be quiet!

be quiet! Pure Power 13 M 1000W

028EUS5081002848

Lab ID BQ10002834

Certification ID 252834

Test Result Report ID: 25PS2834A

Certificate Issue Date: Jun 10, 2025

Scheme: ETA-EMI PSU

115V



230V

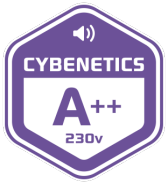


Scheme: LAMBDA PSU

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	be quiet!
Model	Pure Power 13 M 1000W
OEM/ODM	FSP
Serial Number	028EUS5081002848
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240
□□□□ (Arms)	6-12

□□□□ (Hz)	50-60
□□□□ (W)	1000
Operating Temperature (Continuous Full Load) (°C)	
□□	ATX12V
□□□□	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
□□	120mm Rifle Bearing Fan (BQ QF2-12025-HS)
□□□□□	✓
Cybenetics Testing Information	
Lab ID	BQ10002834
Date of receipt	May 9, 2025
Testing Date	May 30, 2025
Report Issued Date	Jun 10, 2025
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□ (Non-accredited measurements)

□□□□				
□□	□□□□	□□□□□	**Gauge**	In Cable Capacitors
ATX □□ 24 pin (550mm)	1	1	18-22AWG	□
4+4 pin EPS 12V □□ (650mm)	1	1	16AWG	□
8-pin EPS 12V □□ (650mm)	1	1	16AWG	□
2x 6+2pin PCIe□□ (600mm)	2	2	16-18AWG	□
6+2pin PCIe□□ (500mm+150mm)	1	2	16-18AWG	□
12+4 pin PCIe (595mm) (600W)	1	1	16-28AWG	□
SATA□□ (500mm+150mm+150mm+150mm)	1	4	18AWG	□

SATA□□ (510mm+150mm) / 4-pin Molex (+150mm+150mm)	1	2 / 2	18AWG	□
AC Power Cord (1350mm) - 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	✗

□□□□

□		3.3V	5V	12V	5VSB	-12V
□□□□	□□	22	22	83.4	3	0.3
	□	120		1000	15	3.6
□□□□□ (W)		1000				

Parts Description

	General Data
Manufacturer (OEM)	FSP
PCB Type	Double-Sided
	-**Primary Side**
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor & Relay
Bridge Rectifier(s)	2x HY Electronic GBJ2508L (800V, 25A @ 100°C)
APFC MOSFETs	2x ROHM Semiconductor R6049YNX (600V, 22A @ 25°C, Rds(on): 84mOhm)

APFC Boost Diode	1x DSC08C065 (650V, 8A @ 25°C)
Bulk Cap(s)	2x Elite (420V, 470uF each or 940uF combined, 2000h @ 105°C,PL(M))
Main Switchers	2x STMicroelectronics STW35N60DM2 (600V, 17A @ 100°C, Rds(on): 0.11Ohm)
IC Driver	Novosense NSI6602
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CM6901X
Topology	Primary side: APFC, Half-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
	Secondary Side
+12V MOSFETs	6x Toshiba THPR8504PL (40V, 150A @ 25°C, Rds(on): 0.85mOhm)
5V & 3.3V	DC-DC Converters: 4x Nexperia PSMN3RO-30YLD (30V, 100A @ 25°C, Rds(on): 3.1mOhm) PWM Controller(s): ANPECAPW7159C
Filtering Capacitors	Electrolytic: 1x Rubycon (6-10,000 @ 105°C, ZLH) 3x Elite (2,000 @ 105°C, EL) 2x Elite (2-5,000 @ 105°C, ED) 1x Elite (4-10,000 @ 105°C, EY) 1x Elite (3-6,000 @ 105°C, EV) Polymer: 19x Apaq, 8 Elite (CS), 9x Biostar
Supervisor IC	IN1S4241-SDG (OCP, OVP, UVP, SCP, PG)
Fan Controller	Grenergy GR8031
Fan Model	BQ QF2-12025-HS (120mm, 12V, 0.30A, Rifle Bearing Fan)
	5VSB Circuit
Synchronous Rectification Driver	Leadtrend LD8926AA13 Synchronous Rectification IC

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)	90.551%
Average Noise Output (>1450 Load Combinations)	10.65dBA
PF□□□ (>1450 Load Combinations)	0.993
Efficiency With 10W (≤500W) or 2% (>500W) Load	70.656%
□□□□□□	0.0557W
Non-Accredited	
12V Ripple (Full Load)	27.45mV
5V Ripple (Full Load)	15.50mV
3.3V Ripple (Full Load)	16.69mV
5VSB Ripple (Full Load)	26.15mV
12V Load Regulation	0.57%
5V Load Regulation	0.93%
3.3V Load Regulation	1.41%
5VSB Load Regulation	2.34%
Inrush Current	36.510A

230V

Accredited	
□□□□ (>1450 load combinations)	92.564%
Average Noise Output (>1450 Load Combinations)	10.58dBA
PF□□□ (>1450 Load Combinations)	0.964
Efficiency With 10W (≤500W) or 2% (>500W) Load	75.687%
□□□□□□	0.1318W
Non-Accredited	

12V Ripple (Full Load)		27.64mV
5V Ripple (Full Load)		15.77mV
3.3V Ripple (Full Load)		16.71mV
5VSB Ripple (Full Load)		25.60mV
12V Load Regulation		0.56%
5V Load Regulation		0.91%
3.3V Load Regulation		1.41%
5VSB Load Regulation		2.34%
Inrush Current		67.650A
12V Transient Response (200%)		11.27V
5V Transient Response (200%)		4.967V
3.3V Transient Response (200%)		3.187V
5VSB Transient Response (200%)		4.951V
□□□□ & PG□□		22.20ms
AC Loss to PWR_OK Hold Up Time		21.20ms
PWR_OK Inactive to DC Loss Delay		1.00ms
PSU Timings: T1 (20% / 100%)	78.0ms	70.0ms
PSU Timings: T3 (20% / 100%)	137.0ms	135.0ms
12V OCP (29.1°C / 42.8°C)	94.40A (113.19%), 11.982V	91.00A (109.11%), 11.992V
5V OCP (29.1°C / 42.8°C)	28.5A (129.55%), 5.09V	29.2A (132.73%), 5.089V
3.3V OCP (29.1°C / 42.8°C)	30.2A (137.27%), 3.352V	30.6A (139.09%), 3.347V
5VSB OCP (29.1°C / 42.8°C)	4.2A (140.00%), 5.038V	4.2A (140.00%), 5.038V
OPP (30.04°C / 42.12°C)	114.69%	111.70%

