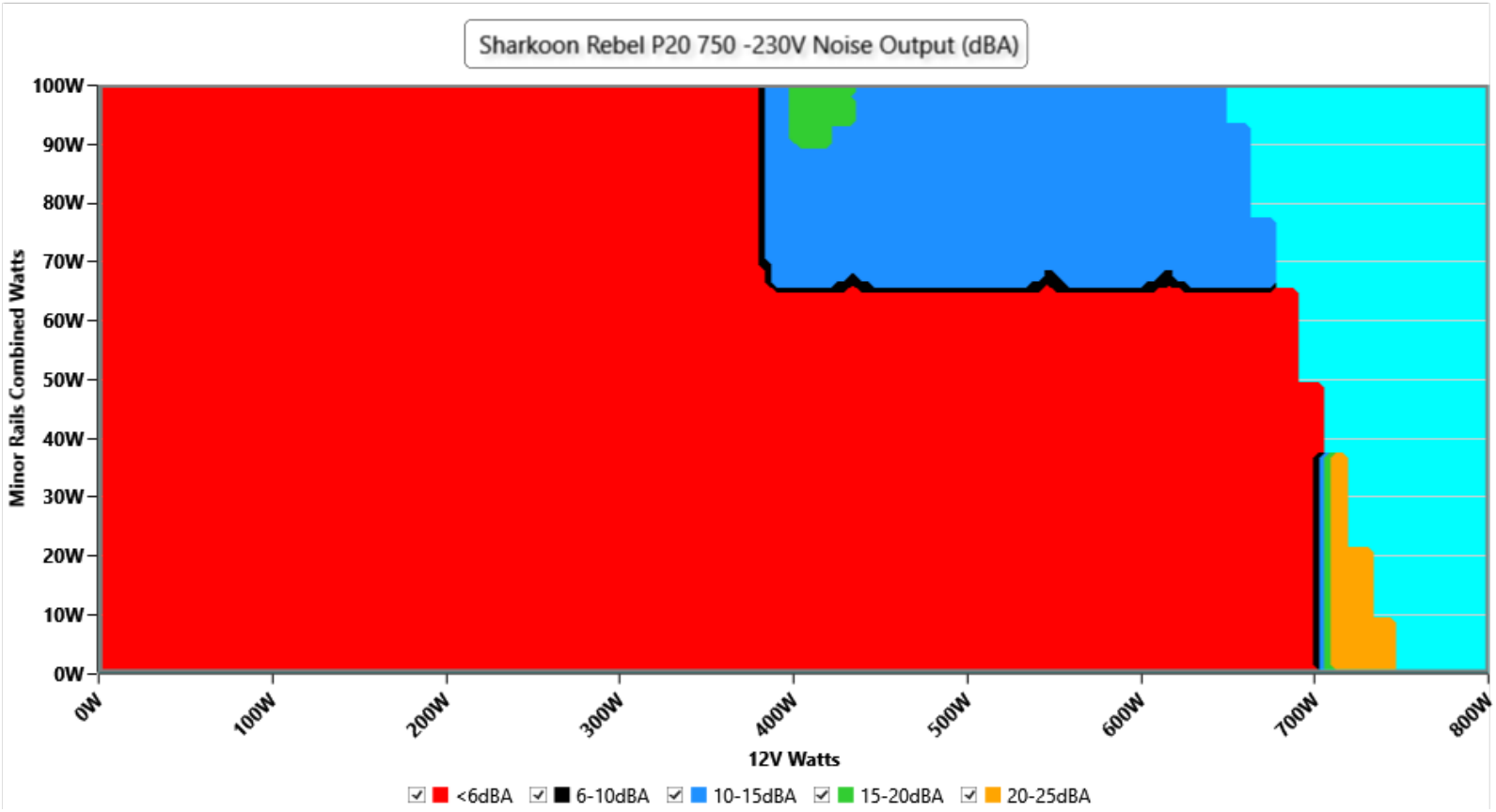
115V



□□

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 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) · 44.5 °C	0 RPM · <6.0 dB(A) · 44.5 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.0 °C	0 RPM · <6.0 dB(A) · 45.0 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 47.8 °C	0 RPM · <6.0 dB(A) · 47.8 °C	fan off in both
100%	772 RPM · 14.6 dB(A) · 46.1 °C	772 RPM · 14.6 dB(A) · 46.1 °C	**+0.0 dB(A)**

