CPS PCCooler YS1000

Serial Number

Lab ID PL10002345

Certification ID 252345

Test Result Report ID: 24PS2345A

Certificate Issue Date: Feb 7, 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	CPS PCCooler
Model	YS1000
OEM/ODM	Seasonic
Serial Number	
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	13-6.5
Rated Frequency (Hz)	50-60
Rated Power (W)	1000
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	135mm Fluid Dynamic Bearing Fan (HA13525H12F-Z)
Semi-Passive Operation	✓ (selectable)
Cybenetics Testing Information	
Lab ID	PL10002345
Date of receipt	Jan 25, 2024
Testing Date	Feb 6, 2024
Report Issued Date	Feb 7, 2024
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors
(Non-accredited measurements)

Modular Cables				
Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (610mm)	1	1	16-18AWG	No
4+4 pin EPS12V (710mm)	2	2	16AWG	No
6+2 pin PCIe (760mm)	2	2	16-18AWG	No
12+4 pin PCIe (700mm) (600W)	1	1	16-28AWG	No

SATA (410mm+155mm)	1	2	18AWG	No
SATA (500mm+155mm+155mm+155mm)	2	8	18AWG	No
4-pin Molex (450mm+125mm+125mm)	1	3	18AWG	No

Protection Features

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	25	25	83	3	0.3
	Watts	125		996	15	3.6
Total Max. Power (W)		1000				

Parts Description

General Data	
Manufacturer (OEM)	Seasonic
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV, 1x CM02X (Discharge IC)
Inrush Protection	1x NTC Thermistor MF72-5D20L (5 Ohm) & Relay
Bridge Rectifier(s)	2x
APFC MOSFETs	2x Infineon IPP60R125P6 (600V, 19A, @ 100°C Rds(on): 0.125Ohm)
APFC Boost Diode	1x CREE C3D08060A (600V, 24A @ 25°C)
Bulk Cap(s)	1x Nippon Chemi-Con (420V, 560uF, 2,000h @ 105°C, KMR) & 1x Nippon Chemi-Con (420V, 330uF, 2,000h @ 105°C, KMR)

Main Switchers	4x Great Power GPT21N50 (500V, 20.5A , Rds(on): 0.24Ohm)
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 Nexperia PSMN1R0-40YLD (40V, 198A @ 100°C, Rds(on): 1.93mOhm)
5V & 3.3V	DC-DC Converters: 6x Nexperia PSMN4R0-30YLD (30V, 67A @ 100°C, Rds(on): 6.6mOhm) PWM Controller(s): ANPEC APW7159C
Filtering Capacitors	Electrolytic: 8x Nippon Chemi-Con (5-6,000h @ 105°C, KZH) 3x Nichicon (2-5,000h @ 105°C, HD), 2x Rubycon (3-6,000h @ 105°C, YXG), 1x Nippon Chemi-Con (1-5,000h @ 105°C, KZE) Polymer: 8x FCAP, 17x FPCAP, 2x Rubycon
Supervisor IC	Weltrend WT7527 (OCP, OVP, UVP, SCP, PG)
Fan Model	Hong Hua HA13525H12F-Z (135mm, 12V, 0.50A, Fluid Dynamic Bearing Fan)

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)	89.449%
Average Noise Output (>1450 Load Combinations)	24.49dBA
Average PF (>1450 Load Combinations)	0.979
Efficiency With 10W (≤500W) or 2% (>500W) Load	74.632%
Standby Power Consumption	0.0666W

Non-Accredited	
12V Ripple (Full Load)	28.07mV
5V Ripple (Full Load)	18.59mV
3.3V Ripple (Full Load)	20.77mV
5VSB Ripple (Full Load)	38.33mV
12V Load Regulation	1.71%
5V Load Regulation	0.59%
3.3V Load Regulation	0.64%
5VSB Load Regulation	2.52%
Inrush Current	36.220A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.686%
Average Noise Output (>1450 Load Combinations)	24.46dBA
Average PF (>1450 Load Combinations)	0.947
Efficiency With 10W (≤500W) or 2% (>500W) Load	72.981%
Standby Power Consumption	0.1387W
Non-Accredited	
12V Ripple (Full Load)	28.91mV
5V Ripple (Full Load)	18.53mV
3.3V Ripple (Full Load)	19.68mV
5VSB Ripple (Full Load)	31.90mV
12V Load Regulation	1.82%
5V Load Regulation	0.67%
3.3V Load Regulation	0.67%
5VSB Load Regulation	2.50%
Inrush Current	68.330A
12V Transient Response (200%)	11.39V
5V Transient Response (200%)	4.857V
3.3V Transient Response (200%)	3.149V
5VSB Transient Response (200%)	4.859V

Hold-Up Time & PWR_OK Signal		24.20ms
AC Loss to PWR_OK Hold Up Time		19.40ms
PWR_OK Inactive to DC Loss Delay		4.80ms
PSU Timings: T1 (20% / 100%)	69.0ms	68.0ms
PSU Timings: T3 (20% / 100%)	127.0ms	123.0ms
12V OCP (26.4°C / 40.6°C)	114.60A (138.07%), 12.212V	113.60A (136.87%), 12.249V
5V OCP (26.4°C / 40.6°C)	35.5A (142.00%), 4.953V	34.7A (138.80%), 4.955V
3.3V OCP (26.4°C / 40.6°C)	34.3A (137.20%), 3.276V	34.3A (137.20%), 3.283V
5VSB OCP (26.4°C / 40.6°C)	6.1A (203.33%), 4.996V	6A (200.00%), 4.998V
OPP (28.71°C / 41.28°C)	138.91%	127.81%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	24.2
AC Loss to PWR_OK Hold Up Time (ms)	19.4
PWR_OK Inactive to DC Loss Delay (ms)	4.8

