

Lab ID#: 560

Receipt Date: Jun 3, 2018

Test Date: Jun 9, 2018

Report:

Report Date: Jun 12, 2018

DUT INFORMATION

Brand	Corsair
Manufacturer (OEM)	HEC
Series	VS
Model Number	
Serial Number	18389853000052597432
DUT Notes	CP-9020171

DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	10-5
Rated Frequency (Hz)	47-63
Rated Power (W)	550
Type	ATX12V
Cooling	120mm Sleeve Bearing Fan (D12SH-12)
Semi-Passive Operation	X
Cable Design	Fixed cables

POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	24	20	44	3	0.3
	Watts	120		528	15	3.6
Total Max. Power (W)		550				

CABLES AND CONNECTORS

Captive Cables

Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (550mm)	1	1	18-20AWG	No
4+4 pin EPS12V (620mm)	1	1	18AWG	No
6+2 pin PCIe (550mm+110mm)	1	2	18AWG	No
SATA (440mm+120mm+120mm)	2	6	18AWG	No
SATA (450mm) / 4-pin Molex (+120mm+120mm) / FDD (+120mm)	1	1 / 2 / 1	18-20AWG	No
AC Power Cord (1380mm) - C13 coupler	1	1	18AWG	-

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RESULTS

Temperature Range (°C /°F)	28-30 / 82.4-86 (+-2°C / +- 3.6°F)
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓

115V

Average Efficiency	82.826%
Efficiency With 10W (≤500W) or 2% (>500W)	53.965
Average Efficiency 5VSB	79.731%
Standby Power Consumption (W)	0.0445783
Average PF	0.991
Avg Noise Output	29.11 dB(A)
Efficiency Rating (ETA)	BRONZE
Noise Rating (LAMBDA)	A-

230V

Average Efficiency	85.204%
Average Efficiency 5VSB	78.599%
Standby Power Consumption (W)	0.1029090
Average PF	0.963
Avg Noise Output	29.81 dB(A)
Efficiency Rating (ETA)	BRONZE
Noise Rating (LAMBDA)	A-

TEST EQUIPMENT

Electronic Loads	Chroma 6314A x2 63123A x6 63102A 63101A	Chroma 63601-5 x4 Chroma 63600-2 x2 63640-80-80 x20 63610-80-20 x2
AC Sources	Chroma 6530, Chroma 61604, Keysight AC6804B	
Power Analyzers	N4L PPA1530 x2, N4L PPA5530	
Oscilloscopes	Picoscope 4444 & 3424, Keysight DSOX3024A, Rigol DS2072A	
Voltmeter	Keithley 2015 THD 6.5 Digit	
Sound Analyzer	Bruel & Kjaer 2250-L G4	
Microphone	Bruel & Kjaer Type 4955-A, Bruel & Kjaer Type 4189	
Data Loggers	Picoscope TC-08 x2, Labjack U3-HV x2	

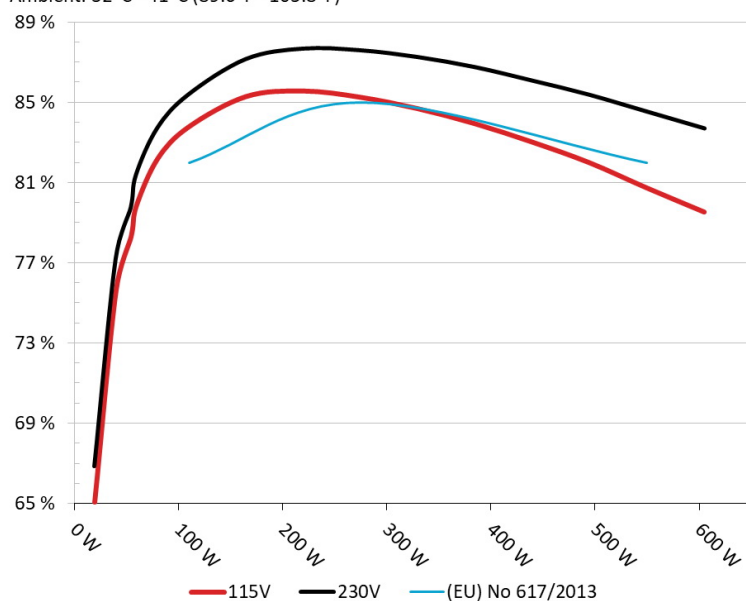
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EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