230V

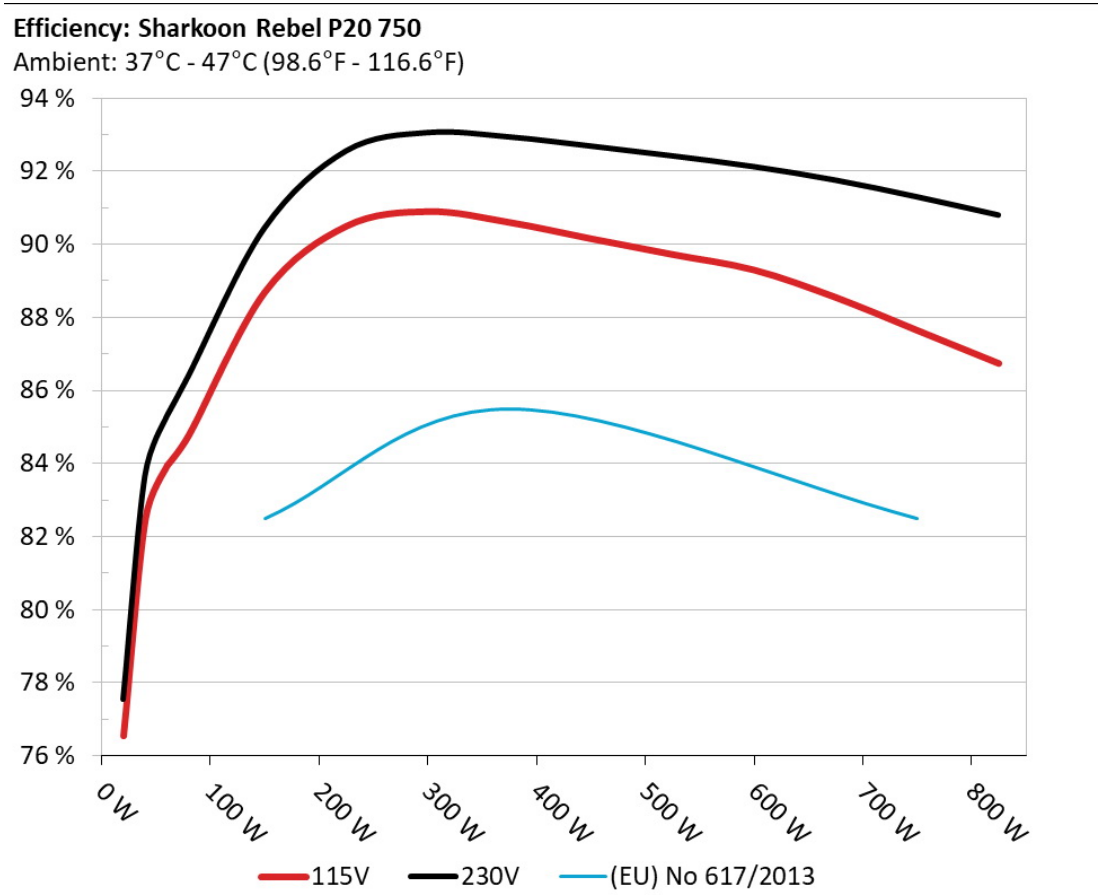
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 44.5 °C	0 RPM · <6.0 dB(A) · 44.5 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 45.2 °C	0 RPM · <6.0 dB(A) · 45.2 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 47.9 °C	0 RPM · <6.0 dB(A) · 47.9 °C	fan off in both
100%	772 RPM · 14.6 dB(A) · 45.4 °C	772 RPM · 14.6 dB(A) · 45.4 °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.