Stromverbrauch im Ruhezustand

Tables

115V

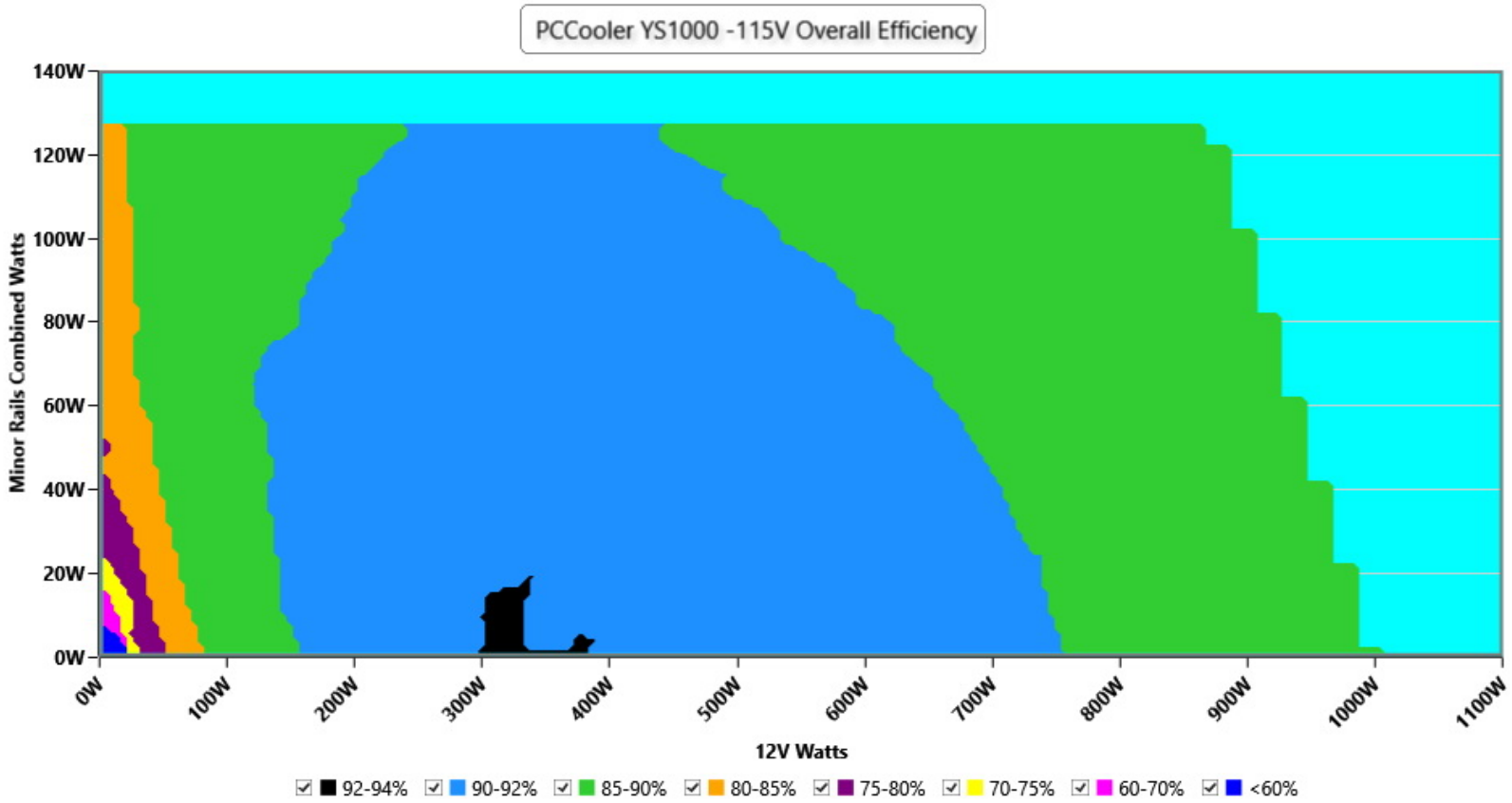
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	114.91 V	114.80 V	113.85 V	115.01 V	116.15 V	PASS
Mains Frequency:	60.01 Hz	59.99 Hz	59.40 Hz	60.03 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.419	1.417	1.340	1.421	1.490	PASS
Mains Voltage THD:	0.19 %	0.15 %	N/A	0.28 %	2.00 %	PASS
Real Power:	0.067 W	0.050 W	N/A	0.081 W	N/A	N/A
Apparent Power:	10.494 W	10.466 W	N/A	10.516 W	N/A	N/A
Power Factor:	0.006	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	229.92 V	229.81 V	227.70 V	230.01 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	1.418	1.490	PASS
Mains Voltage THD:	0.15 %	0.12 %	N/A	0.20 %	2.00 %	PASS
Real Power:	0.139 W	0.109 W	N/A	0.177 W	N/A	N/A
Apparent Power:	35.325 W	35.279 W	N/A	35.378 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