Efficiency: Corsair VS550

Ambient: 32°C - 41°C (89.6°F - 105.8°F)



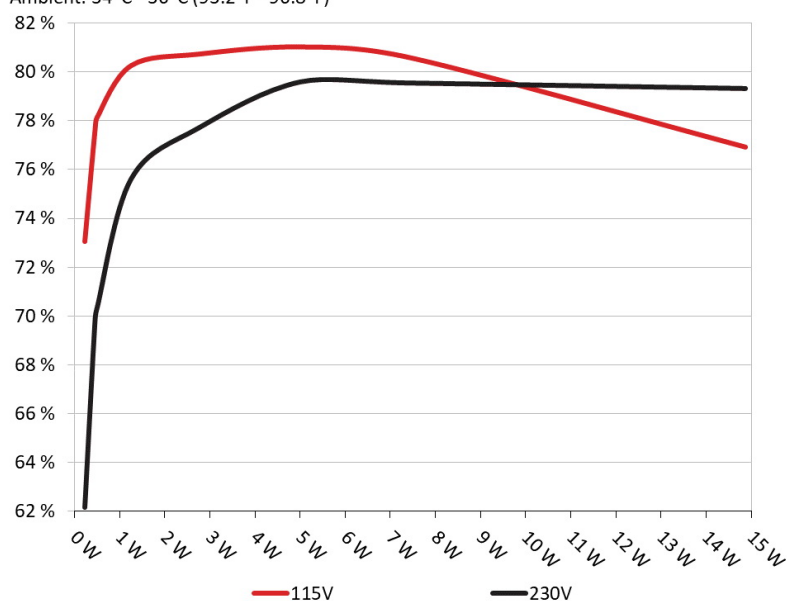
INFO

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

5VSB Efficiency: Corsair VS550

Ambient: 34°C - 36°C (93.2°F - 96.8°F)



INFO

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

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5VSB EFFICIENCY -115V (ERP LOT 3/6 & CEC)

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.225	73.052%	0.038
	5.018V	0.308		115.02V
2	0.090A	0.451	77.625%	0.070
	5.017V	0.581		115.03V
3	0.550A	2.754	80.739%	0.276
	5.008V	3.411		115.02V
4	1.000A	4.999	81.034%	0.351
	4.998V	6.169		115.02V
5	1.500A	7.483	80.575%	0.392
	4.989V	9.287		115.02V
6	3.000A	14.875	76.925%	0.451
	4.958V	19.337		115.02V

5VSB EFFICIENCY -230V (ERP LOT 3/6 & CEC)

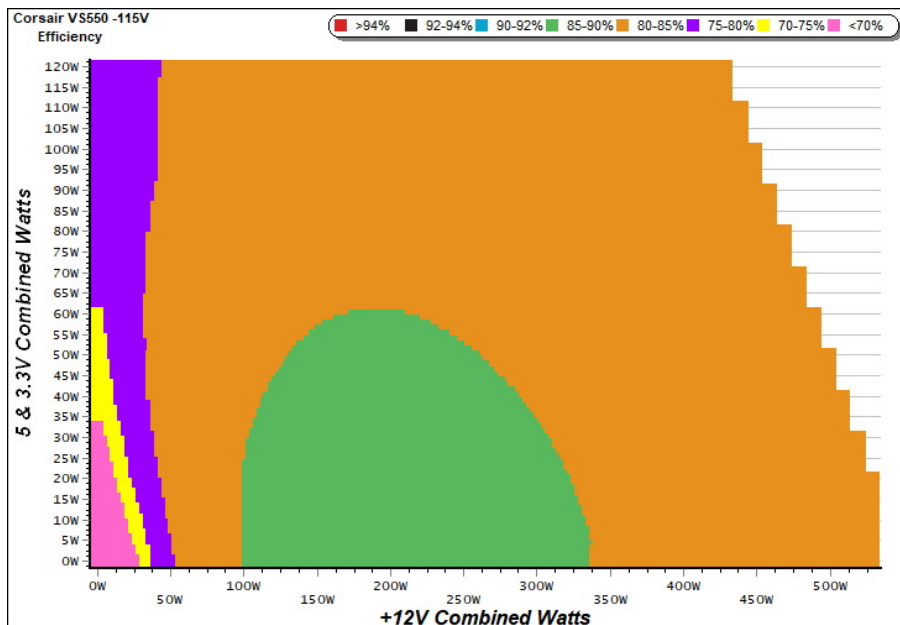
Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.225	62.155%	0.013
	5.017V	0.362		230.12V
2	0.090A	0.451	69.814%	0.024
	5.016V	0.646		230.12V
3	0.550A	2.754	77.709%	0.120
	5.008V	3.544		230.12V
4	1.000A	4.999	79.589%	0.189
	4.999V	6.281		230.12V
5	1.500A	7.477	79.543%	0.244
	4.985V	9.400		230.12V
6	3.000A	14.866	79.319%	0.331
	4.956V	18.742		230.13V