□□□□ & PG□□

Hold-Up Time (ms)	22.2
AC Loss to PWR_OK Hold Up Time (ms)	21.2
PWR_OK Inactive to DC Loss Delay (ms)	1

Tables

115V

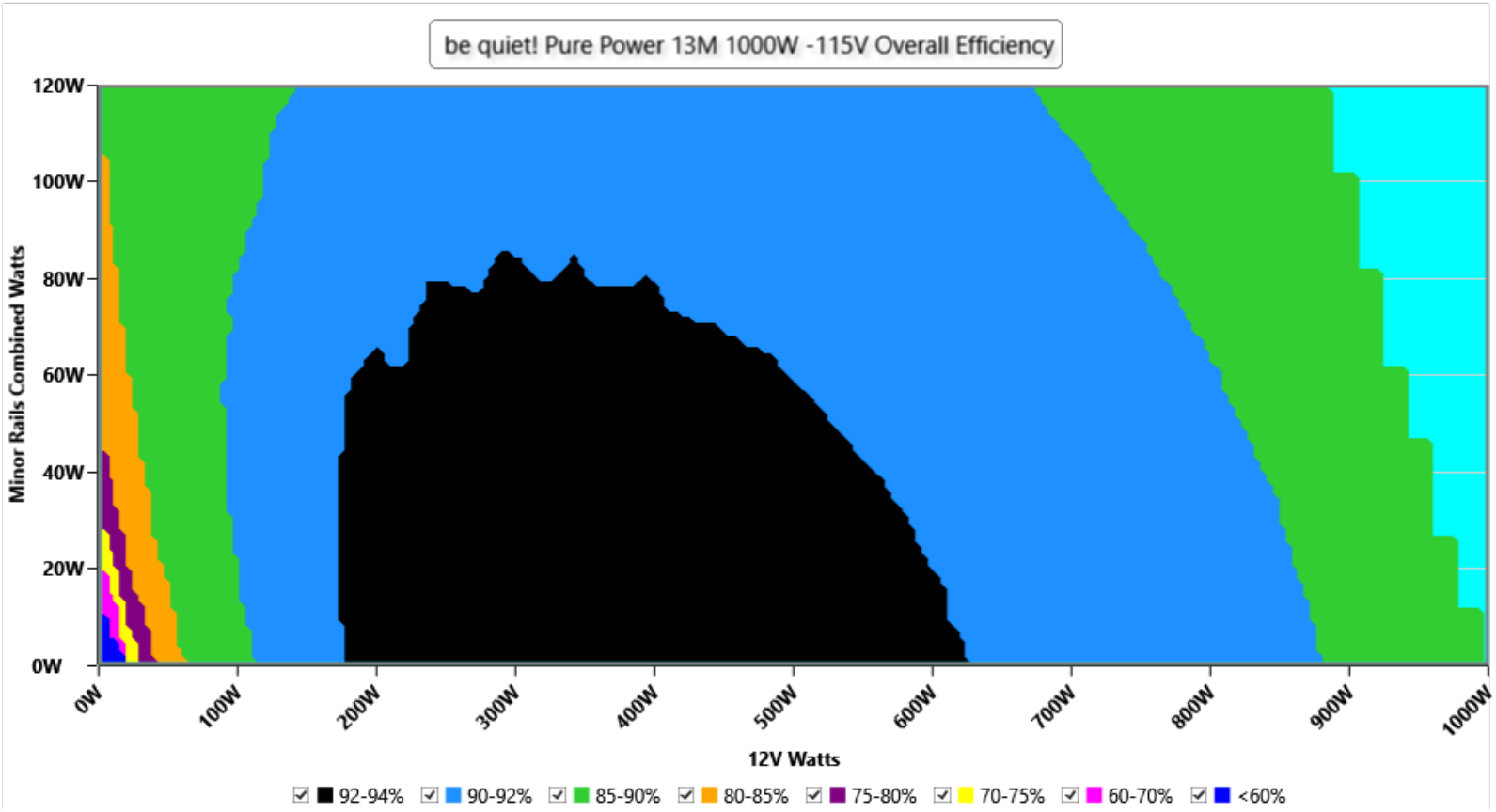
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.07 V	115.04 V	113.85 V	115.11 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	60.00 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.056 W	0.035 W	N/A	0.095 W	N/A	N/A
Apparent Power:	10.091 W	10.049 W	N/A	10.148 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.02 V	230.94 V	227.70 V	231.11 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	0.27 %	2.00 %	PASS
Real Power:	0.132 W	0.082 W	N/A	0.274 W	N/A	N/A
Apparent Power:	34.663 W	34.393 W	N/A	34.981 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

