Anex

Corsair TX1200

Lab ID#: CR12002411
Receipt Date: Mar 28, 2024
Test Date: Apr 11, 2024

Report: 24PS2411A
Report Date: Apr 12, 2024

DUT INFORMATION

Brand	Corsair
Manufacturer (OEM)	Great Wall
Series	TX
Model Number	RPS0210
Serial Number	A7VID34550KNJX
DUT Notes	CP-9020291, Not Properly Configured OCP/OPP

DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	15-8
Rated Frequency (Hz)	47-63
Rated Power (W)	1200
Type	ATX12V
Cooling	135mm Fluid Dynamic Bearing Fan (HA13525M12F-Z)
Semi-Passive Operation	✓
Cable Design	Fully Modular

TEST EQUIPMENT

Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 63640-80-80 x10 63610-80-20
AC Sources	Chroma 6530, APM SP300VAC4000W-P
Power Analyzers	RS HMC8015, N4L PPA1530, N4L PPA5530
Oscilloscopes	Picoscope 4444, Rigol DS7014, 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, Keithley 2015 - THD
UPS	FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA
Isolation Transformer	4kVA

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

RESULTS

Temperature Range (°C /°F)	30-32 / 86-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.1 PSU Power Excursion	✓

115V

Average Efficiency	88.560%
Efficiency With 10W (≤500W) or 2% (>500W)	68.058
Average Efficiency 5VSB	79.449%
Standby Power Consumption (W)	0.0495000
Average PF	0.993
Avg Noise Output	34.70 dB(A)
Efficiency Rating (ETA)	GOLD
Noise Rating (LAMBDA)	Standard++

230V

Average Efficiency	91.119%
Average Efficiency 5VSB	80.530%
Standby Power Consumption (W)	0.1054000
Average PF	0.972
Avg Noise Output	33.80 dB(A)
Efficiency Rating (ETA)	PLATINUM
Noise Rating (LAMBDA)	Standard++

POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	25	25	99	3	0.8
	Watts	130		1188	15	9.6
Total Max. Power (W)		1200				

HOLD-UP TIME & POWER OK SIGNAL (230V)

Hold-Up Time (ms)	21.9
AC Loss to PWR_OK Hold Up Time (ms)	19.5
PWR_OK Inactive to DC Loss Delay (ms)	2.4

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

CABLES AND CONNECTORS

Modular Cables

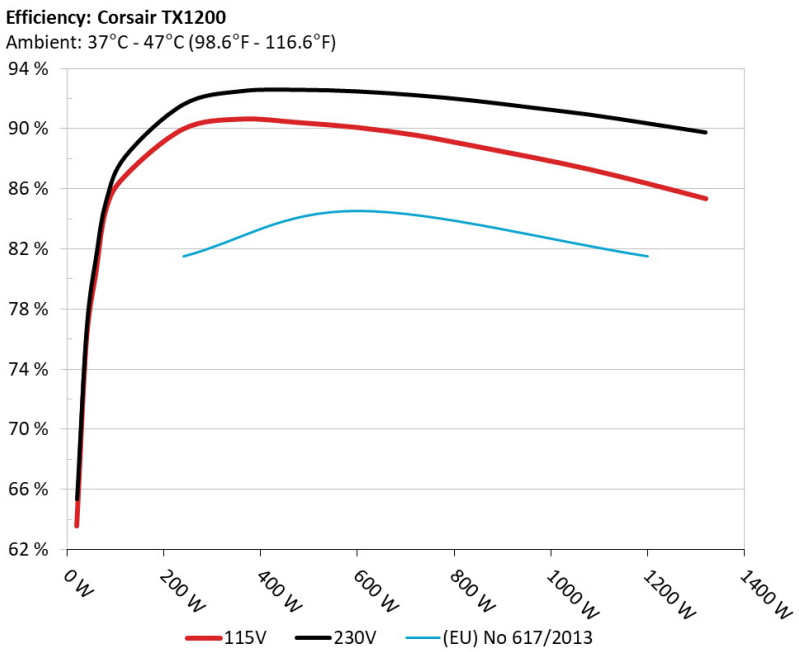
Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (605mm)	1	1	18AWG	No
4+4 pin EPS12V (650mm)	2	2	18AWG	No
2 x 6+2 pin PCIe (675mm)	1	2	18AWG	No
6+2 pin PCIe (675mm)	1	1	18AWG	No
12+4 pin PCIe (675mm) (600W)	2	2	16-24AWG	No
SATA (110mm+115mm+115mm+115mm)	1	4	18AWG	No
SATA (100mm+115mm+115mm+115mm)	1	4	18AWG	No
4-pin Molex (100mm+115mm+115mm+115mm)	1	4	18AWG	No
AC Power Cord (1395mm) - C13 coupler	1	1	18AWG	-

