Sharkoon Rebel P15 650W

Serial Number -

Lab ID SK65002865

Certification ID 252865

Test Result Report ID: 25PS2865A

Certificate Issue Date: Jun 26, 2025

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 P15 650W
OEM/ODM	Andyson
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	4-8

Rated Frequency (Hz)	50-60
Rated Power (W)	650
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fixed cables
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	120mm Sleeve Bearing Fan (PY-1225M12S)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	SK65002865
Date of receipt	May 22, 2025
Testing Date	Jun 26, 2025
Report Issued Date	Jun 26, 2025
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors(Non-accredited measurements)

Captive Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	In Cable Capacitors
ATX connector 24 pin (550mm)	1	1	18-22AWG	No
4+4 pin EPS12V (675mm+145mm)	1	2	18AWG	No
6+2 pin PCIe (530mm+150mm)	1	2	18AWG	No
12+4 pin PCIe (600mm) (600W)	1	1	16-26AWG	No
SATA (530mm+150mm+150mm) / 4-pin Molex (+150mm)	2	6 / 2	18AWG	No
AC Power Cord (1070mm) - C13 coupler	1	1	18AWG	-

Protection Features(Manufacturer)

Over Power Protection	✓
Over Current (+12V) Protection	✓
Over Temperature Protection	✓
Short Circuit Protection	✓
Surge Protection	✓
Inrush Current Protection	✓
Fan Failure Protection	✗

Power Specifications

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	18	18	54.1	3	0.3
	Watts	100		649.2	15	3.6
Total Max. Power (W)		650				

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	1x NTC Thermistor SCK-201R5 (1.5 Ohm) & Relay
Bridge Rectifier(s)	2x GBU806 (600V, 8A @ 100°C)
APFC MOSFETs	2x PingWei PWE180N65SFMF
APFC Boost Diode	1x
Bulk Cap(s)	1x Nippon Chemi-Con (400V, 390uF, 2000h @ 105°C, KMR)

Main Switchers	2x SI24N50F
APFC Controller	Champion CM6500UNX & CM03X (Remove Phantom Power)
Resonant Controller	Champion CM6901T6X
Topology	Primary side: APFC, Half-Bridge & LLC Resonant converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	4x PingWei PWC012N04ES (40V, 132A @ 100°C, Rds(on): 1.2mOhm)
5V & 3.3V	DC-DC Converters: 4x Way-On WMO190N03TS (30V, 120A @ 100°C, Rds(on): 2.8mOhm) PWM Controller(s): 2x ANPECAPW7164
Filtering Capacitors	Electrolytic: 9x CS (3,000 @ 105°C, WE) 5x CS (2,000 @ 105°C, WR) Polymer: 5x Polycap, 2x Teapo
Supervisor IC	Esthome EST.7630FS (OCP, FPOB, PGO, OVP, UVP)
Fan Model	Poweryear PY-1225M12S (120mm, 12V, 0.26A, Sleeve Bearing Fan).
5VSB/12VSB Circuit	
Rectifier	1x PingWei PS1045L SBR (45V, 10A)
Standby PWM Controller	Esthome EST.2508

Test Results

Temperature & Compliance Info

Temperature Range (°C /°F)	28-32 / 82.4-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.1 PSU Power Excursion	✓

Performance Summary

115V

Accredited	
Average Efficiency (>1450 load combinations)	88.372%
Average Noise Output (>1450 Load Combinations)	31.31dBA
Average PF (>1450 Load Combinations)	0.980
Efficiency With 10W (≤500W) or 2% (>500W) Load	60.688%
Standby Power Consumption	0.0903W
Non-Accredited	
12V Ripple (Full Load)	55.61mV
5V Ripple (Full Load)	22.78mV
3.3V Ripple (Full Load)	24.28mV
5VSB Ripple (Full Load)	19.06mV
12V Load Regulation	1.03%
5V Load Regulation	1.72%
3.3V Load Regulation	2.15%
5VSB Load Regulation	3.81%
Inrush Current	32.330A

230V

Accredited	
Average Efficiency (>1450 load combinations)	90.266%
Average Noise Output (>1450 Load Combinations)	31.69dBA
Average PF (>1450 Load Combinations)	0.930
Efficiency With 10W (≤500W) or 2% (>500W) Load	61.360%
Standby Power Consumption	0.1163W
Non-Accredited	
12V Ripple (Full Load)	60.97mV
5V Ripple (Full Load)	23.77mV
3.3V Ripple (Full Load)	24.30mV

5VSB Ripple (Full Load)		19.40mV
12V Load Regulation		1.02%
5V Load Regulation		1.80%
3.3V Load Regulation		2.09%
5VSB Load Regulation		3.85%
Inrush Current		65.400A
12V Transient Response (200%)		11.53V
5V Transient Response (200%)		4.953V
3.3V Transient Response (200%)		3.260V
5VSB Transient Response (200%)		5.006V
Hold-Up Time & PWR_OK Signal		14.70ms
AC Loss to PWR_OK Hold Up Time		12.90ms
PWR_OK Inactive to DC Loss Delay		1.80ms
PSU Timings: T1 (20% / 100%)	59.0ms	58.0ms
PSU Timings: T3 (20% / 100%)	117.0ms	119.0ms
12V OCP (27.6°C / 44.0°C)	75.60A (139.74%), 12.158V	73.20A (135.30%), 12.173V
5V OCP (27.6°C / 44.0°C)	23.3A (129.44%), 5.047V	23.1A (128.33%), 5.046V
3.3V OCP (27.6°C / 44.0°C)	22.1A (122.78%), 3.397V	21.7A (120.56%), 3.396V
5VSB OCP (27.6°C / 44.0°C)	4.2A (140.00%), 4.95V	4.1A (136.67%), 4.95V
OPP (28.16°C / 43.23°C)	137.34%	135.24%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	14.7
AC Loss to PWR_OK Hold Up Time (ms)	12.9
PWR_OK Inactive to DC Loss Delay (ms)	1.8