□□□□□□

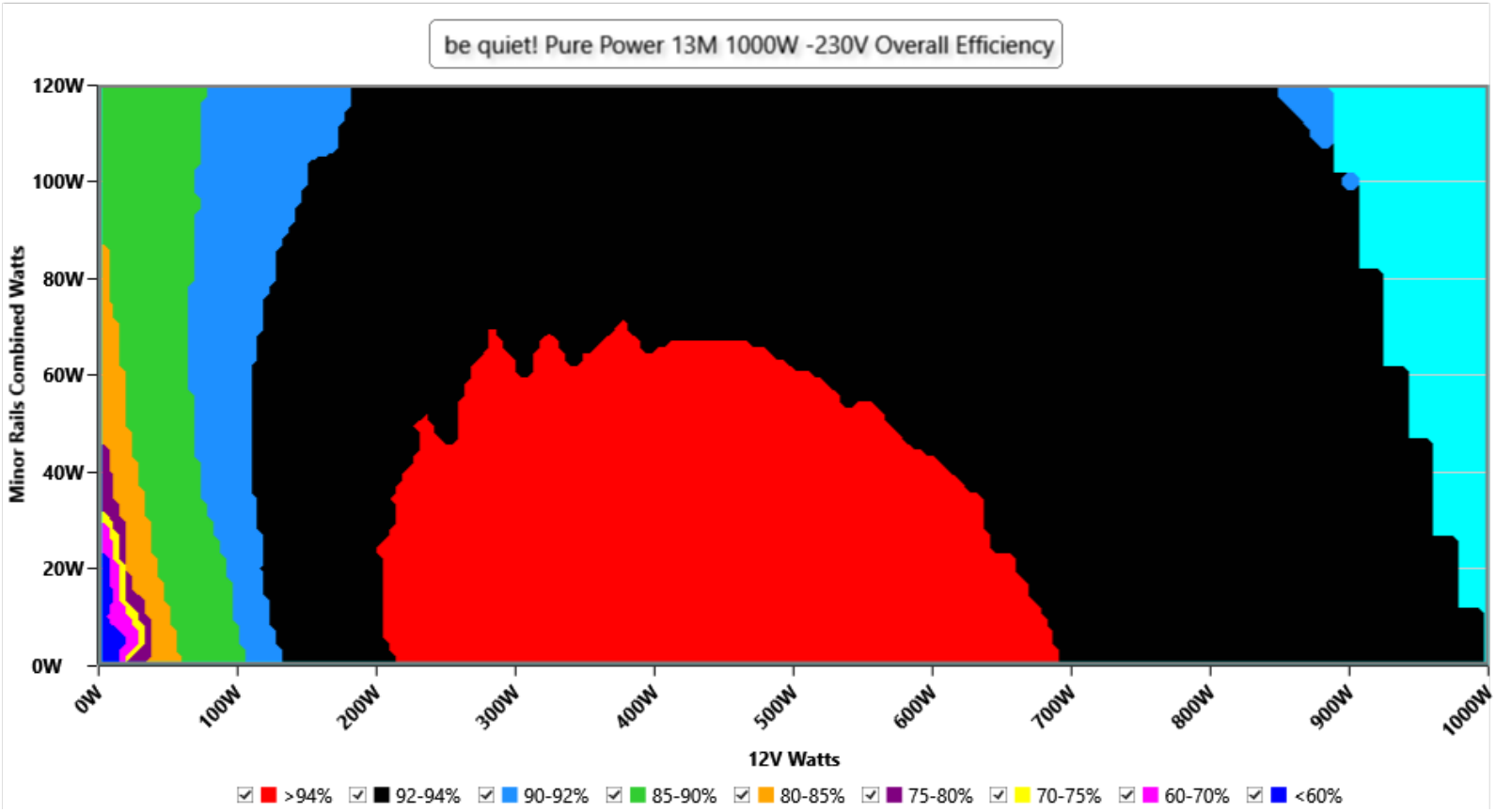
115V



□□

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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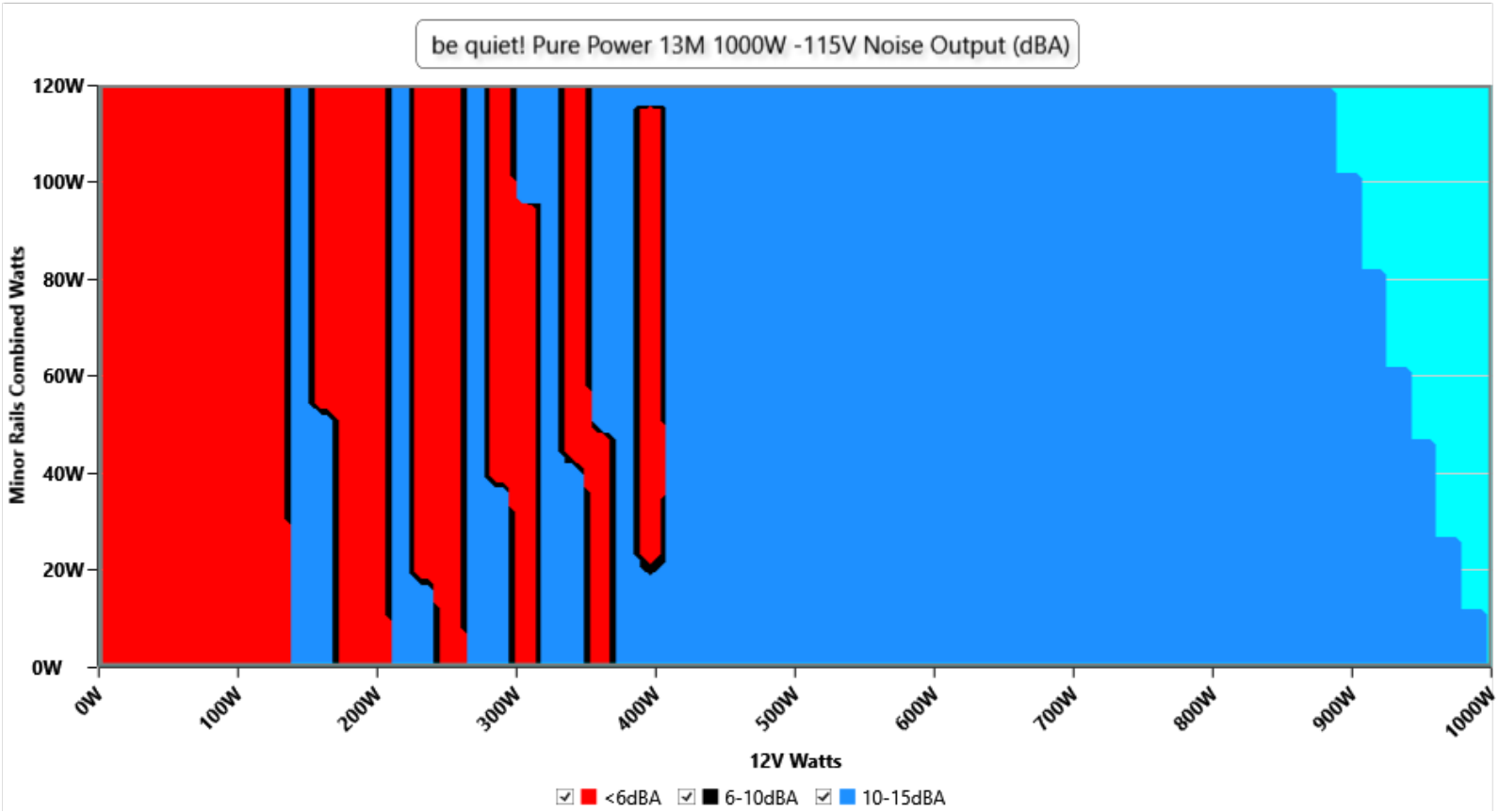
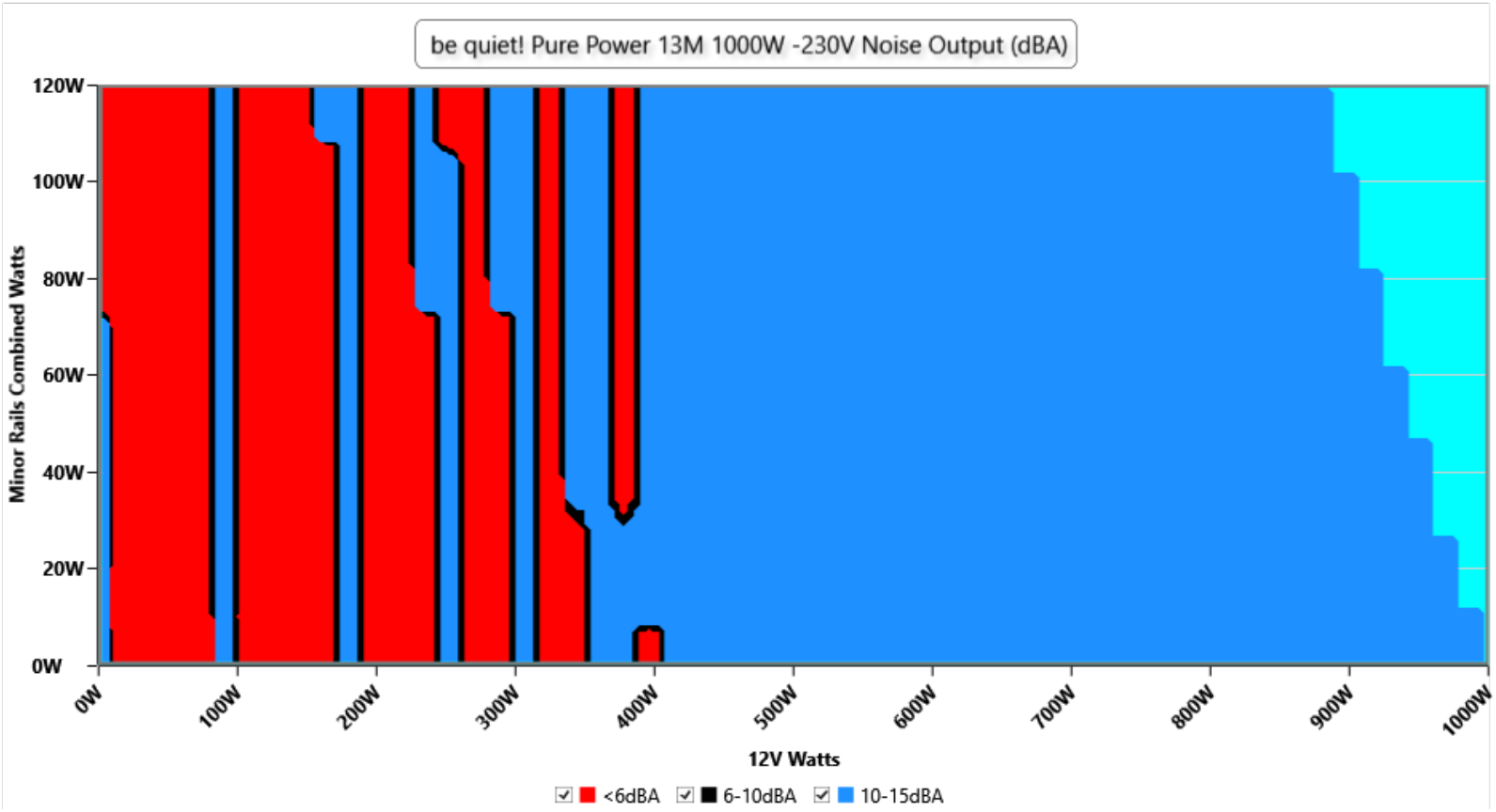
115V



□□

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) · 31.3 °C	729 RPM · 12.9 dB(A) · 40.2 °C	fan starts (<6.0 → 12.9)
20%	0 RPM · <6.0 dB(A) · 31.8 °C	728 RPM · 12.5 dB(A) · 40.7 °C	fan starts (<6.0 → 12.5)
50%	691 RPM · 11.3 dB(A) · 31.2 °C	737 RPM · 14.3 dB(A) · 42.2 °C	**+3.0 dB(A)**