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

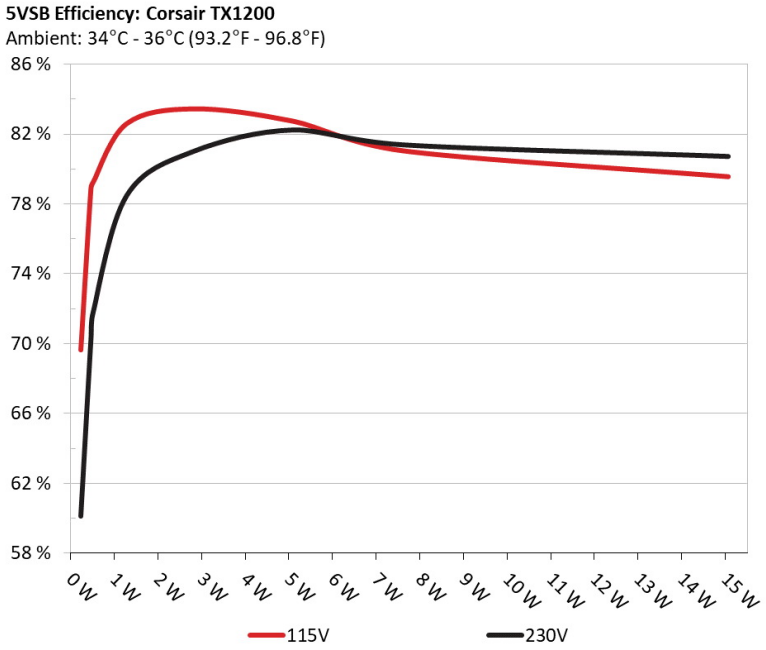
EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE



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

Anex

Corsair TX1200

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.231W	69.12%	0.005
	5.13V	0.058W		115.18V
2	0.09A	0.462W	78.37%	0.054
	5.127V	0.59W		115.18V
3	0.55A	2.812W	82.943%	0.249
	5.11V	3.39W		115.18V
4	1A	5.096W	82.237%	0.349
	5.094V	6.197W		115.18V
5	1.5A	7.618W	80.539%	0.405
	5.077V	9.459W		115.18V
6	3.001A	15.073W	79.052%	0.481
	5.023V	19.066W		115.17V

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.231W	59.598%	0.011
	5.126V	0.388W		230.35V
2	0.09A	0.461W	69.684%	0.018
	5.124V	0.661W		230.36V
3	0.55A	2.81W	80.521%	0.094
	5.108V	3.49W		230.38V
4	1A	5.094W	81.756%	0.157
	5.092V	6.232W		230.39V
5	1.5A	7.615W	80.901%	0.218
	5.075V	9.412W		230.39V
6	3.001A	15.064W	80.234%	0.327
	5.021V	18.774W		230.39V