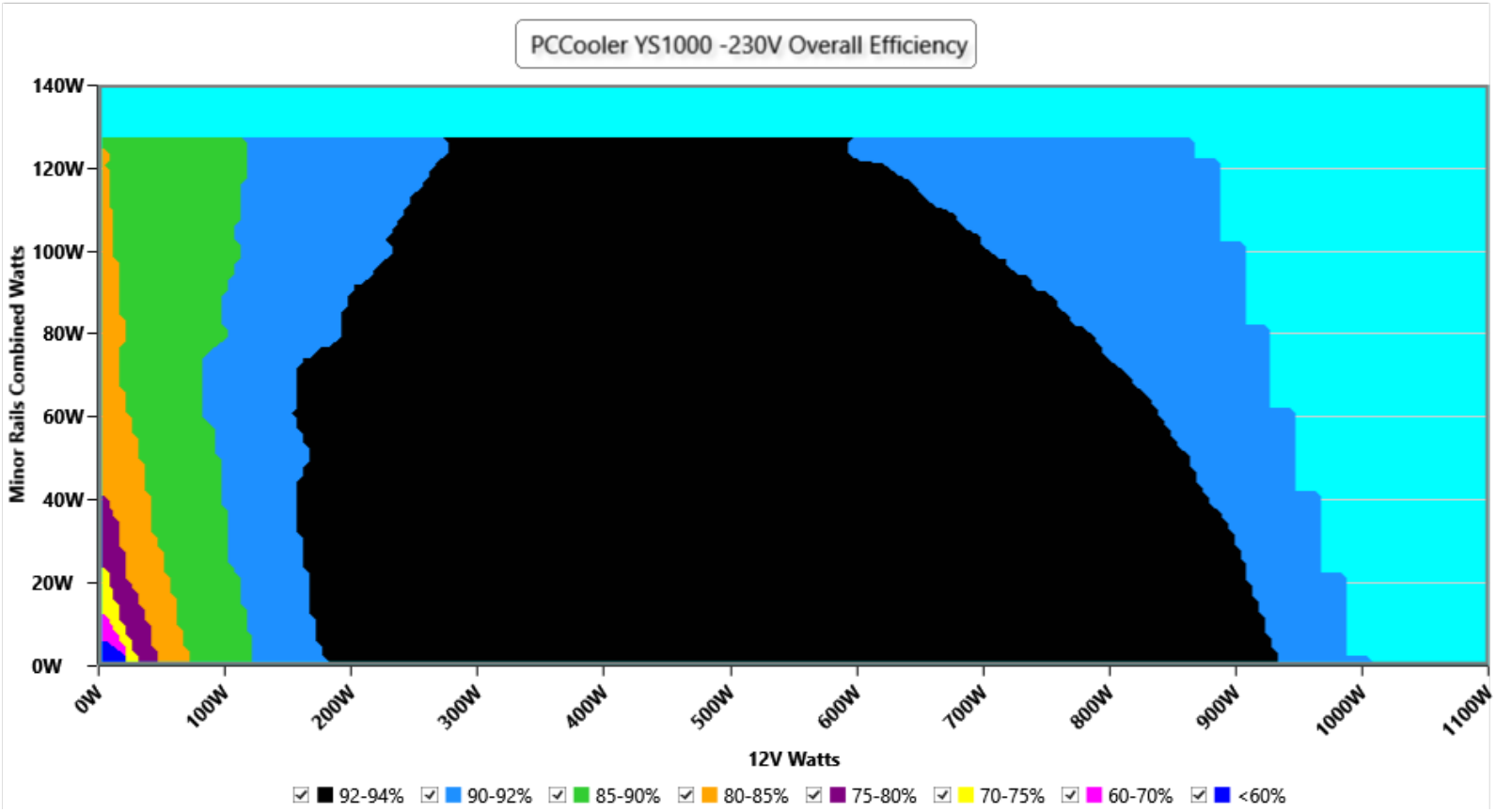
115V



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

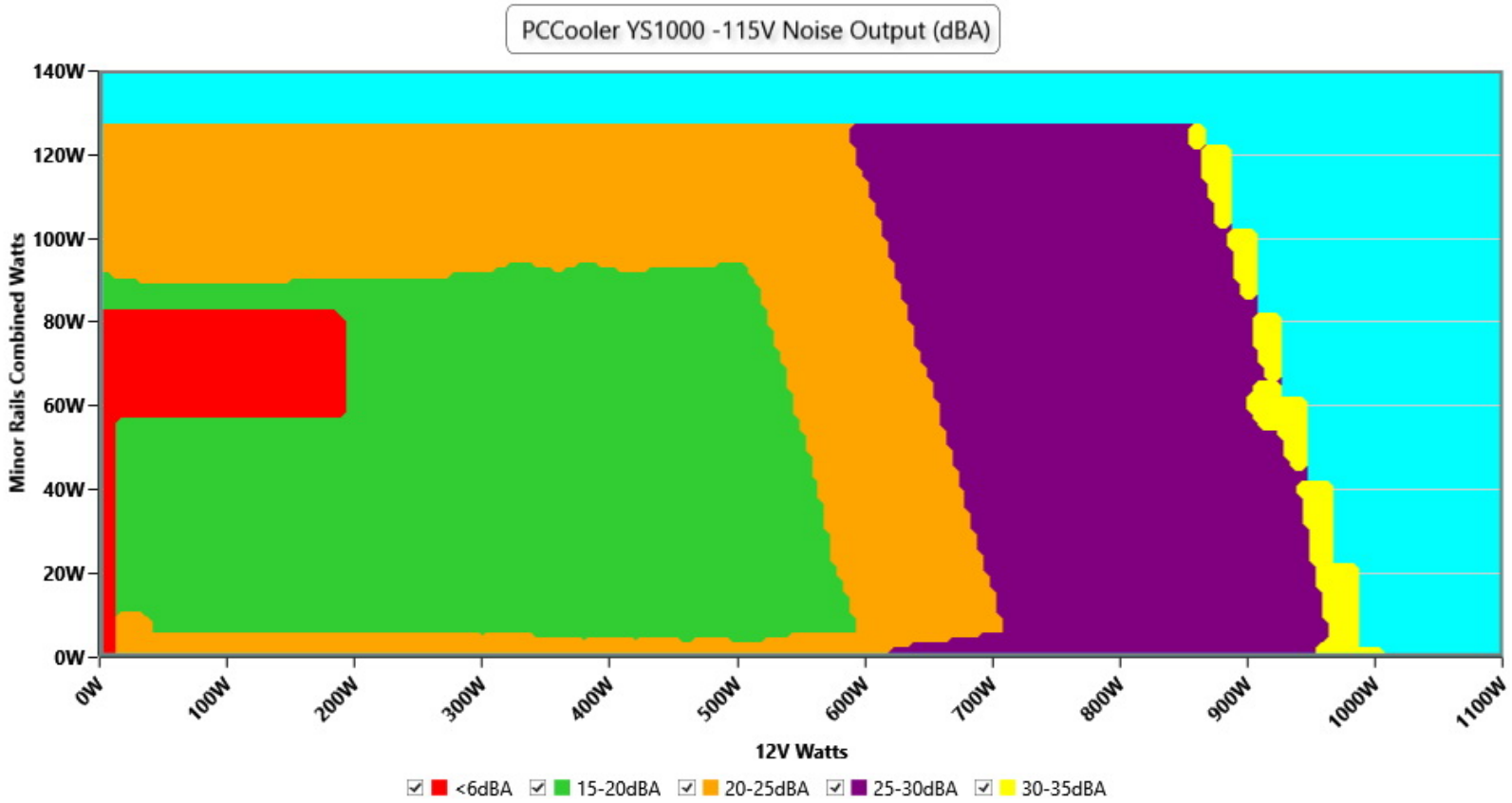


INFO

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Noise Graph

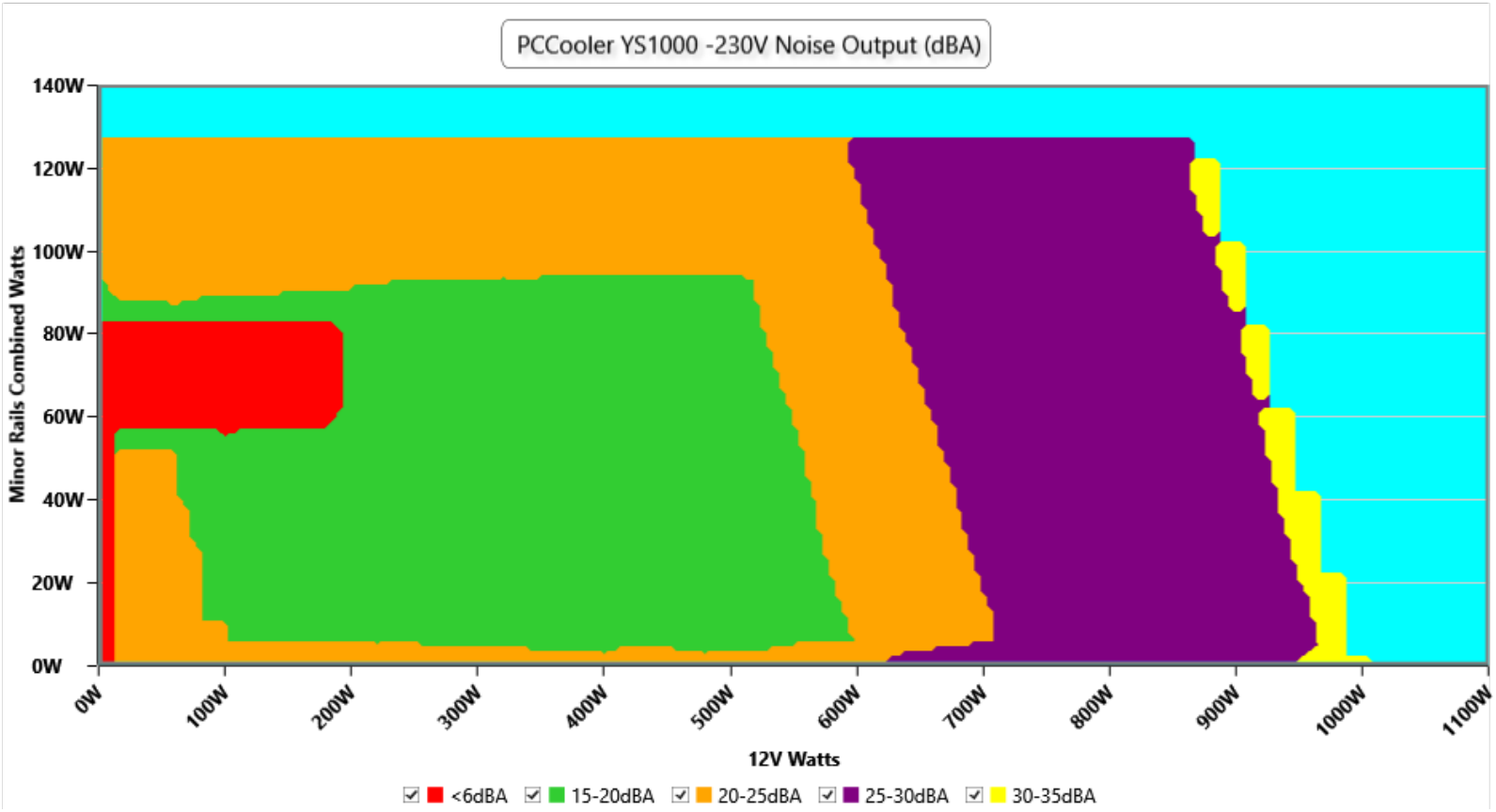
115V



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%	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) · 45.3 °C	0 RPM · <6.0 dB(A) · 45.3 °C	fan off in both
50%	723 RPM · 20.0 dB(A) · 42.0 °C	723 RPM · 20.0 dB(A) · 42.0 °C	**+0.0 dB(A)**
100%	1742 RPM · 44.7 dB(A) · 45.6 °C	1742 RPM · 44.7 dB(A) · 45.6 °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%	723 RPM · 20.0 dB(A) · 42.3 °C	723 RPM · 20.0 dB(A) · 42.3 °C	**+0.0 dB(A)**
100%	1607 RPM · 42.7 dB(A) · 45.1 °C	1607 RPM · 42.7 dB(A) · 45.1 °C	**+0.0 dB(A)**