100%	706 RPM · 11.4 dB(A) · 30.5 °C	1255 RPM · 29.8 dB(A) · 45.9 °C	**+18.4 dB(A)**

230V

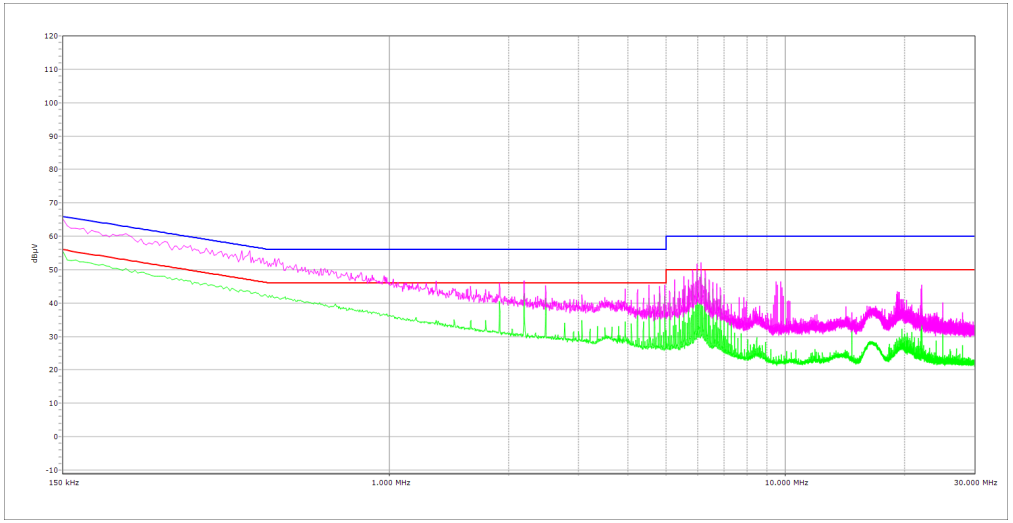
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 32.5 °C	718 RPM · 11.4 dB(A) · 40.2 °C	fan starts (<6.0 → 11.4)
20%	0 RPM · <6.0 dB(A) · 32.9 °C	723 RPM · 12.0 dB(A) · 40.4 °C	fan starts (<6.0 → 12.0)
50%	697 RPM · 11.5 dB(A) · 30.5 °C	739 RPM · 14.5 dB(A) · 42.1 °C	**+3.0 dB(A)**
100%	711 RPM · 11.5 dB(A) · 30.9 °C	1183 RPM · 27.6 dB(A) · 45.6 °C	**+16.1 dB(A)**