Stromverbrauch im Ruhezustand

Tables

115V

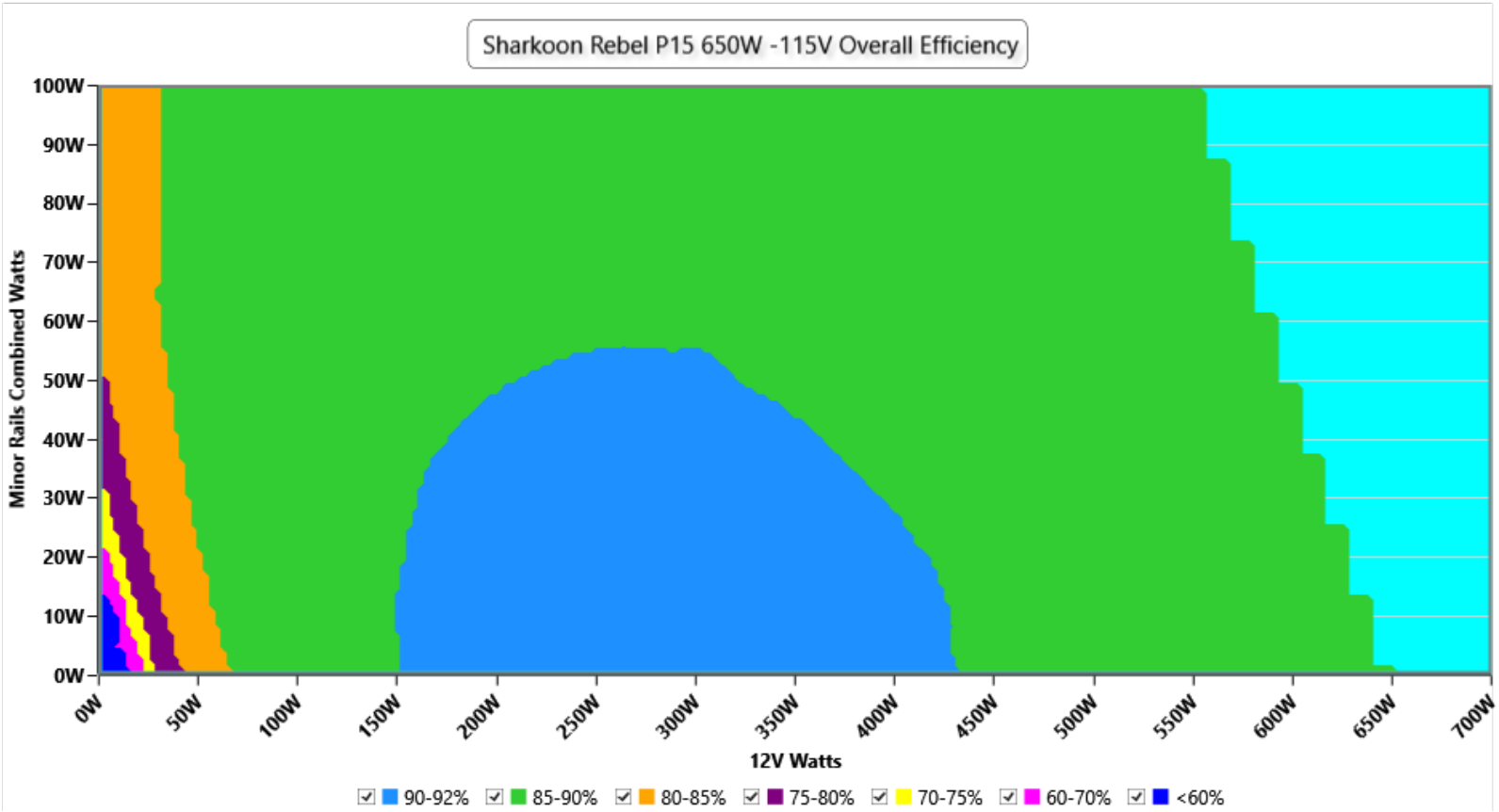
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.08 V	115.07 V	113.85 V	115.11 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	60.00 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.13 %	0.10 %	N/A	0.15 %	2.00 %	PASS
Real Power:	0.090 W	0.080 W	N/A	0.103 W	N/A	N/A
Apparent Power:	8.064 W	8.045 W	N/A	8.105 W	N/A	N/A
Power Factor:	0.010	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.25 V	230.23 V	227.70 V	230.27 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:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.14 %	0.13 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.116 W	0.095 W	N/A	0.144 W	N/A	N/A
Apparent Power:	26.376 W	26.350 W	N/A	26.392 W	N/A	N/A
Power Factor:	0.005	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