Anex

Corsair TX1200

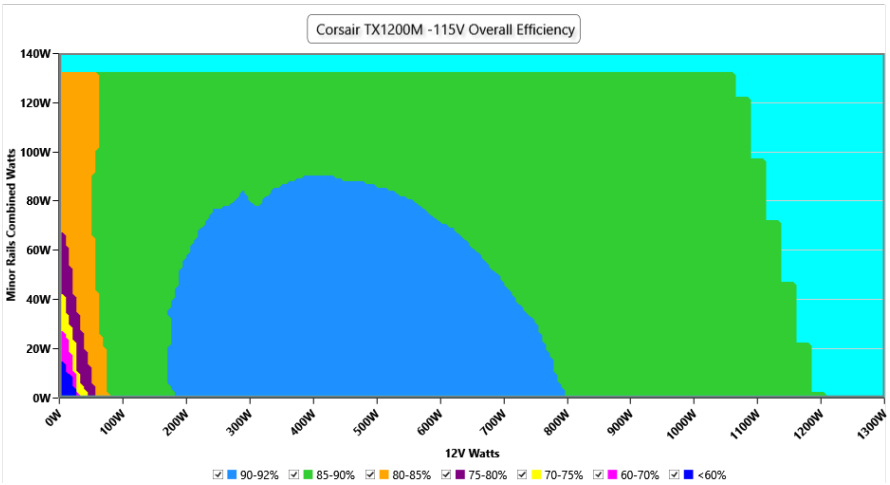
115V

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

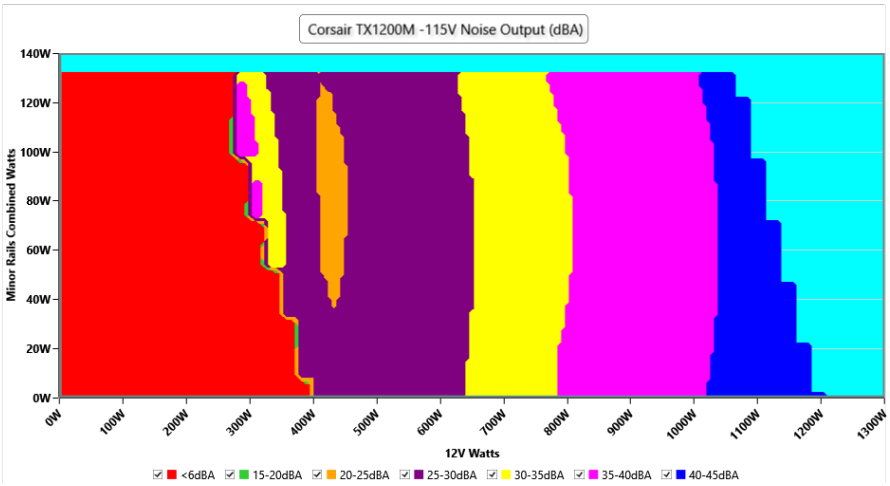
EFFICIENCY GRAPH 115V



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 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

Anex

Corsair TX1200

VAMPIRE POWER -115V

Detailed Results

	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.18 V	115.15 V	113.85 V	115.18 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 %	0.11 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.049 W	0.044 W	N/A	0.054 W	N/A	N/A
Apparent Power:	10.709 W	10.706 W	N/A	10.713 W	N/A	N/A
Power Factor:	0.005	N/A	N/A	N/A	N/A	N/A