INFO

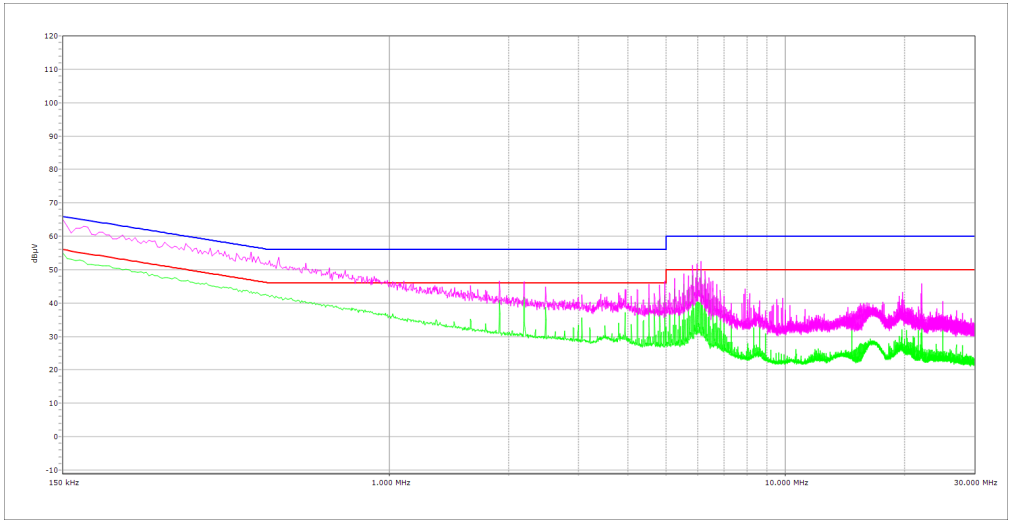
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative 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