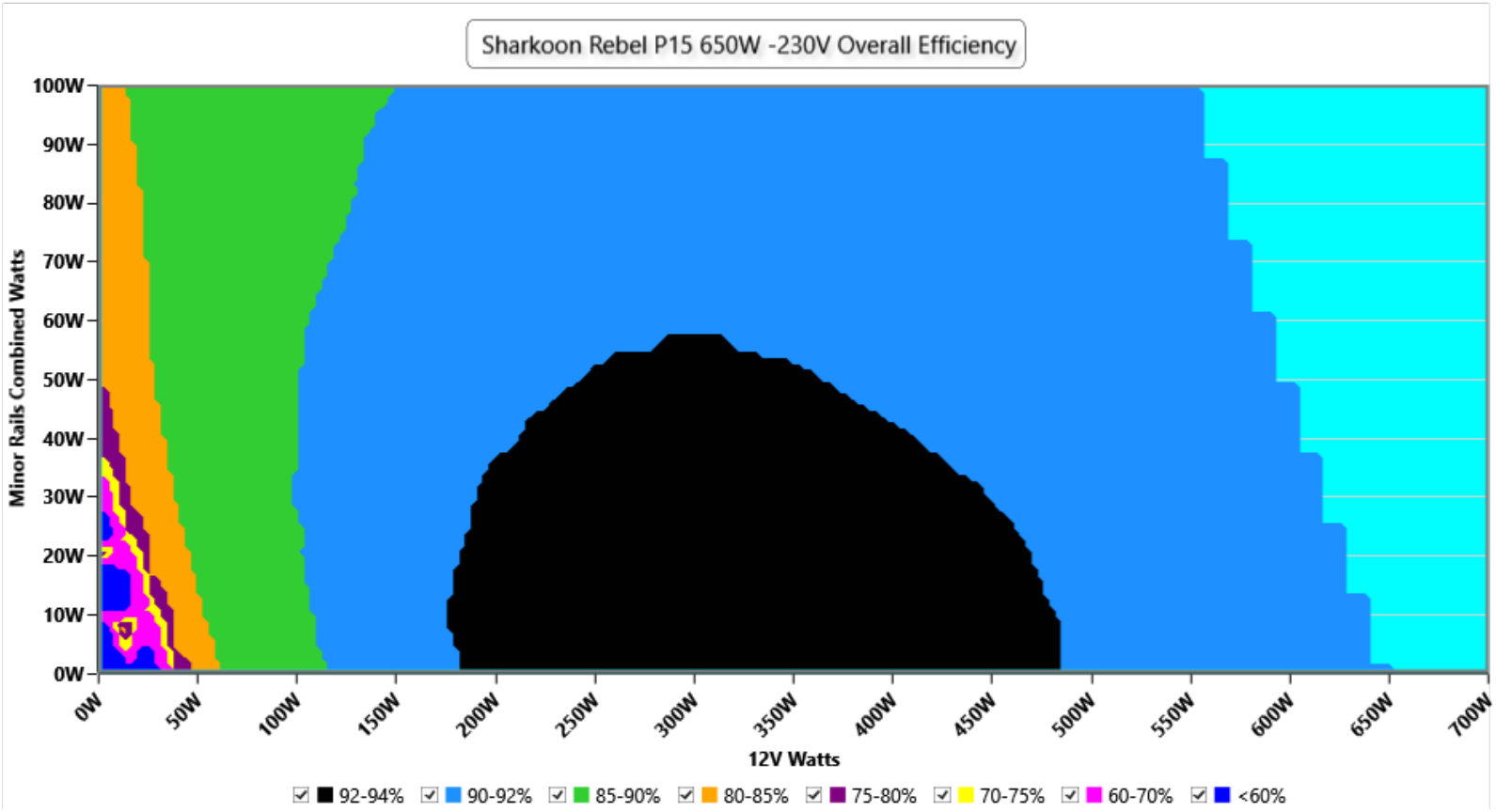
115V



INFO

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

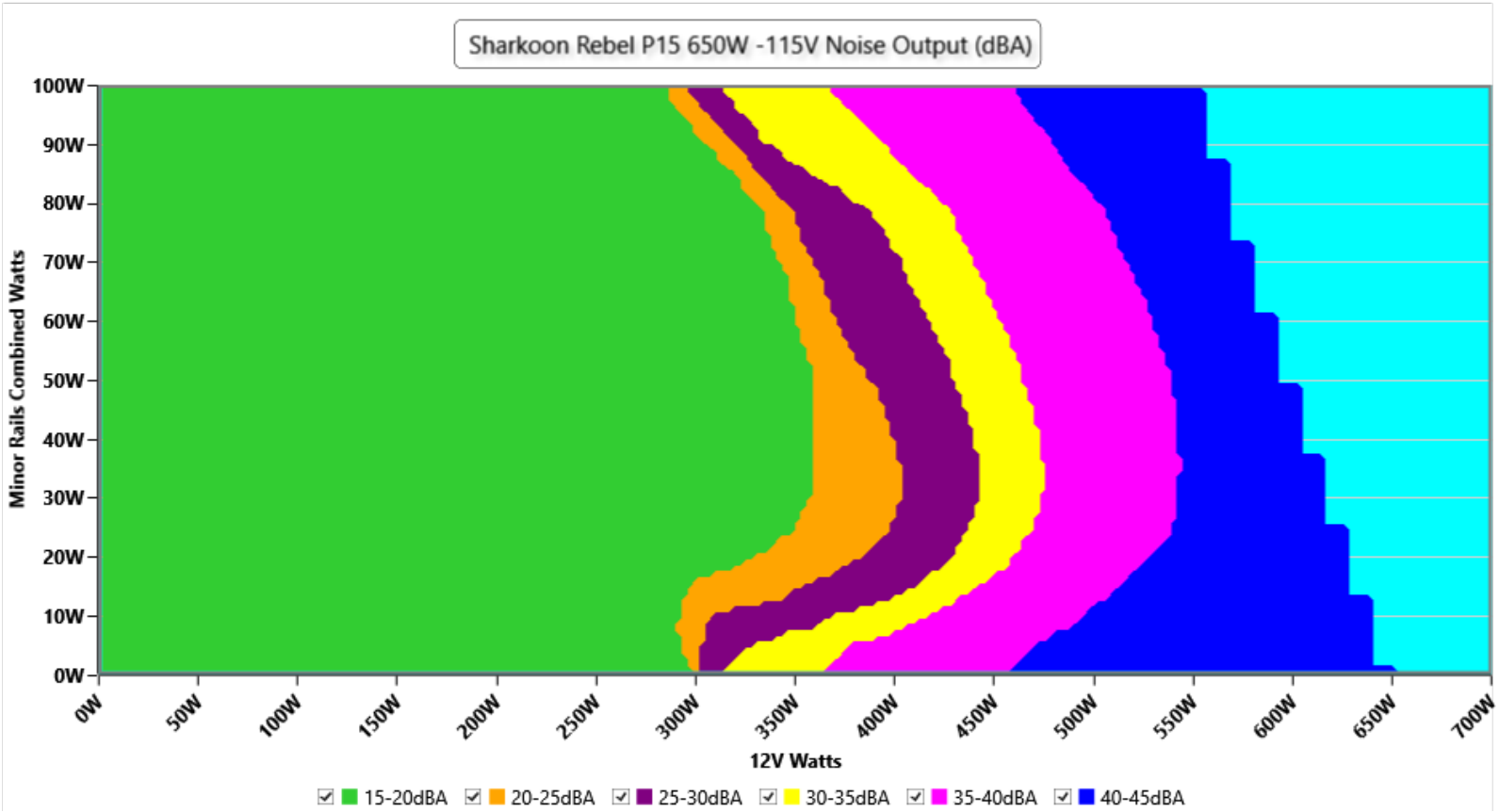


INFO

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

Noise Graph

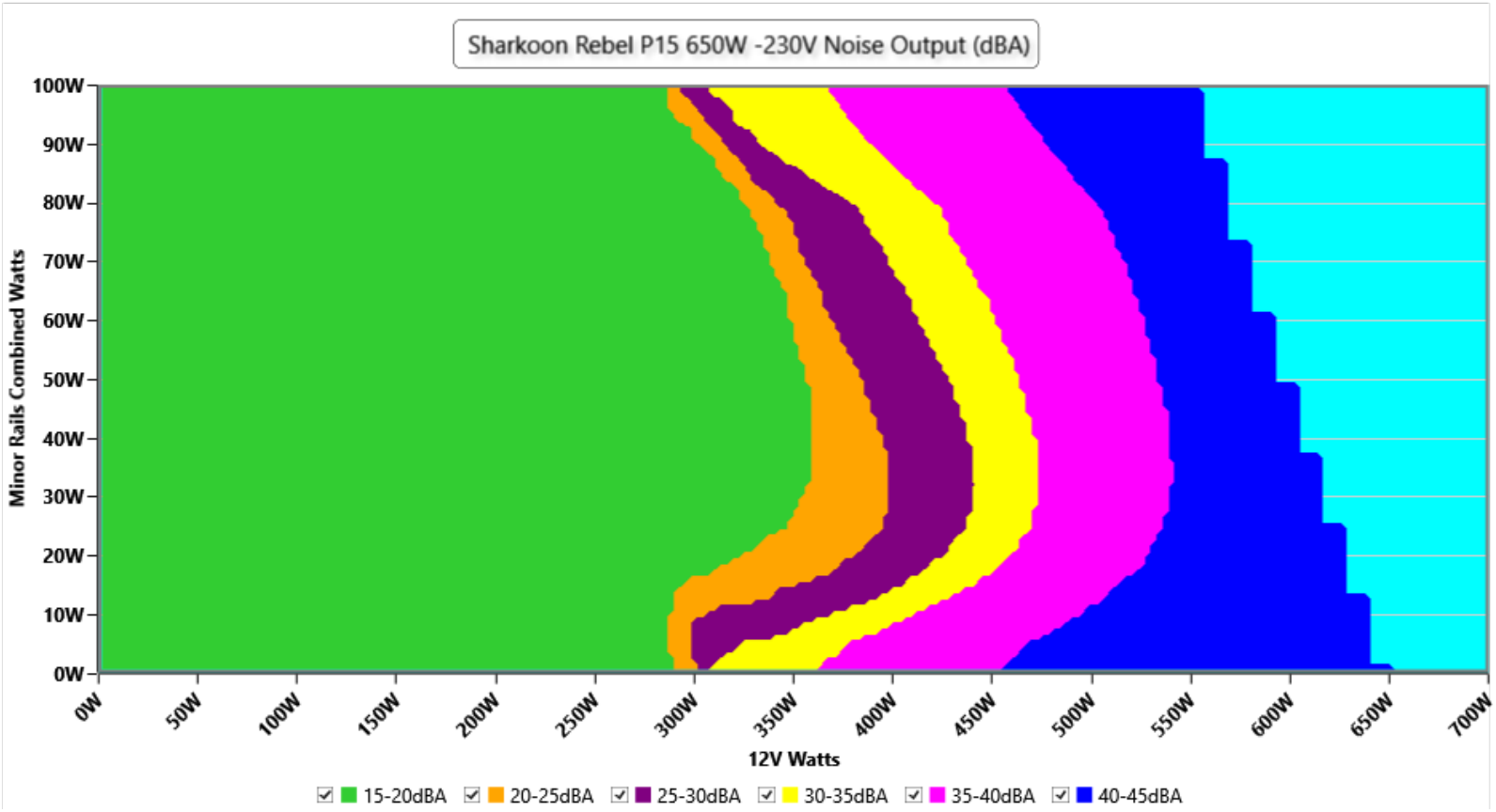
115V



INFO

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



INFO

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%	824 RPM · 18.6 dB(A) · 30.2 °C	853 RPM · 20.1 dB(A) · 40.4 °C	**+1.5 dB(A)**
20%	828 RPM · 18.9 dB(A) · 30.1 °C	857 RPM · 20.3 dB(A) · 40.6 °C	**+1.4 dB(A)**
50%	832 RPM · 18.9 dB(A) · 30.9 °C	1525 RPM · 37.1 dB(A) · 42.2 °C	**+18.2 dB(A)**
100%	1914 RPM · 43.3 dB(A) · 29.9 °C	1995 RPM · 45.4 dB(A) · 45.2 °C	**+2.1 dB(A)**