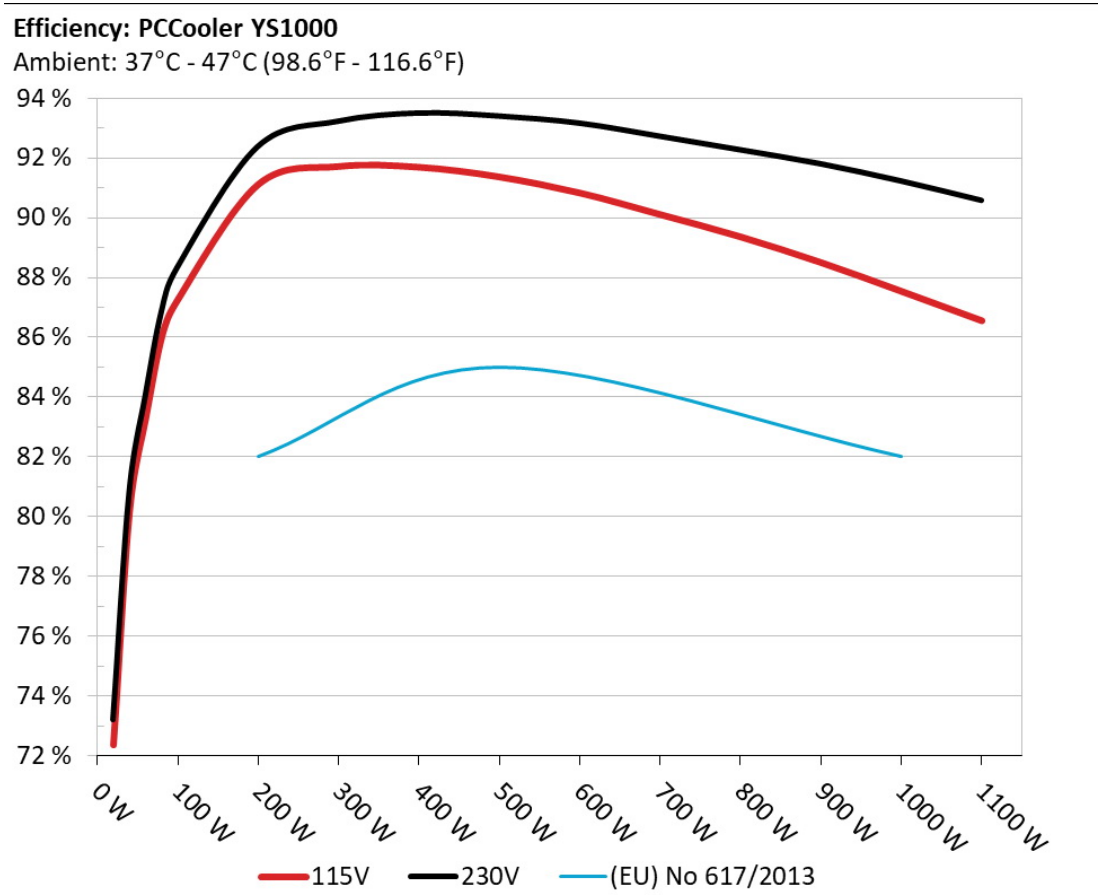
INFO

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

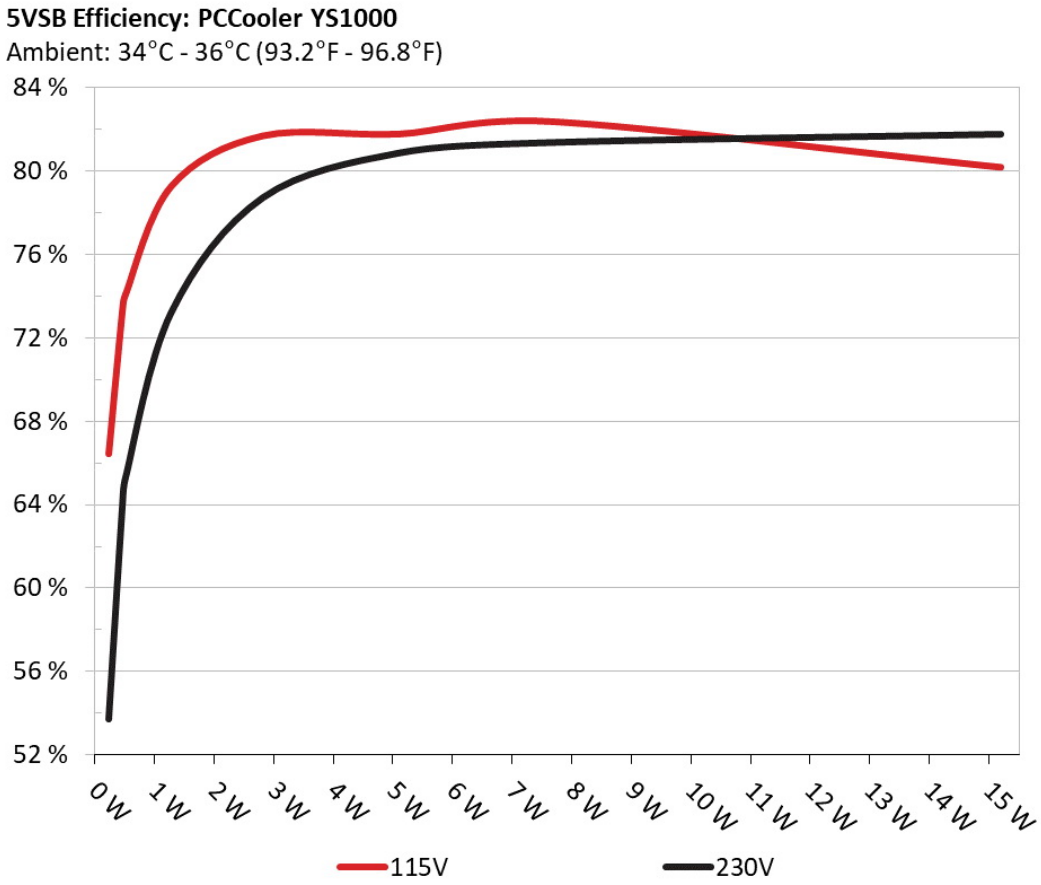
Efficiency under high ambient temperature



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	66.44%	0.033
	5.129V	0.348W		114.9V
2	0.09A	0.462W	73.38%	0.059
	5.128V	0.629W		114.91V
3	0.55A	2.814W	81.709%	0.256
	5.118V	3.444W		114.9V
4	1A	5.108W	81.796%	0.357
	5.108V	6.246W		114.9V
5	1.5A	7.647W	82.398%	0.406
	5.098V	9.28W		114.9V
6	3A	15.191W	80.202%	0.484
	5.065V	18.941W		114.89V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.231W	53.743%	0.012
	5.128V	0.43W		229.92V
2	0.09A	0.461W	64.048%	0.02
	5.127V	0.72W		229.91V
3	0.55A	2.814W	78.734%	0.097
	5.117V	3.574W		229.89V
4	1A	5.107W	80.881%	0.161
	5.108V	6.314W		229.89V
5	1.5A	7.646W	81.379%	0.212
	5.097V	9.395W		229.89V
6	3A	15.194W	81.776%	0.323
	5.065V	18.581W		229.89V