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

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

10-110% 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%	8.083A	1.997A	1.999A	0.983A	120	87.363%	0	<6.0	44.33°C	0.985
	12.173V	5.009V	3.302V	5.088V	137.36				40.08°C	115.11V
20%	17.178A	2.997A	3.001A	1.183A	239.957	90.48%	0	<6.0	45.41°C	0.984
	12.170V	5.006V	3.299V	5.072V	265.205				40.84°C	115.07V
30%	26.565A	3.498A	3.504A	1.384A	359.304	91.142%	0	<6.0	46.38°C	0.989
	12.168V	5.004V	3.296V	5.057V	394.22				41.32°C	115.04V
40%	36.055A	4A	4.01A	1.587A	479.68	90.908%	1003	32.9	41.75°C	0.993
	12.161V	5.001V	3.292V	5.041V	527.657				47.26°C	115.01V
50%	45.164A	5.003A	5.018A	1.792A	599.452	90.585%	1058	34.3	42.37°C	0.995
	12.154V	4.998V	3.289V	5.023V	661.757				48.43°C	114.98V
60%	54.333A	6.008A	6.028A	1.998A	720.037	90.075%	1165	37.0	42.96°C	0.996
	12.151V	4.995V	3.285V	5.007V	799.381				49.48°C	114.95V
70%	63.442A	7.013A	7.04A	2.205A	839.786	89.36%	1295	39.7	43.11°C	0.997
	12.147V	4.993V	3.282V	4.99V	939.772				50.14°C	114.91V
80%	72.623A	8.017A	8.052A	2.311A	959.755	88.61%	1412	42.3	43.77°C	0.997
	12.143V	4.99V	3.278V	4.977V	1083.126				52.01°C	114.87V
90%	82.128A	8.522A	8.548A	2.417A	1079.585	87.798%	1532	45.1	44.7°C	0.998
	12.140V	4.987V	3.275V	4.965V	1229.633				53.78°C	114.82V
100%	91.444A	9.028A	9.076A	3.041A	1199.632	86.855%	1661	46.4	45.64°C	0.998
	12.138V	4.985V	3.272V	4.933V	1381.183				55.68°C	114.78V
110%	100.705A	10.036A	10.187A	3.047A	1320.279	85.848%	1770	47.6	46.85°C	0.998
	12.134V	4.982V	3.269V	4.923V	1537.926				57.79°C	114.74V
CL1	0.115A	15.672A	15.677A	0A	131.303	81.639%	0	<6.0	45.64°C	0.992
	12.185V	4.996V	3.291V	5.12V	160.839				40.15°C	115.11V
CL2	0.115A	25.057A	0A	0A	126.389	79.909%	0	<6.0	48.42°C	0.993
	12.183V	4.988V	3.307V	5.126V	158.167				41.35°C	115.11V
CL3	0.115A	0A	25.133A	0A	83.891	72.043%	0	<6.0	49.51°C	0.985
	12.189V	5.01V	3.282V	5.121V	116.446				40.45°C	115.12V
CL4	98.831A	0A	0A	0A	1200.082	87.411%	1656	46.3	45.73°C	0.998
	12.143V	4.999V	3.284V	5.057V	1372.924				56.69°C	114.8V

Anex

Corsair TX1200

20-80W 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	1.218A	0.499A	0.499A	0.195A	20.002	64.074%	0	<6.0	39.92°C	0.901
	12.200V	5.01V	3.304V	5.122V	31.219				36.86°C	115.14V
40W	2.688A	0.699A	0.699A	0.293A	40	76.432%	0	<6.0	40.74°C	0.957
	12.160V	5.01V	3.304V	5.118V	52.332				37.38°C	115.13V
60W	4.155A	0.898A	0.899A	0.391A	59.998	81%	0	<6.0	41.98°C	0.968
	12.161V	5.011V	3.304V	5.113V	74.067				38.28°C	115.13V
80W	5.613A	1.098A	1.099A	0.489A	79.951	85.083%	0	<6.0	43.46°C	0.981
	12.172V	5.011V	3.304V	5.109V	93.968				39.48°C	115.12V