230V

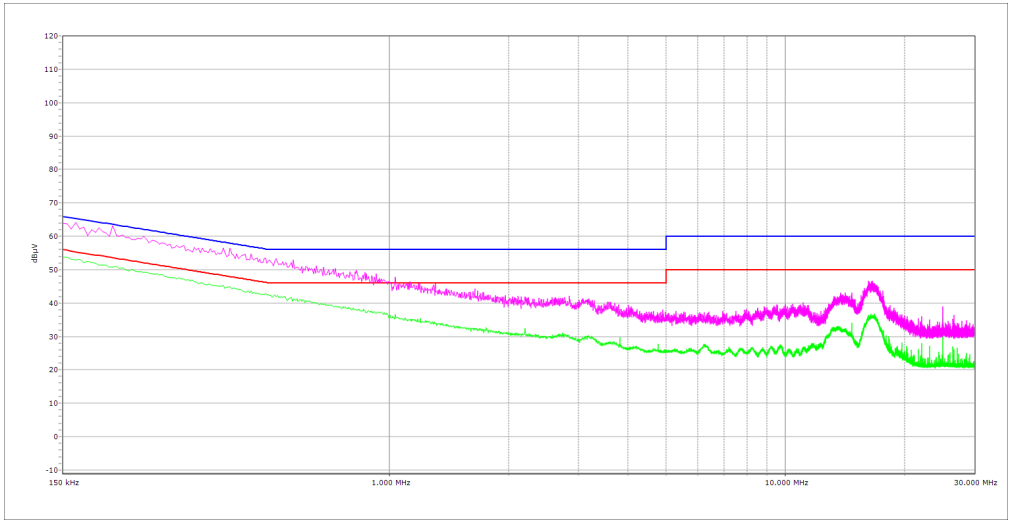
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	823 RPM · 18.5 dB(A) · 30.7 °C	857 RPM · 20.3 dB(A) · 40.5 °C	**+1.8 dB(A)**
20%	829 RPM · 18.9 dB(A) · 30.9 °C	872 RPM · 20.3 dB(A) · 41.0 °C	**+1.4 dB(A)**
50%	832 RPM · 18.9 dB(A) · 30.4 °C	1723 RPM · 40.3 dB(A) · 42.1 °C	**+21.4 dB(A)**
100%	1867 RPM · 43.5 dB(A) · 30.5 °C	1999 RPM · 45.4 dB(A) · 46.0 °C	**+1.9 dB(A)**

INFO

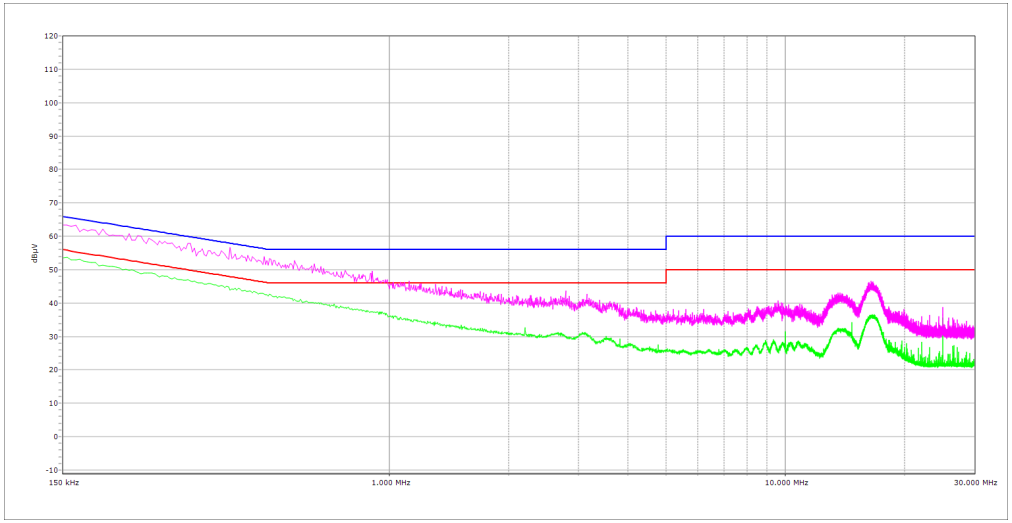
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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

Informational. Not part of the ETA or LAMBDA rating.