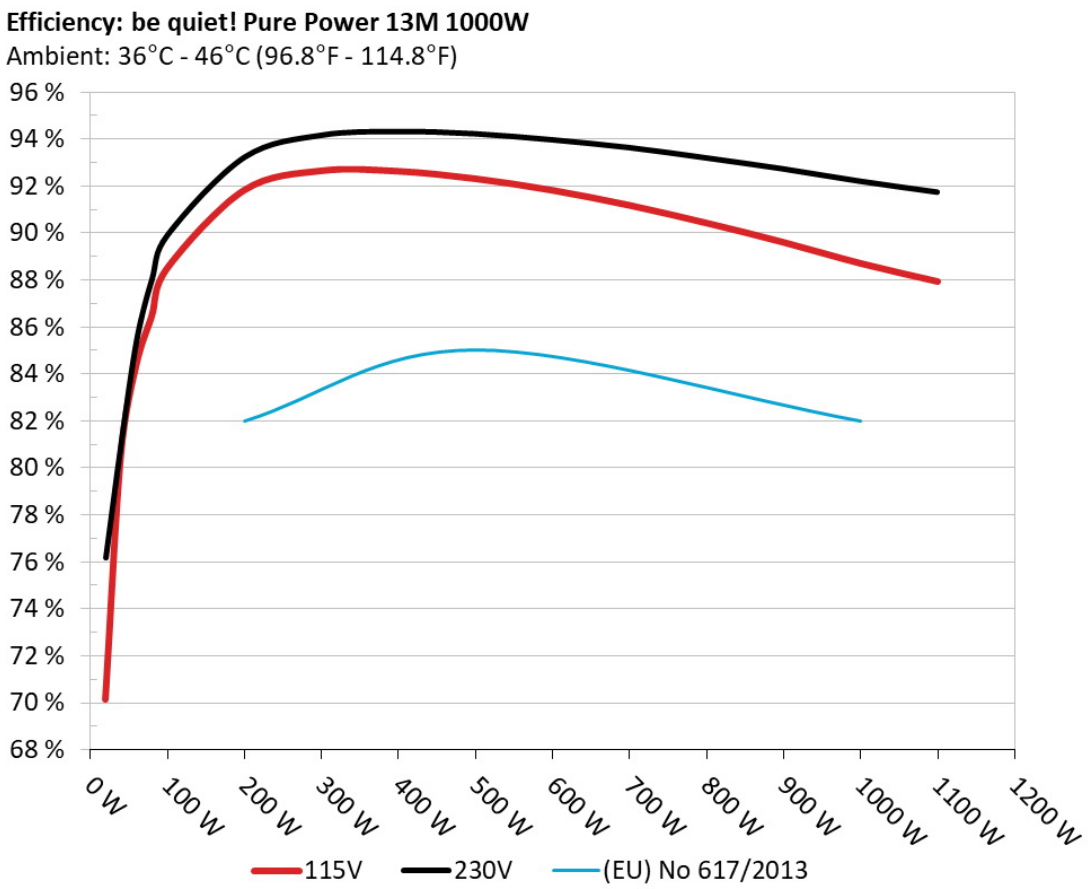


NEUTRAL



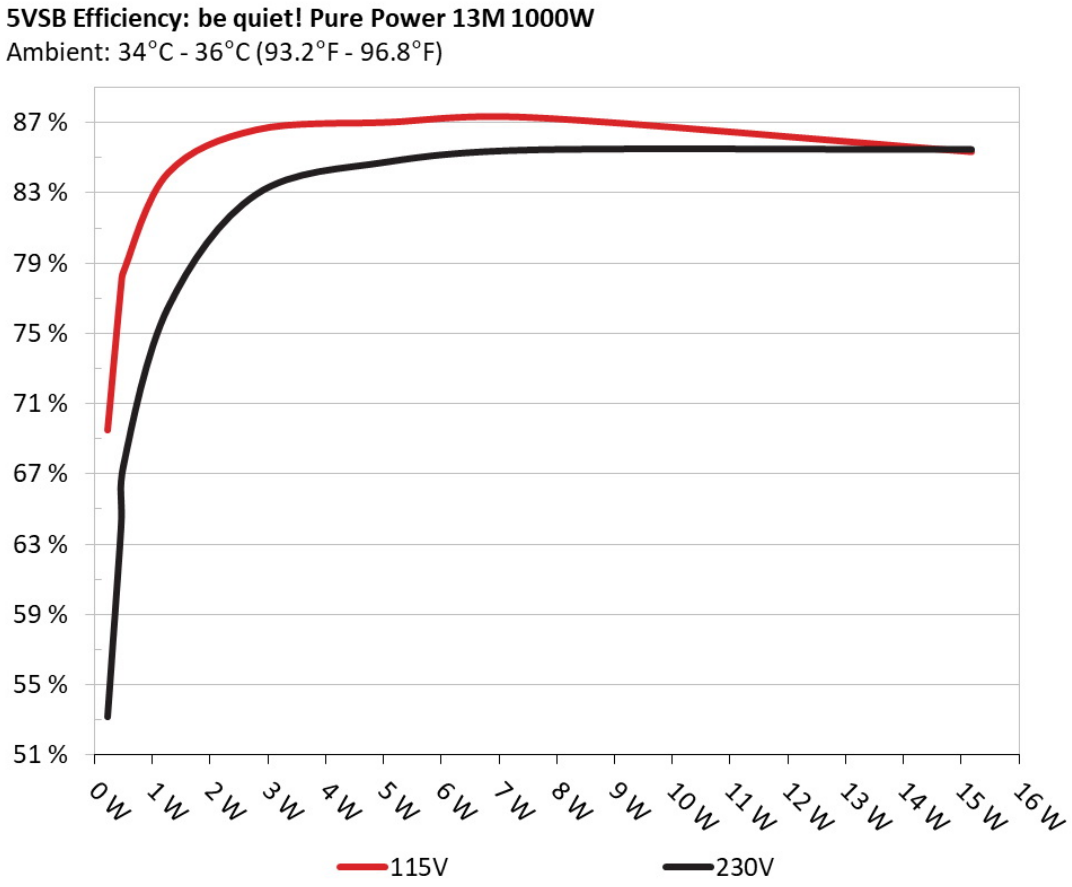
PHASE

Indicative Performance



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	69.511%	0.032
	5.11V	0.331W		114.92V
2	**0.09A**	0.46W	77.626%	0.056
	5.109V	0.593W		114.92V
3	**0.55A**	2.806W	86.584%	0.253
	5.101V	3.241W		114.92V
4	**1A**	5.094W	87.011%	0.358
	5.094V	5.854W		114.92V
5	**1.5A**	7.629W	87.271%	0.407
	5.085V	8.742W		114.92V
6	**3A**	15.178W	85.332%	0.486
	5.059V	17.787W		114.91V

230V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	**0.045A**	0.23W	53.143%	0.012
	5.111V	0.434W		229.88V
2	**0.09A**	0.46W	63.829%	0.02
	5.11V	0.695W		229.9V
3	**0.55A**	2.806W	82.914%	0.093
	5.102V	3.387W		229.9V
4	**1A**	5.094W	84.763%	0.157
	5.094V	6.014W		229.9V
5	**1.5A**	7.629W	85.437%	0.202
	5.085V	8.933W		229.91V
6	**3A**	15.178W	85.456%	0.312
	5.06V	17.76W		229.91V

Protection Features

OCP (Normal @ 29.1°C)	12V: 94.40A (113.19%), 11.982V 5V: 28.5A (129.55%), 5.09V 3.3V: 30.2A (137.27%), 3.352V 5VSB: 4.2A (140.00%), 5.038V
OCP (Hot @ 42.8°C)	12V: 91.00A (109.11%), 11.992V 5V: 29.2A (132.73%), 5.089V 3.3V: 30.6A (139.09%), 3.347V 5VSB: 4.2A (140.00%), 5.038V
OPP (Normal @ 30.0°C)	1146.92W (114.69%)
OPP (Hot @ 42.1°C)	1116.97W (111.70%)
OTP	✓ (100°C @ Heat Sink)
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)

10-110%□□□□

115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	**6.510A**	**1.956A**	**1.958A**	**0.983A**	99.994	88.505%	729	12.9	40.24°C	0.988
	12.043V	5.113V	3.371V	5.088V	112.982				42.08°C	114.87V
20%	**14.044A**	**2.937A**	**2.942A**	**1.182A**	199.942	91.84%	728	12.5	40.68°C	0.986
	12.036V	5.107V	3.365V	5.078V	217.706				42.23°C	114.84V
30%	**21.940A**	**3.43A**	**3.437A**	**1.381A**	299.989	92.67%	730	13.1	41.01°C	0.992
	12.029V	5.102V	3.361V	5.068V	323.717				44.6°C	114.81V
40%	**29.801A**	**3.923A**	**3.932A**	**1.582A**	399.522	92.653%	733	13.6	41.7°C	0.995
	12.024V	5.099V	3.357V	5.058V	431.199				46.69°C	114.77V
50%	**37.342A**	**4.908A**	**4.923A**	**1.783A**	499.238	92.337%	737	14.3	42.2°C	0.996
	12.017V	5.094V	3.352V	5.048V	540.668				49.42°C	114.74V
60%	**44.956A**	**5.895A**	**5.915A**	**1.985A**	599.774	91.84%	741	13.8	42.56°C	0.997
	12.011V	5.09V	3.347V	5.037V	653.068				52.56°C	114.7V
70%	**52.515A**	**6.884A**	**6.911A**	**2.188A**	699.516	91.203%	748	13.8	43.25°C	0.998
	12.004V	5.085V	3.343V	5.027V	766.986				57.23°C	114.67V
80%	**60.150A**	**7.872A**	**7.908A**	**2.292A**	799.557	90.447%	808	15.5	43.66°C	0.998
	11.998V	5.08V	3.338V	5.018V	884.003				60.55°C	114.62V
90%	**68.126A**	**8.371A**	**8.398A**	**2.396A**	899.353	89.626%	1052	23	44.38°C	0.999
	11.991V	5.076V	3.334V	5.008V	1003.454				61.79°C	114.59V
100%	**75.914A**	**8.872A**	**8.921A**	**3.006A**	999.381	88.726%	1255	29.8	45.87°C	0.999
	11.983V	5.071V	3.329V	4.99V	1126.372				63.71°C	114.55V
110%	**83.629A**	**9.87A**	**10.02A**	**3.01A**	1099.961	87.95%	1352	31.2	46.19°C	0.999
	11.977V	5.065V	3.323V	4.983V	1250.675				63.97°C	114.5V
CL1	**0.116A**	**14.177A**	**14.24A**	**0A**	121.29	84.482%	748	13.8	40.7°C	0.982
	12.040V	5.092V	3.35V	5.099V	143.565				53.47°C	114.86V