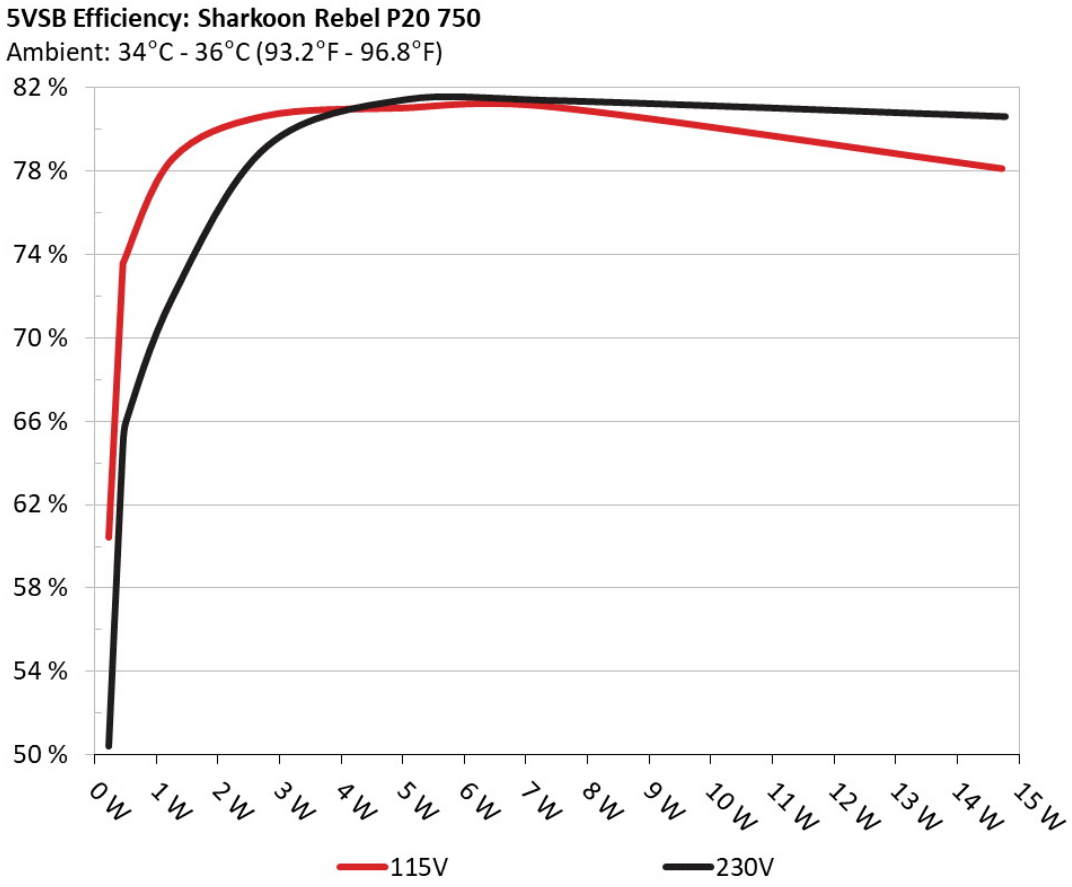
Informational. Not part of the ETA or LAMBDA rating.