Conducted Emissions EN 55032 & CISPR 32



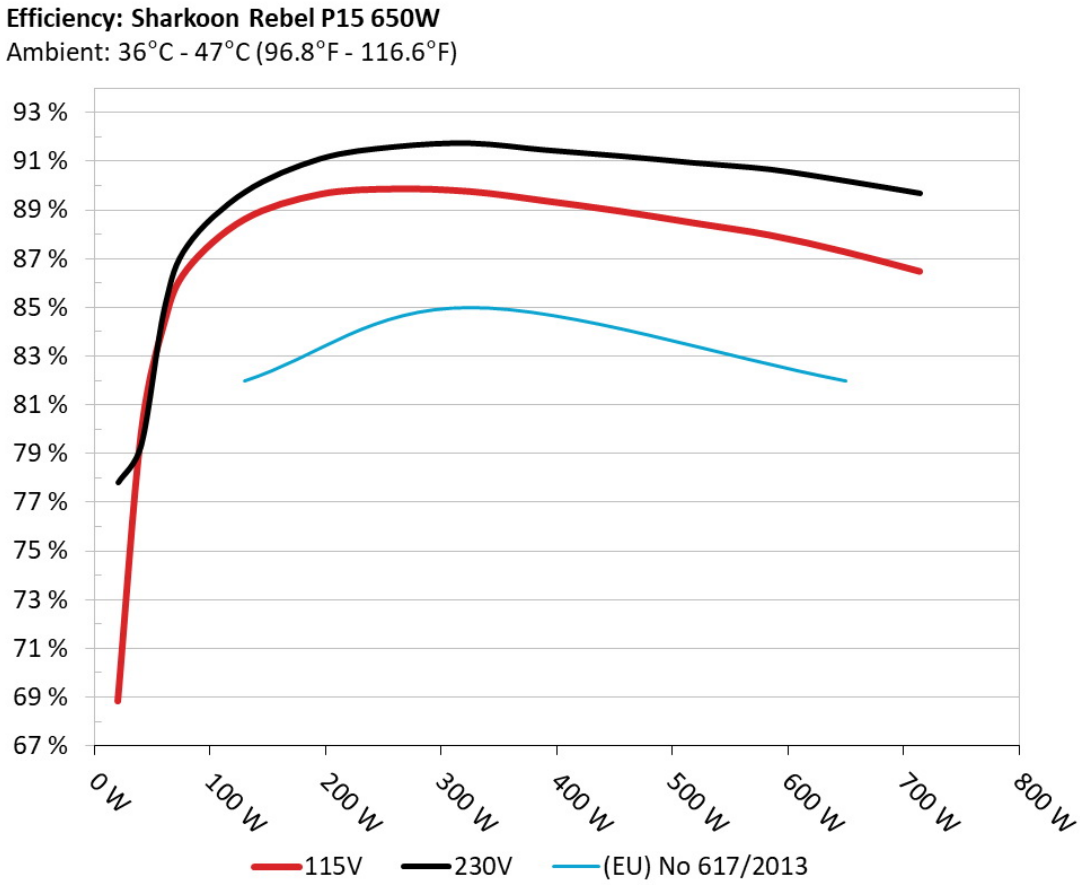
NEUTRAL



PHASE

Indicative Performance

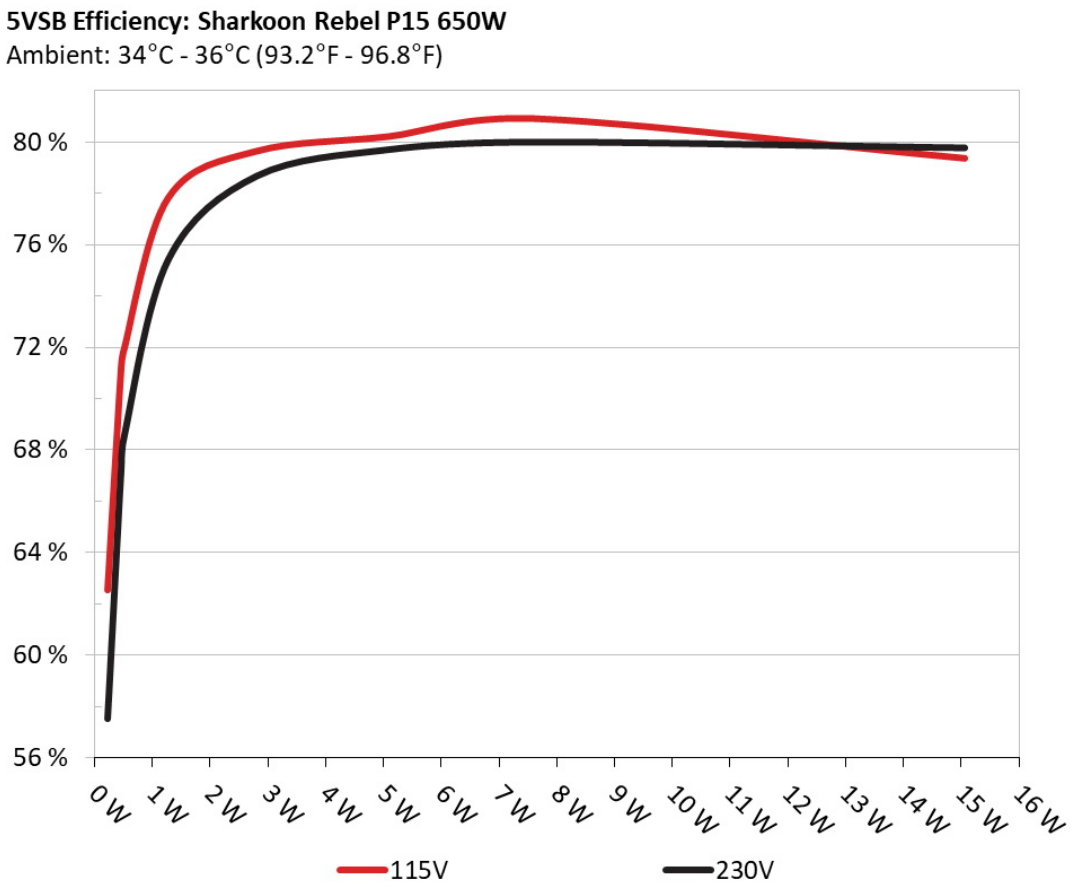
Efficiency under high ambient temperature



INFO

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 Efficiency



INFO

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

5VSB Efficiency (ERP LOT 3/6 & CEC)

115V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.231W	62.562%	0.045
	5.134V	0.37W		115.08V
2	**0.09A**	0.462W	71.111%	0.078
	5.132V	0.65W		115.08V
3	**0.55A**	2.813W	79.655%	0.286
	5.115V	3.532W		115.08V
4	**1A**	5.098W	80.222%	0.353
	5.098V	6.354W		115.08V
5	**1.5A**	7.617W	80.919%	0.391
	5.078V	9.413W		115.07V
6	**3A**	15.056W	79.374%	0.446
	5.019V	18.968W		115.07V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.231W	57.535%	0.015
	5.132V	0.402W		230.29V
2	**0.09A**	0.462W	67.114%	0.026
	5.13V	0.688W		230.28V
3	**0.55A**	2.812W	78.661%	0.124
	5.113V	3.573W		230.27V
4	**1A**	5.096W	79.689%	0.196
	5.096V	6.397W		230.27V
5	**1.5A**	7.616W	79.981%	0.248
	5.077V	9.522W		230.27V
6	**3A**	15.053W	79.757%	0.33
	5.017V	18.875W		230.27V

Protection Features

OCP (Normal @ 27.6°C)	12V: 75.60A (139.74%), 12.158V 5V: 23.3A (129.44%), 5.047V 3.3V: 22.1A (122.78%), 3.397V 5VSB: 4.2A (140.00%), 4.95V
OCP (Hot @ 44.0°C)	12V: 73.20A (135.30%), 12.173V 5V: 23.1A (128.33%), 5.046V 3.3V: 21.7A (120.56%), 3.396V 5VSB: 4.1A (136.67%), 4.95V
OPP (Normal @ 28.2°C)	892.70W (137.34%)
OPP (Hot @ 43.2°C)	879.07W (135.24%)
OTP	✓ (112°C @ Secondary Side)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
UVP (Full Load @ 90V)	✓
UVP (No Damage @ 80V)	✓
Conducted Emissions EN55032 & CISPR 32	✓
NLO	✓
Fan Failure Protection	✗
SIP	Surge: MOV Inrush: NTC & Bypass Relay