Protection Features

OCP (Normal @ 26.4°C)	12V: 114.6A (138.07%), 12.212V 5V: 35.5A (142%), 4.953V 3.3V: 34.3A (137.2%), 3.276V 5VSB: 6.1A (203.33%), 4.996V
OCP (Hot @ 40.6°C)	12V: 113.6A (136.87%), 12.249V 5V: 34.7A (138.8%), 4.955V 3.3V: 34.3A (137.2%), 3.283V 5VSB: 6A (200%), 4.998V
OPP (Normal @ 28.7°C)	1389.11W (138.91%)
OPP (Hot @ 41.3°C)	1278.12W (127.81%)
OTP	✓ (130°C @ Main Transformer)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
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%	6.419A	2.009A	1.998A	0.98A	99.995	87.265%	0	<6.0	44.6°C	0.959
	12.213V	4.978V	3.303V	5.104V	114.588				40.33°C	114.88V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20%	13.858A	3.015A	2.999A	1.178A	199.944	91.12%	0	<6.0	45.27°C	0.974
	12.198V	4.975V	3.301V	5.093V	219.428				40.77°C	114.84V
30%	21.638A	3.519A	3.502A	1.377A	300	91.724%	731	20.5	41°C	0.979
	12.199V	4.972V	3.299V	5.083V	327.093				46.02°C	114.8V
40%	29.375A	4.024A	4.004A	1.578A	399.55	91.702%	728	20.2	41.89°C	0.98
	12.199V	4.971V	3.297V	5.072V	435.704				47.39°C	114.78V
50%	36.769A	5.032A	5.008A	1.779A	499.263	91.377%	723	20.0	42.01°C	0.982
	12.205V	4.968V	3.295V	5.061V	546.384				48.03°C	114.73V
60%	44.214A	6.043A	6.014A	1.981A	599.808	90.84%	786	22.7	42.97°C	0.983
	12.214V	4.965V	3.293V	5.049V	660.278				49.53°C	114.71V
70%	51.590A	7.054A	7.021A	2.184A	699.537	90.119%	811	23.7	43.4°C	0.985
	12.220V	4.963V	3.291V	5.038V	776.208				50.43°C	114.66V
80%	59.031A	8.064A	8.028A	2.287A	799.539	89.373%	897	26.8	43.96°C	0.987
	12.225V	4.96V	3.288V	5.028V	894.606				52°C	114.63V
90%	66.772A	8.572A	8.519A	2.391A	899.314	88.516%	979	29.5	44.35°C	0.989
	12.234V	4.958V	3.287V	5.019V	1015.983				53.42°C	114.59V
100%	74.321A	9.08A	9.042A	3.001A	999.358	87.552%	1742	44.7	45.58°C	0.99
	12.240V	4.955V	3.285V	4.999V	1141.441				55.59°C	114.53V
110%	81.835A	10.094A	10.145A	3.005A	1099.939	86.561%	1979	48.7	46.83°C	0.991
	12.239V	4.952V	3.282V	4.991V	1270.714				57.73°C	114.5V
CL1	0.114A	15.183A	15.076A	0A	126.3	83.83%	766	21.8	40.68°C	0.97
	12.261V	4.959V	3.291V	5.116V	150.664				46.18°C	114.86V
CL2	0.113A	25.155A	0A	0A	126.261	82.225%	936	28.1	40.62°C	0.969
	12.251V	4.964V	3.294V	5.119V	153.556				47.65°C	114.86V
CL3	0.113A	0A	25.014A	0A	83.898	76.336%	936	28.1	40.06°C	0.96
	12.245V	4.964V	3.299V	5.119V	109.911				49.07°C	114.88V
CL4	81.807A	0A	0A	0A	999.916	88.38%	1095	32.5	45.5°C	0.989
	12.223V	4.97V	3.297V	5.069V	1131.385				56.45°C	114.55V

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%	6.418A	2.009A	1.997A	0.979A	99.975	88.355%	0	<6.0	44.46°C	0.844
	12.213V	4.978V	3.304V	5.105V	113.151				40.24°C	229.87V
20%	13.857A	3.015A	2.998A	1.178A	199.916	92.391%	0	<6.0	45.17°C	0.919
	12.197V	4.975V	3.302V	5.094V	216.381				40.6°C	229.86V
30%	21.637A	3.519A	3.5A	1.377A	299.96	93.242%	732	20.5	41.28°C	0.945
	12.198V	4.973V	3.3V	5.083V	321.705				46.28°C	229.84V
40%	29.362A	4.023A	4.003A	1.577A	399.464	93.516%	728	20.2	41.74°C	0.957
	12.201V	4.971V	3.298V	5.073V	427.158				47.28°C	229.82V
50%	36.766A	5.032A	5.007A	1.778A	499.174	93.416%	723	20.0	42.32°C	0.964
	12.203V	4.968V	3.296V	5.061V	534.359				48.32°C	229.81V
60%	44.218A	6.043A	6.012A	1.98A	599.721	93.178%	718	19.6	42.95°C	0.969
	12.210V	4.965V	3.294V	5.05V	643.632				49.51°C	229.79V
70%	51.579A	7.056A	7.019A	2.183A	699.483	92.74%	811	23.7	43.15°C	0.972
	12.222V	4.961V	3.291V	5.039V	754.24				50.22°C	229.77V
80%	59.011A	8.067A	8.026A	2.287A	799.5	92.287%	897	26.8	43.69°C	0.974
	12.228V	4.957V	3.289V	5.029V	866.328				51.73°C	229.75V
90%	66.757A	8.576A	8.517A	2.39A	899.292	91.819%	1004	30.1	44.22°C	0.976
	12.236V	4.954V	3.287V	5.02V	979.418				53.27°C	229.73V
100%	74.333A	9.086A	9.04A	3A	999.289	91.247%	1607	42.7	45.09°C	0.978
	12.237V	4.952V	3.285V	5V	1095.148				55.17°C	229.71V
110%	81.838A	10.102A	10.143A	3.005A	1099.92	90.595%	1976	48.7	46.86°C	0.979
	12.239V	4.949V	3.283V	4.992V	1214.105				57.78°C	229.69V
CL1	0.114A	15.203A	15.07A	0A	126.292	84.957%	767	21.8	42.29°C	0.881
	12.254V	4.952V	3.292V	5.116V	148.656				47.77°C	229.86V
CL2	0.113A	25.216A	0A	0A	126.253	83.175%	935	28.1	40.17°C	0.883
	12.241V	4.952V	3.294V	5.119V	151.792				47.24°C	229.86V
CL3	0.113A	0A	24.999A	0A	83.895	77.3%	937	28.1	42.78°C	0.838
	12.243V	4.964V	3.301V	5.119V	108.532				51.88°C	229.87V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL4	81.821A	0A	0A	0A	999.873	91.853%	1082	32.1	45.07°C	0.977
	12.220V	4.969V	3.297V	5.07V	1088.559				56.05°C	229.72V