CL2	**0.115A**	**21.559A**	**0A**	**0A**	111.317	82.517%	748	13.8	41.54°C	0.983
	12.043V	5.099V	3.369V	5.101V	134.902				50.54°C	114.87V
CL3	**0.115A**	**0A**	**21.63A**	**0A**	73.994	76.723%	744	13.7	41.22°C	0.977
	12.037V	5.108V	3.357V	5.102V	96.447				47.93°C	114.88V
CL4	**83.406A**	**0A**	**0A**	**0.001A**	999.949	89.492%	797	15.4	45.2°C	0.999
	11.988V	5.093V	3.352V	5.047V	1117.365				61.72°C	114.55V

The results above are not used in the certification process

230V

□□	**12V**	**5V**	**3.3V**	**5VSB**	**DC/AC (□)**	□□	□□□□ **(RPM)**	□□□□□□□ **(dB[A])**	□□ **(□□ /□□)**	**PF/AC □□**
10%	**6.512A**	**1.956A**	**1.958A**	**0.983A**	100.014	89.078%	718	11.4	40.17°C	0.854
	12.042V	5.113V	3.371V	5.088V	112.27				42.73°C	229.81V
20%	**14.047A**	**2.938A**	**2.943A**	**1.182A**	199.975	93.215%	723	12	40.35°C	0.944
	12.036V	5.106V	3.365V	5.078V	214.518				43.56°C	229.99V
30%	**21.945A**	**3.43A**	**3.438A**	**1.382A**	300.042	94.152%	729	12.9	41.26°C	0.968
	12.030V	5.102V	3.361V	5.068V	318.686				42.27°C	229.9V
40%	**29.814A**	**3.923A**	**3.933A**	**1.582A**	399.677	94.309%	734	13.8	41.56°C	0.977
	12.023V	5.099V	3.357V	5.058V	423.793				43.04°C	229.84V
50%	**37.354A**	**4.909A**	**4.924A**	**1.784A**	499.398	94.215%	739	14.5	42.12°C	0.982
	12.017V	5.094V	3.352V	5.047V	530.05				43.92°C	229.81V
60%	**44.968A**	**5.896A**	**5.917A**	**1.986A**	599.899	93.957%	743	13.7	42.79°C	0.984
	12.010V	5.089V	3.347V	5.037V	638.501				44.95°C	229.76V
70%	**52.521A**	**6.885A**	**6.913A**	**2.189A**	699.553	93.627%	746	13.8	43.23°C	0.986
	12.003V	5.084V	3.342V	5.026V	747.173				44.83°C	229.82V
80%	**60.153A**	**7.874A**	**7.91A**	**2.292A**	799.553	93.19%	748	13.8	43.37°C	0.988
	11.996V	5.079V	3.338V	5.017V	857.981				45.06°C	229.79V
90%	**68.130A**	**8.372A**	**8.4A**	**2.396A**	899.326	92.724%	952	19.9	44.25°C	0.99
	11.990V	5.075V	3.334V	5.009V	969.896				45.9°C	229.73V
100%	**75.915A**	**8.873A**	**8.922A**	**3.006A**	999.341	92.198%	1183	27.6	45.6°C	0.992
	11.983V	5.071V	3.329V	4.99V	1083.907				47.56°C	229.72V

110%	**83.632A**	**9.87A**	**10.021A**	**3.01A**	1099.923	91.735%	1265	29.9	46.4°C	0.993
	11.976V	5.065V	3.323V	4.983V	1199.016				48.2°C	229.7V
CL1	**0.116A**	**14.179A**	**14.242A**	**0A**	121.289	85.637%	748	13.8	40.55°C	0.901
	12.040V	5.091V	3.35V	5.099V	141.634				42.84°C	229.86V
CL2	**0.115A**	**21.56A**	**0A**	**0A**	111.316	83.554%	746	13.8	41.4°C	0.89
	12.043V	5.099V	3.369V	5.101V	133.228				43.92°C	229.87V
CL3	**0.115A**	**0A**	**21.631A**	**0A**	73.994	77.625%	743	13.7	40.78°C	0.82
	12.036V	5.108V	3.357V	5.102V	95.319				43.5°C	229.87V
CL4	**83.407A**	**0A**	**0A**	**0.001A**	999.947	92.764%	891	17.9	45.77°C	0.992
	11.988V	5.092V	3.351V	5.047V	1077.95				48.11°C	229.72V