Supplementary Tests (For Reference)

Typical Load Tests

115V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	**3.542A**	**1.965A**	**1.932A**	**0.984A**	65.004	83.869%	853	20.1	40.4°C	0.959
	12.255V	5.089V	3.416V	5.081V	77.506				42.44°C	115.06V
20%	**8.087A**	**2.953A**	**2.903A**	**1.184A**	129.935	88.633%	857	20.3	40.63°C	0.975
	12.246V	5.08V	3.41V	5.066V	146.6				43.9°C	115.03V
30%	**12.986A**	**3.45A**	**3.395A**	**1.386A**	194.937	89.654%	1072	26.9	41.25°C	0.969
	12.235V	5.073V	3.403V	5.051V	217.434				45.43°C	115.01V
40%	**17.902A**	**3.949A**	**3.89A**	**1.589A**	260.025	89.873%	1222	30.7	41.63°C	0.976
	12.223V	5.065V	3.394V	5.036V	289.325				45.61°C	114.99V
50%	**22.483A**	**4.945A**	**4.875A**	**1.793A**	325.021	89.768%	1525	37.1	42.22°C	0.982
	12.210V	5.056V	3.385V	5.021V	362.07				46.17°C	114.97V
60%	**27.024A**	**5.945A**	**5.865A**	**1.998A**	389.375	89.388%	1752	40.3	42.67°C	0.985
	12.195V	5.047V	3.376V	5.006V	435.601				47.15°C	114.94V
70%	**31.656A**	**6.949A**	**6.861A**	**2.205A**	454.688	88.96%	1941	43.8	43.37°C	0.988
	12.180V	5.038V	3.367V	4.989V	511.115				48.45°C	114.92V
80%	**36.298A**	**7.954A**	**7.859A**	**2.311A**	519.475	88.472%	1990	45.3	43.64°C	0.989
	12.165V	5.028V	3.359V	4.977V	587.166				49.62°C	114.9V
90%	**41.343A**	**8.466A**	**8.351A**	**2.417A**	584.874	87.975%	1992	45.3	44.37°C	0.991
	12.151V	5.02V	3.353V	4.965V	664.814				52.18°C	114.87V
100%	**46.145A**	**8.98A**	**8.878A**	**3.042A**	649.704	87.291%	1995	45.4	45.24°C	0.992
	12.136V	5.011V	3.345V	4.932V	744.294				54.9°C	114.85V
110%	**50.825A**	**10A**	**9.973A**	**3.047A**	714.339	86.49%	1994	45.4	46.05°C	0.992
	12.121V	5V	3.339V	4.923V	825.918				58.13°C	114.82V
CL1	**0.114A**	**11.901A**	**11.681A**	**0A**	101.289	82.424%	1513	37	40.6°C	0.987
	12.247V	5.058V	3.398V	5.1V	122.887				43.91°C	115.04V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	**0.113A**	**17.772A**	**0A**	**0A**	91.387	81.636%	1398	34.9	40.46°C	0.987
	12.253V	5.064V	3.409V	5.11V	111.943				42.11°C	115.05V
CL3	**0.113A**	**0A**	**17.421A**	**0A**	60.781	75.385%	1088	27.8	41.13°C	0.96
	12.249V	5.075V	3.409V	5.107V	80.628				42.76°C	115.06V
CL4	**53.506A**	**0A**	**0A**	**0A**	649.522	88.272%	1999	45.4	45.78°C	0.992
	12.139V	5.039V	3.361V	5.074V	735.821				53.37°C	114.85V

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	**3.542A**	**1.966A**	**1.932A**	**0.984A**	65.007	84.79%	857	20.3	40.45°C	0.777
	12.255V	5.088V	3.416V	5.081V	76.67				43.37°C	230.23V
20%	**8.087A**	**2.953A**	**2.904A**	**1.185A**	129.941	89.747%	872	20.3	40.98°C	0.897
	12.246V	5.08V	3.41V	5.065V	144.788				44.68°C	230.23V
30%	**12.986A**	**3.451A**	**3.396A**	**1.386A**	194.944	91.108%	1215	30.4	41.09°C	0.929
	12.235V	5.072V	3.401V	5.05V	213.972				44.28°C	230.22V
40%	**17.904A**	**3.95A**	**3.891A**	**1.589A**	260.032	91.601%	1469	36	41.92°C	0.944
	12.222V	5.064V	3.393V	5.036V	283.875				44.98°C	230.21V
50%	**22.486A**	**4.946A**	**4.876A**	**1.793A**	325.034	91.744%	1723	40.3	42.07°C	0.953
	12.208V	5.056V	3.384V	5.021V	354.285				45.64°C	230.19V
60%	**27.030A**	**5.947A**	**5.867A**	**1.999A**	389.413	91.468%	1872	43.5	42.6°C	0.956
	12.194V	5.046V	3.375V	5.004V	425.733				46.11°C	230.19V
70%	**31.661A**	**6.951A**	**6.862A**	**2.206A**	454.728	91.22%	1994	45.4	43.48°C	0.961
	12.179V	5.037V	3.367V	4.987V	498.494				47.54°C	230.17V
80%	**36.303A**	**7.956A**	**7.859A**	**2.312A**	519.51	90.935%	1996	45.4	43.68°C	0.965
	12.165V	5.027V	3.359V	4.975V	571.296				48.81°C	230.17V
90%	**41.352A**	**8.469A**	**8.352A**	**2.418A**	584.907	90.666%	1998	45.4	44.98°C	0.968
	12.149V	5.018V	3.352V	4.964V	645.121				50.8°C	230.16V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**46.153A**	**8.984A**	**8.877A**	**3.043A**	649.737	90.197%	1999	45.4	45.99°C	0.969
	12.134V	5.008V	3.346V	4.93V	720.354				52.76°C	230.15V
110%	**50.835A**	**10.004A**	**9.974A**	**3.048A**	714.364	89.687%	1999	45.4	46.67°C	0.971
	12.119V	4.998V	3.339V	4.921V	796.512				54.85°C	230.13V
CL1	**0.114A**	**11.903A**	**11.68A**	**0A**	101.293	82.992%	1610	38.7	41.8°C	0.87
	12.247V	5.057V	3.399V	5.099V	122.051				44.38°C	230.23V
CL2	**0.113A**	**17.771A**	**0A**	**0A**	91.391	81.975%	1550	37.2	40.23°C	0.852
	12.254V	5.064V	3.409V	5.11V	111.486				42.96°C	230.23V
CL3	**0.113A**	**0A**	**17.429A**	**0A**	60.783	76.168%	1217	30.4	41.3°C	0.786
	12.249V	5.076V	3.408V	5.106V	79.8				43.07°C	230.23V
CL4	**53.518A**	**0A**	**0A**	**0A**	649.551	91.165%	2008	45.5	46.02°C	0.969
	12.137V	5.038V	3.36V	5.074V	712.498				51.58°C	230.15V