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115V

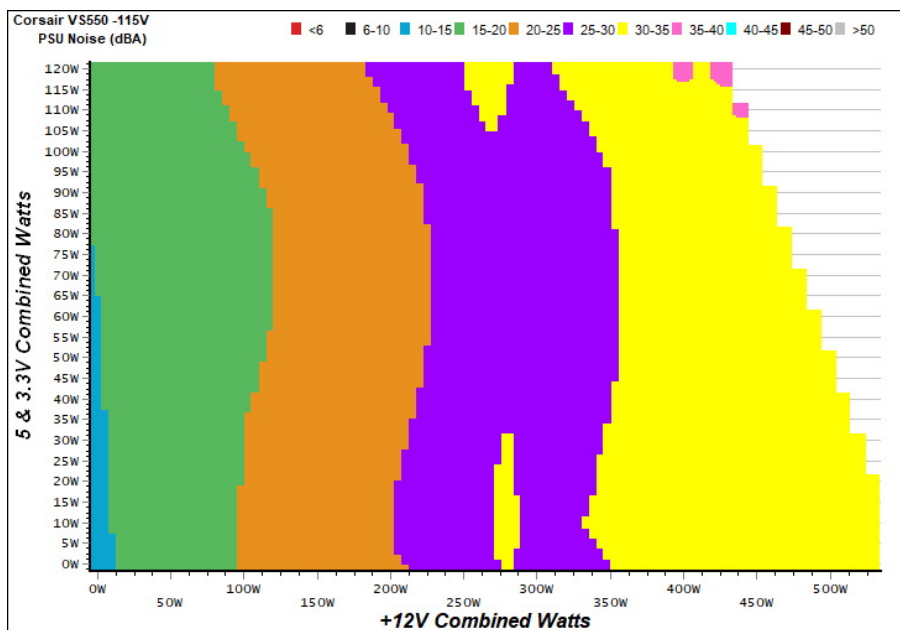
EFFICIENCY GRAPH 115V



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

NOISE GRAPH 115V



INFO

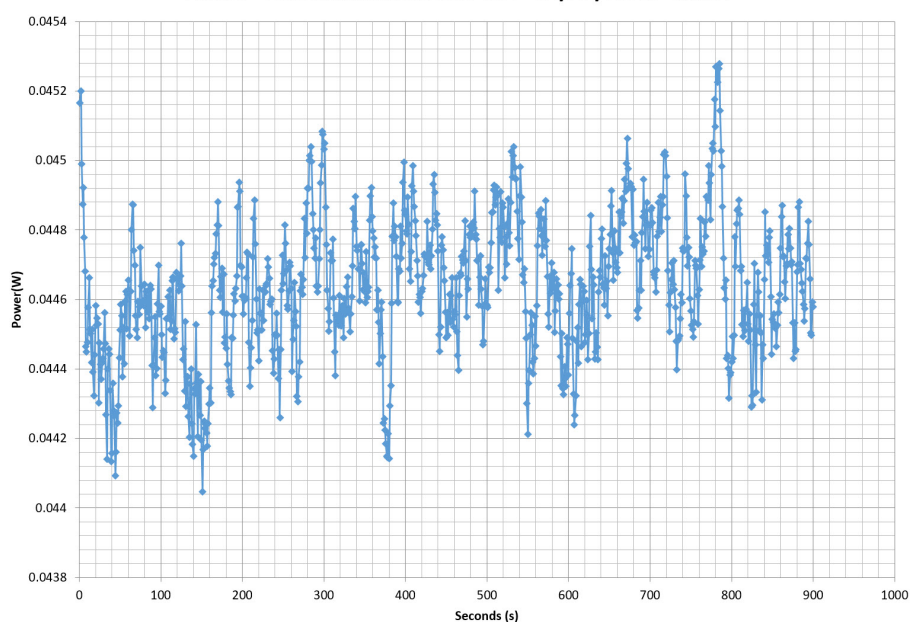
The PSU's noise in its entire operational range and under 30-32 °C (+2 °C) ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