RIPPLE MEASUREMENTS 115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	9.52mV	5.71mV	4.88mV	5.55mV	Pass
20% Load	11.87mV	5.97mV	4.83mV	7.13mV	Pass
30% Load	11.45mV	6.73mV	5.24mV	7.13mV	Pass
40% Load	11.91mV	6.73mV	5.24mV	7.44mV	Pass
50% Load	12.77mV	6.89mV	5.19mV	8.10mV	Pass
60% Load	13.03mV	6.94mV	5.44mV	8.00mV	Pass
70% Load	14.65mV	8.62mV	5.70mV	8.15mV	Pass
80% Load	18.37mV	10.97mV	10.73mV	10.85mV	Pass
90% Load	23.61mV	11.37mV	11.60mV	13.04mV	Pass
100% Load	24.28mV	11.40mV	10.89mV	18.05mV	Pass
110% Load	25.12mV	10.40mV	11.45mV	17.97mV	Pass
Crossload1	16.21mV	7.34mV	11.38mV	5.44mV	Pass
Crossload2	9.16mV	6.22mV	4.53mV	5.20mV	Pass
Crossload3	10.18mV	6.53mV	13.17mV	5.04mV	Pass
Crossload4	23.27mV	9.72mV	6.68mV	8.52mV	Pass

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

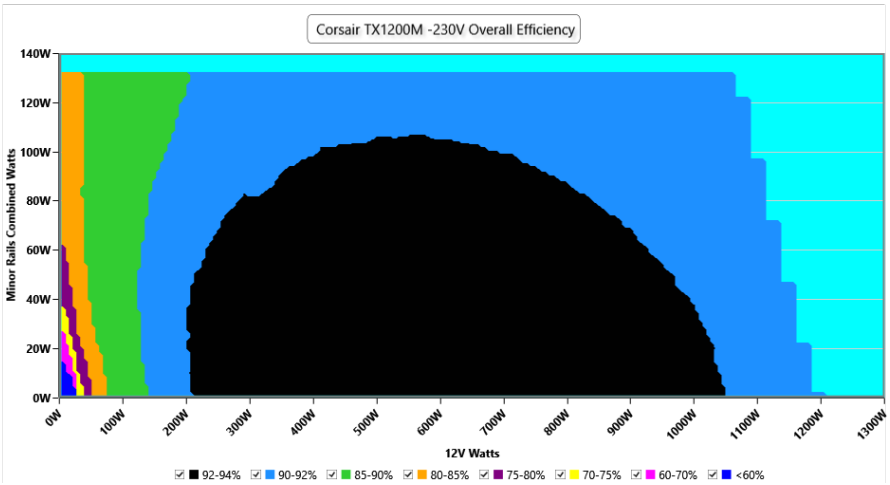
230V

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

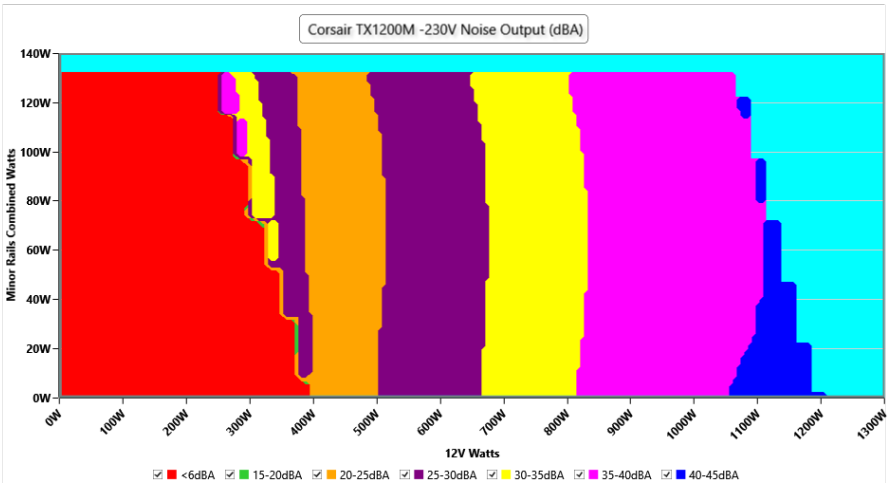
EFFICIENCY GRAPH 230V



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 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

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

VAMPIRE POWER -230V

Detailed Results

	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.40 V	230.39 V	227.70 V	230.43 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:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.14 %	0.13 %	N/A	0.15 %	2.00 %	PASS
Real Power:	0.105 W	0.088 W	N/A	0.151 W	N/A	N/A
Apparent Power:	35.770 W	35.755 W	N/A	35.781 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