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	0.23W	60.453%	0.047
	5.116V	0.381W		114.92V
2	0.09A	0.459W	73.646%	0.076
	5.104V	0.623W		114.93V
3	0.55A	2.745W	80.619%	0.297
	4.991V	3.404W		114.93V
4	1A	4.954W	81.004%	0.375
	4.954V	6.115W		114.92V
5	1.5A	7.411W	81.065%	0.425
	4.94V	9.142W		114.92V
6	3A	14.718W	78.107%	0.491
	4.906V	18.843W		114.91V

230V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	0.045A	0.231W	50.42%	0.017
	5.127V	0.46W		229.9V
2	0.09A	0.461W	64.803%	0.026
	5.124V	0.713W		229.9V
3	0.55A	2.802W	79.168%	0.121
	5.095V	3.54W		229.9V
4	1A	5.067W	81.409%	0.194
	5.067V	6.223W		229.9V
5	1.5A	7.553W	81.349%	0.239
	5.035V	9.284W		229.9V
6	3A	14.787W	80.587%	0.343
	4.929V	18.348W		229.9V

Supplementary Tests (For Reference)

10-110%□□□□

115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	4.376A	1.981A	1.979A	0.988A	75.002	83.433%	0	<6.0	44.45°C	0.954
	12.205V	5.048V	3.334V	5.061V	89.895				40.36°C	114.89V
20%	9.755A	2.972A	2.972A	1.191A	149.942	88.192%	0	<6.0	45.01°C	0.975
	12.203V	5.048V	3.331V	5.039V	170.016				40.73°C	114.86V
30%	15.495A	3.467A	3.469A	1.395A	224.949	89.994%	0	<6.0	45.95°C	0.982
	12.191V	5.047V	3.33V	5.018V	249.957				41.21°C	114.84V
40%	21.241A	3.964A	3.967A	1.601A	300.038	90.395%	0	<6.0	46.7°C	0.984
	12.186V	5.046V	3.328V	4.998V	331.921				41.66°C	114.8V
50%	26.580A	4.956A	4.962A	1.809A	374.484	90.099%	0	<6.0	47.79°C	0.986
	12.189V	5.045V	3.326V	4.977V	415.637				42.28°C	114.79V
60%	31.977A	5.952A	5.963A	2A	449.318	89.653%	787	15.2	42.86°C	0.986
	12.183V	5.041V	3.321V	4.959V	501.171				48.88°C	114.75V
70%	37.387A	6.949A	6.968A	2.228A	524.32	89.222%	786	15.1	43.26°C	0.986
	12.175V	5.038V	3.316V	4.938V	587.656				50.35°C	114.72V
80%	42.863A	7.941A	7.971A	2.334A	599.676	88.794%	784	15.1	44.97°C	0.987
	12.175V	5.036V	3.312V	4.928V	675.222				53.02°C	114.7V
90%	48.598A	8.438A	8.459A	2.442A	674.538	88.046%	777	14.8	45.45°C	0.988
	12.182V	5.036V	3.31V	4.914V	766.116				54.58°C	114.67V
100%	54.140A	8.934A	8.976A	3.078A	749.757	87.141%	772	14.6	46.11°C	0.989
	12.192V	5.036V	3.309V	4.873V	860.398				56.17°C	114.64V
110%	59.590A	9.929A	10.074A	3.079A	824.78	86.235%	1351	32.8	46.98°C	0.99
	12.191V	5.035V	3.305V	4.872V	956.435				57.95°C	114.61V
CL1	0.114A	11.913A	11.962A	0A	101.296	81.431%	789	15.3	41.28°C	0.967
	12.240V	5.053V	3.319V	5.113V	124.395				46.79°C	114.87V

CL2	0.113A	19.771A	0A	0A	101.351	79.978%	1360	33	40.37°C	0.968
	12.214V	5.056V	3.326V	5.116V	126.724				47.46°C	114.87V
CL3	0.113A	0A	19.9A	0A	67.398	74.304%	1360	33	40.41°C	0.955
	12.200V	5.039V	3.317V	5.115V	90.705				49.51°C	114.89V
CL4	61.629A	0A	0A	0A	749.611	88.146%	1346	32.7	42.78°C	0.989
	12.163V	5.035V	3.322V	5.065V	850.403				53.76°C	114.64V