The results above are not used in the certification process

Light Load Tests

115V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20W	**1.212A**	**0.491A**	**0.483A**	**0.195A**	20	68.859%	837	19	36.85°C	0.847
	12.260V	5.097V	3.417V	5.12V	29.045				37.34°C	115.07V
40W	**2.668A**	**0.687A**	**0.676A**	**0.293A**	40	79.771%	843	19.2	37.14°C	0.93
	12.255V	5.095V	3.415V	5.114V	50.142				38.45°C	115.06V
60W	**4.124A**	**0.884A**	**0.87A**	**0.392A**	60.001	84.341%	846	19.5	38.3°C	0.959
	12.254V	5.093V	3.414V	5.108V	71.141				39.93°C	115.06V
80W	**5.576A**	**1.081A**	**1.063A**	**0.49A**	79.945	86.577%	849	19.6	39.26°C	0.964
	12.252V	5.091V	3.414V	5.102V	92.339				41.56°C	115.05V

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20W	**1.212A**	**0.49A**	**0.483A**	**0.195A**	20.008	77.786%	842	19.2	36.37°C	0.471
	12.258V	5.098V	3.416V	5.12V	28.61				37.49°C	230.25V
40W	**2.668A**	**0.687A**	**0.676A**	**0.293A**	40.005	79.348%	847	19.5	37.47°C	0.649
	12.256V	5.096V	3.416V	5.113V	50.166				40.1°C	230.24V
60W	**4.124A**	**0.884A**	**0.87A**	**0.392A**	60.004	84.963%	849	19.6	38.42°C	0.753
	12.254V	5.093V	3.415V	5.107V	70.626				41.05°C	230.23V
80W	**5.576A**	**1.081A**	**1.063A**	**0.49A**	79.951	87.541%	853	20.1	39.45°C	0.815
	12.252V	5.09V	3.414V	5.101V	91.331				42.21°C	230.23V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	14.85mV	12.62mV	14.43mV	12.03mV	Pass
20% Load	24.44mV	36.89mV	48.09mV	26.69mV	Pass
30% Load	24.64mV	13.86mV	15.88mV	12.49mV	Pass
40% Load	28.87mV	14.06mV	15.98mV	13.06mV	Pass
50% Load	32.69mV	15.20mV	16.24mV	13.99mV	Pass
60% Load	36.09mV	17.00mV	17.84mV	24.05mV	Pass
70% Load	39.70mV	18.03mV	19.50mV	14.71mV	Pass
80% Load	44.44mV	20.71mV	21.72mV	17.50mV	Pass
90% Load	50.58mV	23.29mV	23.94mV	17.34mV	Pass
100% Load	55.61mV	22.78mV	24.28mV	19.06mV	Pass
110% Load	65.36mV	27.89mV	25.62mV	21.90mV	Pass
Crossload1	18.15mV	18.25mV	18.02mV	12.41mV	Pass
Crossload2	18.56mV	18.29mV	21.10mV	12.64mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	17.07mV	18.34mV	20.27mV	12.08mV	Pass
Crossload4	55.59mV	13.90mV	17.08mV	16.41mV	Pass

The results above are not used in the certification process

230V

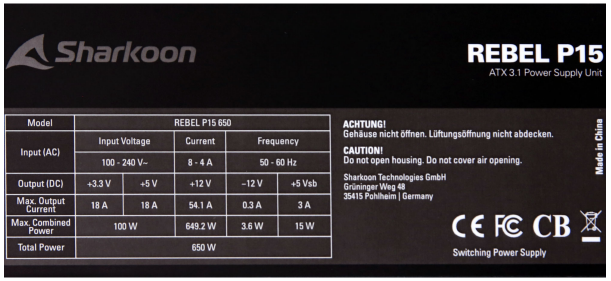
Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	15.67mV	14.32mV	15.51mV	12.59mV	Pass
20% Load	20.00mV	14.11mV	16.55mV	12.96mV	Pass
30% Load	25.00mV	15.20mV	17.22mV	13.53mV	Pass
40% Load	29.49mV	15.35mV	18.46mV	14.30mV	Pass
50% Load	34.34mV	16.28mV	18.15mV	14.87mV	Pass
60% Load	38.15mV	17.21mV	18.88mV	25.14mV	Pass
70% Load	42.64mV	19.21mV	20.22mV	15.07mV	Pass
80% Load	47.90mV	21.69mV	23.17mV	16.36mV	Pass
90% Load	55.47mV	24.27mV	23.79mV	18.48mV	Pass
100% Load	60.97mV	23.77mV	24.30mV	19.40mV	Pass
110% Load	71.60mV	27.72mV	26.99mV	22.17mV	Pass
Crossload1	19.38mV	26.84mV	19.04mV	12.50mV	Pass
Crossload2	19.28mV	19.37mV	21.36mV	13.27mV	Pass
Crossload3	17.74mV	18.75mV	22.34mV	12.44mV	Pass
Crossload4	60.24mV	15.84mV	18.26mV	16.20mV	Pass

The results above are not used in the certification process

Sharkoon Rebel P15 650W



Top side



Power specifications label

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