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

www.cybenetics.com -info@cybenetics.com
CYBENETICS LTD
Syrou 6, Latsia, 2231, Nicosia Cyprus

Anex

Corsair TX1200

10-110% LOAD TESTS 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%	8.084A	1.997A	1.999A	0.982A	120.014	88.667%	0	<6.0	44.67°C	0.906
	12.174V	5.009V	3.302V	5.091V	135.348				40.44°C	230.37V
20%	17.180A	2.997A	3.002A	1.183A	239.983	92.116%	0	<6.0	45.27°C	0.961
	12.170V	5.006V	3.298V	5.075V	260.521				40.75°C	230.36V
30%	26.578A	3.498A	3.505A	1.384A	359.427	93.001%	0	<6.0	46.3°C	0.975
	12.167V	5.004V	3.296V	5.06V	386.482				41.29°C	230.35V
40%	36.073A	4A	4.011A	1.587A	479.82	93.089%	1026	33.5	41.52°C	0.981
	12.159V	5.001V	3.292V	5.043V	515.443				47.03°C	230.34V
50%	45.191A	5.004A	5.019A	1.791A	599.626	92.984%	1060	34.4	42.21°C	0.985
	12.151V	4.998V	3.288V	5.026V	644.867				48.29°C	230.33V
60%	54.361A	6.008A	6.029A	1.997A	720.13	92.733%	1143	36.6	42.96°C	0.988
	12.147V	4.995V	3.285V	5.009V	776.566				49.48°C	230.31V
70%	63.466A	7.013A	7.041A	2.203A	839.809	92.371%	1261	39.1	43.41°C	0.99
	12.143V	4.993V	3.281V	4.993V	909.16				50.5°C	230.28V
80%	72.644A	8.017A	8.053A	2.309A	959.781	91.909%	1384	41.7	43.78°C	0.991
	12.140V	4.99V	3.278V	4.98V	1044.284				51.86°C	230.26V
90%	82.151A	8.521A	8.549A	2.416A	1079.586	91.439%	1503	44.6	44.56°C	0.992
	12.137V	4.988V	3.275V	4.967V	1180.66				53.63°C	230.24V
100%	91.467A	9.027A	9.076A	3.039A	1199.608	90.858%	1638	46.0	45.78°C	0.993
	12.134V	4.985V	3.272V	4.936V	1320.3				55.87°C	230.21V
110%	100.723A	10.034A	10.187A	3.045A	1320.224	90.255%	1763	47.6	46.99°C	0.994
	12.131V	4.983V	3.269V	4.926V	1462.771				57.91°C	230.19V
CL1	0.115A	15.67A	15.678A	0A	131.299	82.531%	0	<6.0	45.81°C	0.927
	12.184V	4.997V	3.291V	5.119V	159.089				40.28°C	230.35V
CL2	0.115A	25.052A	0A	0A	126.388	80.764%	0	<6.0	48.94°C	0.925
	12.183V	4.989V	3.307V	5.124V	156.487				41.92°C	230.34V
CL3	0.114A	0A	25.129A	0A	83.889	73.585%	0	<6.0	50.04°C	0.884
	12.188V	5.011V	3.283V	5.12V	114.01				41.01°C	230.35V
CL4	98.838A	0A	0A	0A	1200.038	91.42%	1615	45.6	45.41°C	0.994
	12.142V	4.999V	3.284V	5.056V	1312.651				56.39°C	230.2V