The results above are not used in the certification process

230V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	4.380A	1.982A	1.98A	0.986A	74.997	84.79%	0	<6.0	44.48°C	0.788
	12.191V	5.046V	3.333V	5.072V	88.453				40.42°C	229.88V
20%	9.763A	2.973A	2.972A	1.187A	149.929	89.944%	0	<6.0	45.18°C	0.899
	12.192V	5.045V	3.331V	5.053V	166.692				40.89°C	229.87V
30%	15.508A	3.469A	3.469A	1.39A	224.93	92.052%	0	<6.0	45.89°C	0.936
	12.179V	5.044V	3.329V	5.035V	244.347				41.18°C	229.86V
40%	21.255A	3.966A	3.967A	1.595A	300.021	92.556%	0	<6.0	46.97°C	0.953
	12.177V	5.043V	3.328V	5.016V	324.149				41.93°C	229.85V
50%	26.597A	4.96A	4.962A	1.802A	374.455	92.438%	0	<6.0	47.86°C	0.963
	12.180V	5.041V	3.325V	4.996V	405.088				42.41°C	229.84V
60%	32.002A	5.958A	5.965A	2A	449.338	92.189%	788	15.2	42.83°C	0.969
	12.174V	5.036V	3.32V	4.975V	487.411				48.93°C	229.82V
70%	37.401A	6.956A	6.967A	2.22A	524.306	91.921%	786	15.1	43.16°C	0.972
	12.171V	5.033V	3.316V	4.954V	570.387				50.18°C	229.81V
80%	42.838A	7.949A	7.968A	2.328A	599.516	91.625%	782	15	43.72°C	0.975
	12.177V	5.031V	3.313V	4.94V	654.313				51.73°C	229.8V
90%	48.587A	8.448A	8.455A	2.435A	674.537	91.257%	777	14.8	44.27°C	0.977
	12.185V	5.03V	3.312V	4.927V	739.164				53.38°C	229.78V
100%	54.115A	8.947A	8.972A	3.068A	749.748	90.799%	772	14.6	45.38°C	0.978
	12.197V	5.029V	3.31V	4.889V	825.723				55.46°C	229.76V

110%	59.562A	9.946A	10.071A	3.071A	824.77	90.298%	1353	32.9	46.58°C	0.979
	12.197V	5.026V	3.307V	4.884V	913.387				57.55°C	229.75V
CL1	0.114A	11.939A	11.96A	0A	101.292	82.982%	790	15.3	40.04°C	0.854
	12.241V	5.041V	3.32V	5.113V	122.065				45.49°C	229.87V
CL2	0.113A	19.819A	0A	0A	101.345	81.341%	1362	33	40.92°C	0.858
	12.214V	5.043V	3.326V	5.116V	124.591				47.99°C	229.87V
CL3	0.113A	0A	19.898A	0A	67.396	75.53%	1360	33	40.02°C	0.791
	12.201V	5.04V	3.318V	5.115V	89.23				49.08°C	229.88V
CL4	61.663A	0A	0A	0A	749.569	91.664%	1348	32.7	45.03°C	0.978
	12.156V	5.035V	3.323V	5.065V	817.738				56.01°C	229.76V

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	0.495A	0.494A	0.195A	20.001	76.036%	0	<6.0	39.72°C	0.784
	12.116V	5.051V	3.338V	5.119V	26.306				36.65°C	114.91V
40W	2.698A	0.693A	0.692A	0.293A	40	81.97%	0	<6.0	41.12°C	0.906
	12.120V	5.051V	3.338V	5.11V	48.799				37.79°C	114.9V
60W	4.142A	0.891A	0.89A	0.392A	59.999	81.313%	0	<6.0	42°C	0.944
	12.199V	5.051V	3.337V	5.102V	73.788				38.15°C	114.89V
80W	5.598A	1.089A	1.088A	0.491A	79.945	84.266%	0	<6.0	43.23°C	0.957
	12.204V	5.05V	3.336V	5.094V	94.876				39.25°C	114.88V