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	**1.232A**	**0.489A**	**0.489A**	**0.196A**	20	70.122%	0	<6.0	41.88°C	0.821
	12.050V	5.116V	3.374V	5.107V	28.522				36.23°C	114.9V
40W	**2.712A**	**0.684A**	**0.684A**	**0.294A**	39.999	80.563%	0	<6.0	46.21°C	0.93
	12.051V	5.118V	3.376V	5.104V	49.651				37.82°C	114.89V
60W	**4.196A**	**0.879A**	**0.88A**	**0.392A**	59.998	84.395%	725	12.3	38.98°C	0.966
	12.041V	5.117V	3.375V	5.101V	71.093				43.15°C	114.88V
80W	**5.676A**	**1.075A**	**1.076A**	**0.49A**	79.944	86.46%	729	12.9	39.32°C	0.976
	12.035V	5.115V	3.373V	5.098V	92.461				42.89°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	**1.232A**	**0.489A**	**0.489A**	**0.196A**	20.003	76.183%	0	<6.0	38.21°C	0.418
	12.050V	5.117V	3.376V	5.107V	27.607				36.11°C	229.79V
40W	**2.714A**	**0.684A**	**0.684A**	**0.294A**	40.002	81.068%	0	<6.0	38.91°C	0.603
	12.047V	5.117V	3.375V	5.104V	49.346				37.95°C	229.74V
60W	**4.196A**	**0.879A**	**0.88A**	**0.392A**	60.002	85.427%	0	<6.0	39.92°C	0.729
	12.041V	5.117V	3.375V	5.101V	70.236				38.05°C	229.91V
80W	**5.676A**	**1.075A**	**1.076A**	**0.49A**	79.957	88.036%	0	<6.0	43.6°C	0.806
	12.036V	5.117V	3.374V	5.098V	90.823				39.45°C	229.87V

The results above are not used in the certification process

□□□□

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	31.57mV	14.97mV	15.45mV	15.50mV	Pass
20% Load	28.70mV	16.55mV	16.32mV	16.01mV	Pass
30% Load	25.22mV	15.22mV	16.52mV	15.75mV	Pass
40% Load	24.92mV	16.09mV	16.88mV	16.37mV	Pass
50% Load	25.37mV	16.35mV	17.04mV	17.85mV	Pass
60% Load	25.32mV	16.91mV	16.32mV	18.26mV	Pass
70% Load	25.99mV	15.94mV	16.83mV	22.51mV	Pass
80% Load	26.14mV	16.09mV	17.03mV	26.14mV	Pass
90% Load	27.57mV	17.37mV	18.41mV	27.93mV	Pass
100% Load	27.45mV	15.50mV	16.69mV	26.15mV	Pass
110% Load	28.70mV	15.88mV	16.81mV	27.17mV	Pass
Crossload1	30.02mV	16.13mV	15.89mV	17.63mV	Pass
Crossload2	31.57mV	21.87mV	16.93mV	19.49mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	30.85mV	15.43mV	18.21mV	18.62mV	Pass
Crossload4	26.83mV	14.82mV	15.41mV	18.67mV	Pass

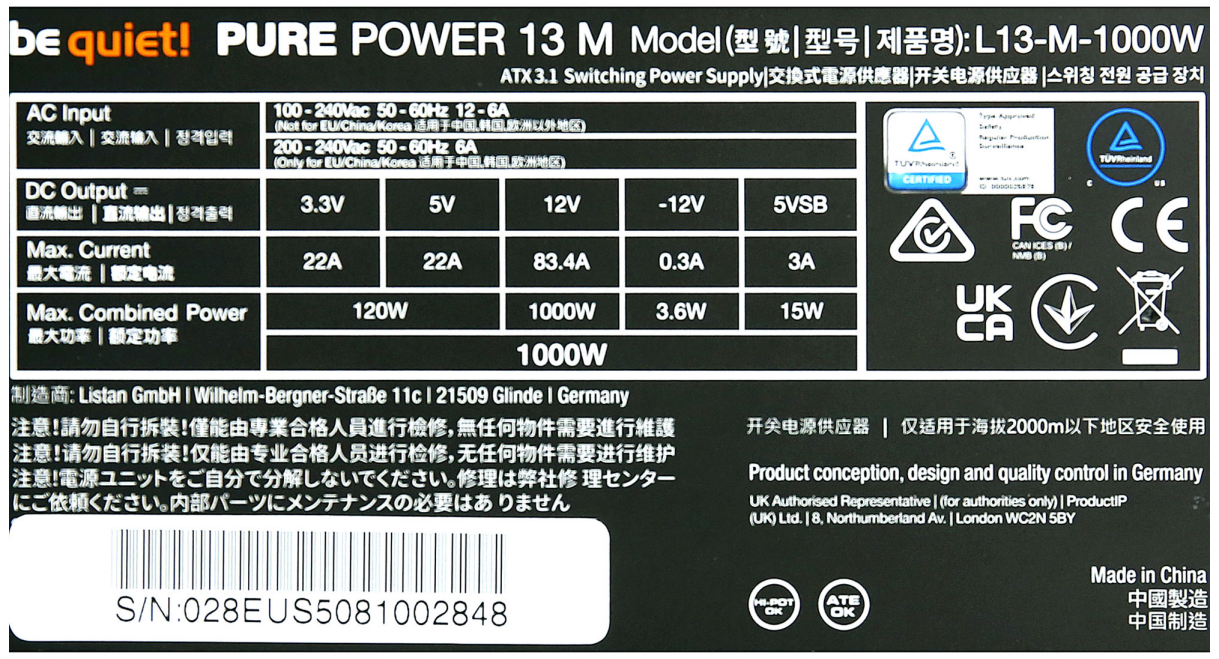
The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	35.66mV	16.61mV	16.37mV	14.73mV	Pass
20% Load	27.88mV	16.76mV	16.73mV	15.91mV	Pass
30% Load	25.42mV	16.20mV	16.62mV	15.60mV	Pass
40% Load	26.19mV	15.99mV	17.29mV	15.96mV	Pass
50% Load	25.53mV	16.71mV	16.47mV	17.29mV	Pass
60% Load	25.68mV	17.11mV	17.90mV	18.01mV	Pass
70% Load	26.76mV	17.17mV	19.54mV	23.02mV	Pass
80% Load	27.58mV	17.47mV	17.60mV	25.88mV	Pass
90% Load	29.52mV	16.71mV	17.08mV	27.62mV	Pass
100% Load	27.64mV	15.77mV	16.71mV	25.60mV	Pass
110% Load	28.26mV	15.46mV	17.56mV	26.23mV	Pass
Crossload1	30.50mV	15.35mV	16.17mV	17.80mV	Pass
Crossload2	34.02mV	20.74mV	15.96mV	19.03mV	Pass
Crossload3	32.08mV	15.53mV	19.69mV	18.36mV	Pass
Crossload4	27.47mV	14.72mV	15.49mV	18.68mV	Pass

The results above are not used in the certification process





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Top side

Power specifications label

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