Anex

Corsair TX1200

20-80W LOAD TESTS 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	1.216A	0.499A	0.499A	0.195A	20.001	65.83%	0	<6.0	39.84°C	0.54
	12.208V	5.012V	3.305V	5.124V	30.383				36.75°C	230.38V
40W	2.688A	0.698A	0.699A	0.293A	39.999	77.216%	0	<6.0	40.47°C	0.701
	12.162V	5.011V	3.304V	5.119V	51.807				37.14°C	230.37V
60W	4.154A	0.898A	0.899A	0.391A	59.998	82.097%	0	<6.0	41.72°C	0.797
	12.161V	5.011V	3.304V	5.115V	73.087				38.21°C	230.36V
80W	5.613A	1.098A	1.099A	0.489A	79.951	85.671%	0	<6.0	43.34°C	0.852
	12.172V	5.011V	3.304V	5.111V	93.321				39.49°C	230.36V

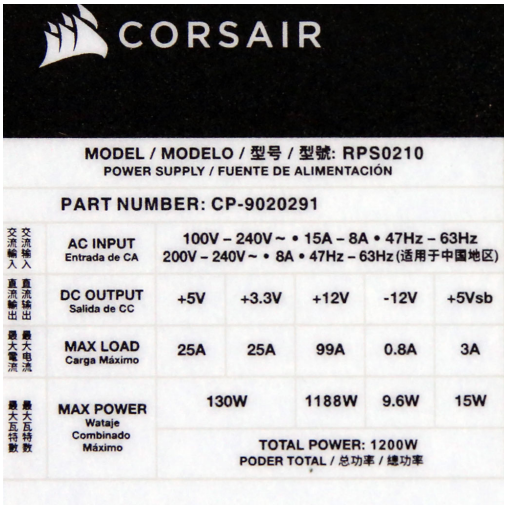
RIPPLE MEASUREMENTS 230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	10.25mV	5.56mV	4.48mV	5.50mV	Pass
20% Load	12.74mV	6.38mV	5.08mV	7.34mV	Pass
30% Load	10.33mV	6.48mV	5.14mV	7.13mV	Pass
40% Load	11.35mV	6.94mV	5.04mV	7.39mV	Pass
50% Load	12.57mV	7.35mV	5.24mV	7.85mV	Pass
60% Load	13.03mV	7.09mV	5.39mV	8.15mV	Pass
70% Load	15.62mV	9.23mV	6.20mV	9.02mV	Pass
80% Load	18.12mV	10.76mV	10.53mV	10.34mV	Pass
90% Load	20.05mV	11.43mV	10.88mV	12.53mV	Pass
100% Load	24.46mV	12.03mV	10.85mV	17.92mV	Pass
110% Load	25.50mV	10.39mV	11.36mV	18.99mV	Pass
Crossload1	16.52mV	7.92mV	11.50mV	5.90mV	Pass
Crossload2	10.29mV	6.12mV	4.68mV	5.25mV	Pass
Crossload3	9.87mV	6.33mV	12.67mV	5.60mV	Pass
Crossload4	23.42mV	10.12mV	6.86mV	8.77mV	Pass

Anex

Corsair TX1200

Top side


CORSAIR

MODEL / MODELO / 型号 / 型號: RPS0210
POWER SUPPLY / FUENTE DE ALIMENTACIÓN

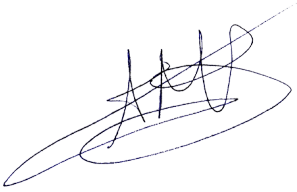
PART NUMBER: CP-9020291

交流輸入	AC INPUT Entrada de CA	100V – 240V ~ • 15A – 8A • 47Hz – 63Hz 200V – 240V ~ • 8A • 47Hz – 63Hz (适用于中国地区)				
直流輸出	DC OUTPUT Salida de CC	+5V	+3.3V	+12V	-12V	+5Vsb
最大電流	MAX LOAD Carga Máximo	25A	25A	99A	0.8A	3A
最大瓦特數	MAX POWER Wataje Combinado Máximo	130W		1188W	9.6W	15W
		TOTAL POWER: 1200W PODER TOTAL / 总功率 / 總功率				

Power specifications label

CERTIFICATIONS 115V

CERTIFICATIONS 230V



Aristeidis Bitziopoulos
Lab Director