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	0.495A	0.495A	0.195A	19.993	77.05%	0	<6.0	39.73°C	0.449
	12.081V	5.048V	3.334V	5.119V	25.95				36.65°C	229.9V
40W	2.704A	0.693A	0.693A	0.293A	39.993	83.156%	0	<6.0	40.81°C	0.621
	12.086V	5.047V	3.334V	5.112V	48.094				37.49°C	229.89V
60W	4.152A	0.891A	0.891A	0.392A	59.993	82.611%	0	<6.0	41.82°C	0.74
	12.171V	5.048V	3.334V	5.105V	72.62				38.33°C	229.88V
80W	5.608A	1.09A	1.089A	0.49A	79.935	85.895%	0	<6.0	42.89°C	0.8
	12.179V	5.047V	3.333V	5.098V	93.062				39.08°C	229.88V

The results above are not used in the certification process

□□□□

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	12.38mV	11.19mV	9.72mV	16.01mV	Pass
20% Load	11.76mV	11.55mV	10.23mV	16.93mV	Pass
30% Load	12.28mV	11.14mV	10.28mV	16.62mV	Pass
40% Load	11.77mV	10.98mV	11.10mV	16.83mV	Pass
50% Load	11.56mV	13.18mV	12.07mV	17.65mV	Pass
60% Load	12.13mV	11.60mV	11.30mV	18.88mV	Pass
70% Load	12.59mV	11.85mV	11.76mV	20.00mV	Pass
80% Load	12.84mV	12.57mV	13.76mV	19.34mV	Pass
90% Load	11.97mV	13.03mV	14.22mV	20.41mV	Pass
100% Load	15.49mV	13.89mV	15.98mV	23.91mV	Pass
110% Load	15.40mV	13.57mV	16.81mV	23.59mV	Pass
Crossload1	11.61mV	12.06mV	12.33mV	15.76mV	Pass
Crossload2	12.63mV	14.92mV	10.54mV	15.86mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	11.46mV	11.29mV	13.56mV	13.20mV	Pass
Crossload4	15.16mV	12.96mV	14.54mV	19.35mV	Pass