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VAMPIRE POWER -115V

Power - 18389853000052597432 - 04/12/2018 - 08:54



INFO

This graph is generated by the PPA Standby Power Analysis software which takes full control of the power analyzer during the whole procedure. This application features all of the EN50564 & IEC62301 test limits for standby power software testing

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COMMISSION REGULATION (EU) NO 617/2013 TESTING 115V

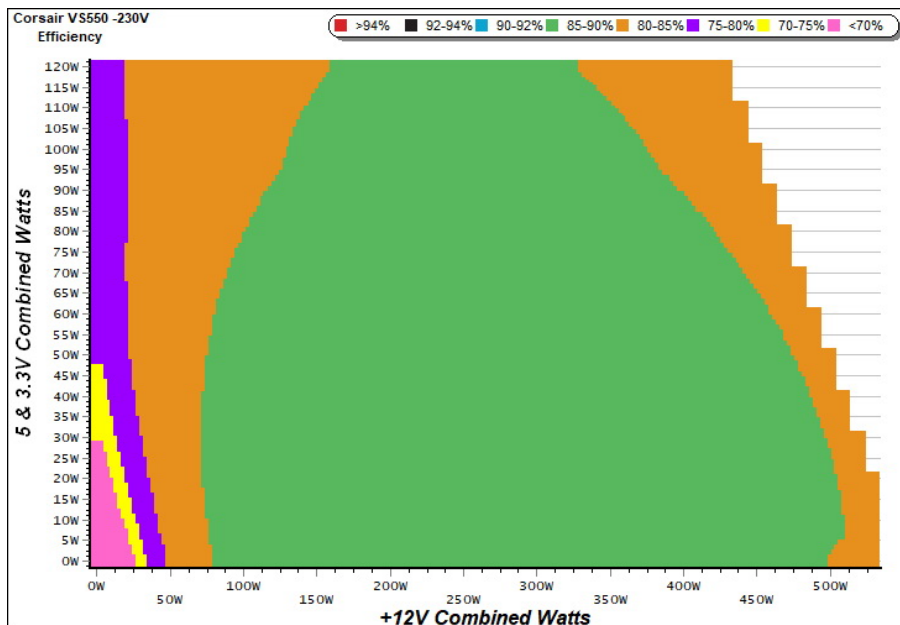
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230V