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	1.234A	0.502A	0.499A	0.195A	19.998	72.363%	0	<6.0	39.62°C	0.854
	12.039V	4.984V	3.306V	5.125V	27.638				36.57°C	114.92V
40W	2.716A	0.702A	0.699A	0.293A	39.997	80.199%	0	<6.0	40.59°C	0.92
	12.034V	4.982V	3.305V	5.122V	49.874				37.26°C	114.9V
60W	4.138A	0.903A	0.899A	0.391A	59.997	83.275%	0	<6.0	41.99°C	0.944
	12.209V	4.981V	3.305V	5.119V	72.042				38.23°C	114.89V
80W	5.596A	1.104A	1.098A	0.489A	79.943	86.002%	0	<6.0	43.33°C	0.951
	12.209V	4.98V	3.305V	5.116V	92.954				39.4°C	114.89V

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	1.233A	0.501A	0.499A	0.195A	19.986	73.22%	0	<6.0	39.63°C	0.49
	12.036V	4.985V	3.307V	5.125V	27.296				36.58°C	229.9V
40W	2.719A	0.702A	0.699A	0.293A	39.987	80.8%	0	<6.0	40.65°C	0.666
	12.018V	4.983V	3.306V	5.122V	49.49				37.34°C	229.89V
60W	4.140A	0.903A	0.898A	0.391A	59.987	84.031%	0	<6.0	41.73°C	0.758
	12.204V	4.982V	3.306V	5.119V	71.379				38.22°C	229.89V
80W	5.594A	1.104A	1.098A	0.489A	79.921	86.841%	0	<6.0	43.25°C	0.808
	12.207V	4.981V	3.305V	5.116V	92.032				39.39°C	229.88V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	13.66mV	12.82mV	16.47mV	16.98mV	Pass
20% Load	25.21mV	12.87mV	15.35mV	17.95mV	Pass
30% Load	11.84mV	11.85mV	12.33mV	23.12mV	Pass
40% Load	17.34mV	15.12mV	17.75mV	28.75mV	Pass
50% Load	15.96mV	14.51mV	17.24mV	28.13mV	Pass
60% Load	15.20mV	14.25mV	17.14mV	26.24mV	Pass
70% Load	15.14mV	14.92mV	15.76mV	23.99mV	Pass
80% Load	17.50mV	17.42mV	18.41mV	27.77mV	Pass
90% Load	18.73mV	17.32mV	18.36mV	27.98mV	Pass
100% Load	28.07mV	18.59mV	20.77mV	38.33mV	Pass
110% Load	28.97mV	19.01mV	21.29mV	36.60mV	Pass
Crossload1	37.36mV	16.18mV	21.20mV	32.72mV	Pass
Crossload2	28.43mV	25.70mV	21.38mV	28.95mV	Pass
Crossload3	15.09mV	16.81mV	24.25mV	28.08mV	Pass
Crossload4	27.78mV	18.10mV	19.60mV	38.03mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	14.27mV	13.08mV	16.68mV	17.19mV	Pass
20% Load	28.58mV	13.84mV	15.60mV	16.93mV	Pass
30% Load	18.30mV	14.61mV	16.27mV	27.32mV	Pass
40% Load	15.09mV	15.38mV	16.11mV	28.24mV	Pass
50% Load	16.01mV	14.92mV	17.09mV	29.82mV	Pass
60% Load	16.37mV	15.02mV	16.93mV	28.85mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	15.76mV	15.89mV	17.24mV	26.50mV	Pass
80% Load	15.60mV	15.38mV	16.01mV	26.40mV	Pass
90% Load	18.52mV	17.01mV	18.36mV	27.21mV	Pass
100% Load	28.91mV	18.53mV	19.68mV	31.90mV	Pass
110% Load	31.47mV	19.36mV	20.82mV	31.89mV	Pass
Crossload1	42.41mV	16.47mV	19.74mV	32.83mV	Pass
Crossload2	32.40mV	25.19mV	20.05mV	28.39mV	Pass
Crossload3	14.78mV	16.91mV	24.35mV	28.59mV	Pass
Crossload4	29.09mV	17.86mV	18.51mV	31.86mV	Pass

The results above are not used in the certification process

CPS PCCooler YS1000



Top side



Power specifications label

Cybenetics bietet freiwillige Zertifizierungsprogramme für Netzteile – ETA für Effizienz, LAMBDA für Lautstärke und SAFE für Sicherheit und korrekten Betrieb – sowie für Kühlprodukte mit DELTA für die Schalldämmung von Gehäusen und PHI für Luftstrom und statischen Druck von Lüftern