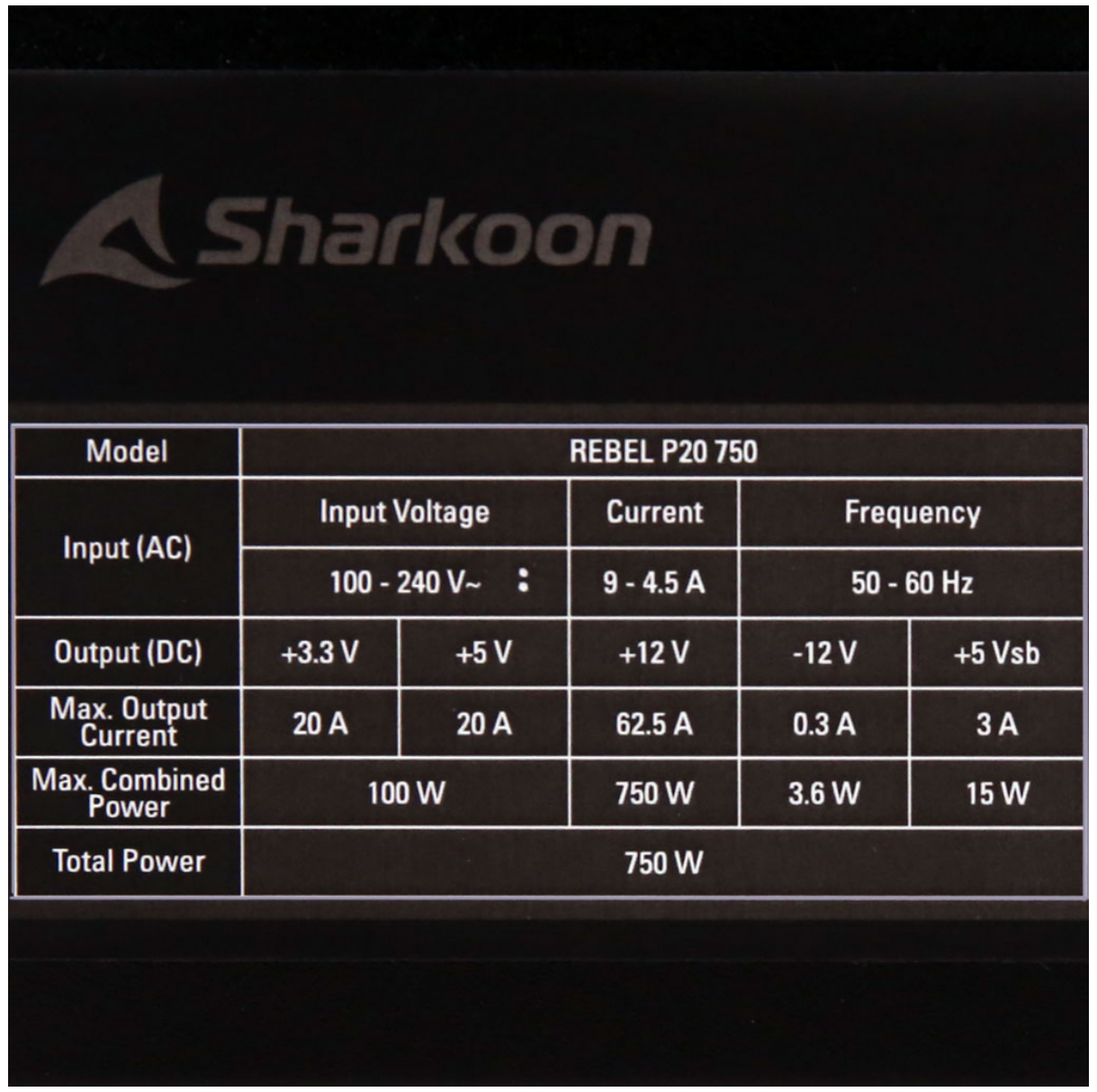
The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	12.28mV	10.88mV	9.72mV	15.75mV	Pass
20% Load	15.76mV	11.34mV	12.58mV	16.88mV	Pass
30% Load	13.16mV	11.29mV	11.26mV	17.39mV	Pass
40% Load	11.41mV	11.50mV	10.90mV	17.65mV	Pass
50% Load	11.15mV	12.57mV	11.97mV	19.23mV	Pass
60% Load	11.66mV	12.06mV	11.61mV	18.72mV	Pass
70% Load	11.51mV	11.65mV	12.38mV	19.49mV	Pass
80% Load	13.20mV	12.72mV	14.37mV	19.75mV	Pass
90% Load	11.72mV	12.88mV	14.37mV	21.74mV	Pass
100% Load	15.74mV	13.66mV	16.21mV	22.57mV	Pass
110% Load	15.51mV	13.93mV	16.98mV	22.58mV	Pass
Crossload1	13.19mV	13.56mV	13.44mV	15.94mV	Pass
Crossload2	13.30mV	16.50mV	10.39mV	15.45mV	Pass
Crossload3	11.56mV	11.49mV	14.88mV	14.22mV	Pass
Crossload4	16.64mV	14.45mV	14.63mV	18.94mV	Pass

The results above are not used in the certification process





Sharkoon Rebel P20 750

Top side

Model	REBEL P20 750				
Input (AC)	Input Voltage		Current	Frequency	
	100 - 240 V~		9 - 4.5 A	50 - 60 Hz	
Output (DC)	+3.3 V	+5 V	+12 V	-12 V	+5 Vsb
Max. Output Current	20 A	20 A	62.5 A	0.3 A	3 A
Max. Combined Power	100 W		750 W	3.6 W	15 W
Total Power	750 W				

Power specifications label

本测试报告中包含的所有数据和图表均可在以下条件下由任何人使用：使用过程需提及测试结果由Cybenetics提供。
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