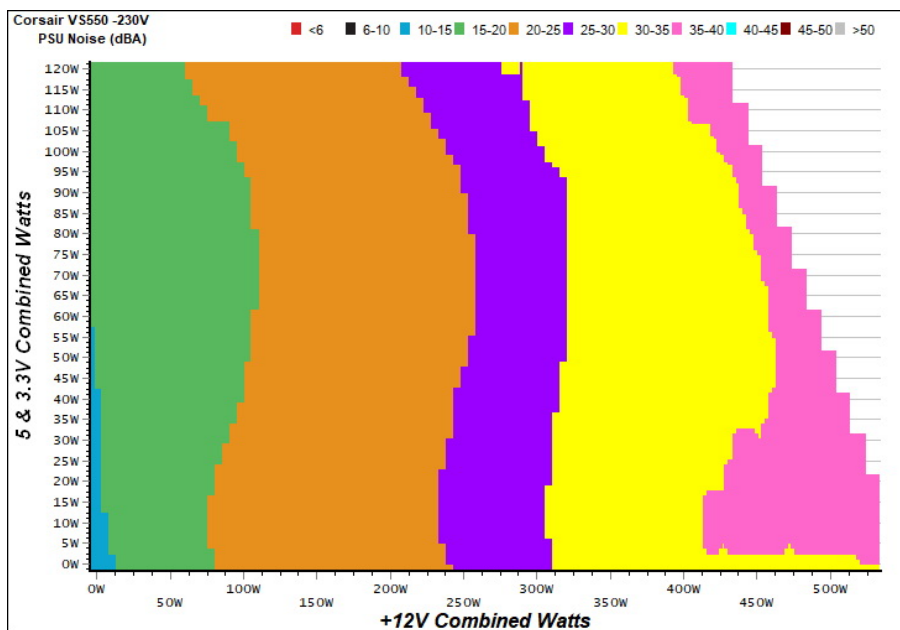
EFFICIENCY GRAPH 230V



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NOISE GRAPH 230V



INFO

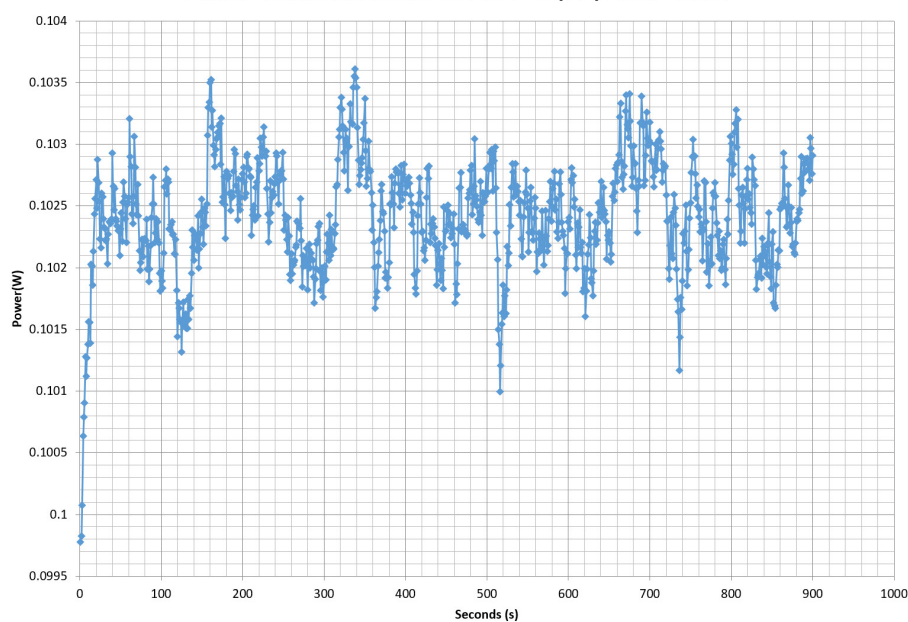
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VAMPIRE POWER -230V

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Top side

MODEL / MODELO / 型号 / 모델: RPS0101 POWER SUPPLY / FUENTE DE ALIMENTACIÓN / FONTE DE ALIMENTAÇÃO / 전원 공급 장치						
PART NUMBER : CP-9020171 / 75-003436						
交流輸入 ENTRADA DE CA / ENTRADA CA / AC 입력	100V - 240V • 10A • 47Hz - 63Hz					
直流輸出 SALIDA DE CC / SAÍDA CC / DC 출력	+5V	+3.3V	+12V	-12V	+5Vsb	
最大電流 MAX LOAD CARGA MÁXIMA / CARGA MÁX / 최대 부하	20A	24A	44A	0.3A	3A	
最大瓦特數 MAXIMUM COMBINED WATTAGE VATAJE COMBINADO MÁXIMO POTÊNCIA MÁXIMA COMBINADA 최대 결합 와트	120W	528W	3.6W	15W		
TOTAL POWER: 550W 总功率 / 總功率 / 총출력						
CCC SAE FCC CE ENEC 10 R39708 RoHS						
 S/N: 18389853000052597432						

Power specifications label

CERTIFICATIONS 115V




Aris Mpitsiopoulos
Lab Director

CERTIFICATIONS 230V



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