ABKO COREMAX 600W BRONZE

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Lab ID AB60003399

Certification ID 263399

Test Result Report ID: 26PS3399A

Certificate Issue Date: Sep 3, 2026

115V

Scheme: ETA-EMI PSU



115V



Scheme: LAMBDA PSU



Aristeidis Bitziopoulos, Certification Body General Manager

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	ABKO
Model	COREMAX 600W BRONZE
OEM/ODM	PREE
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	115-230
□□□□ (Arms)	10
□□□□ (Hz)	50-60

□□□□ (W)	600
Operating Temperature (Continuous Full Load) (°C)	0 - 40
□□	ATX12V
□□□□	Fixed cables
Warranty	No Info
Cybenetics Measurements	
Dimensions (W x H x D)	150 x 85 x 140mm
Weight	1.60 kg (3.52 lb)
□□	120mm Sleeve Bearing Fan (W12025HZ12SEMA)
□□□□□	✗
Cybenetics Testing Information	
Lab ID	AB60003399
Date of receipt	Jul 30, 2026
Testing Date	Aug 21, 2026
Report Issued Date	Sep 3, 2026
Engineer Name	Ioannis Kalyviotis
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□ (Non-accredited measurements)

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□□	□□□□	□□□□□□	**Gauge**	Cable Type
ATX □□ 20+4 pin (520mm)	1	1	18AWG	Tinned Copper
4+4 pin EPS 12V □□ (630mm+150mm)	1	2	18AWG	Tinned Copper
6+2pin PCIe□□ (600mm)	1	1	18AWG	Tinned Copper
6+2pin PCIe□□ (600mm+150mm)	1	2	18AWG	Tinned Copper
SATA□□ (450mm+150mm+150mm+150mm)	1	4	18AWG	Tinned Copper
SATA□□ (450mm+150mm) / 4-pin Molex (+150mm)	1	2/1	18AWG	Tinned Copper
4-pin Molex (450mm+150mm) / SATA□□ (+150mm)	1	2/1	18AWG	Tinned Copper

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
□□□□	□□	20	20	50	2.5	0.3
	□	125		600	12.5	3.6
□□□□□ (W)		600				

Parts Description

General Data	
Manufacturer (OEM)	PREE
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes
Inrush Protection	NTC Thermistor 2.5D-9 (2.5 Ohm @ 25°C)
Bridge Rectifier	2x Diodes GBU808 (800V, 8A @ 100°C)
APFC MOSFETs	2x Lonten LSD65R180GF (650V, 13A @ 100°C, Rds(on): 0.18Ohm
APFC Boost Diode	Global Power Technology G3S06508A (650V, 8A @ 157°C)
Bulk Cap(s)	Toshin Kogyo (420V, 390uF, 2000h @ 105°C, LW)
Main Switchers	2x Maple Semiconductor SLP18N50S (500V, 11.7A @ 100°C, Rds(on): 0.330Ohm)
PFC/PWM Combo Controller	Champion CM6805BG
Topology	Primary side: APFC, Double Forward Secondary side: [12V] Passive Rectification & [Minor Rails] DC-DC converters

Secondary Side	
+12V MOSFETs	6x HS 5MX053
5V & 3.3V	DC-DC Converters: 4x AP70N03NF (30V, 51A @ 100°C, Rds(on): 5.5mOhm) PWM Controller(s): ANPEC APW7159C
Filtering Capacitors	Electrolytic: 13x 12Kuang Jin (2-3,000 @ 105°C, GR) Polymer: 2x
Supervisor IC	EST 7610FS
Fan Model	WAM W12025HZ12SEMA (120mm, 12V, 0.20A, Rifle Bearing Fan)
5VSB Circuit	
Rectifier	HS 3SH022
Standby PWM Controller	EST 2816H

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	✓
Conducted Emissions EN 55032 & CISPR 32	Passed

Performance Summary 115V

Accredited	
□□□□ (>1450 load combinations)	84.265%
Average Noise Output (>1450 Load Combinations)	43.95dBA
PF□□□ (>1450 Load Combinations)	0.977
Efficiency With 10W (≤500W) or 2% (>500W) Load	57.152%
□□□□□□	0.0625W
Non-Accredited	

12V Ripple (Full Load)	53.09mV
5V Ripple (Full Load)	34.38mV
3.3V Ripple (Full Load)	26.15mV
5VSB Ripple (Full Load)	22.37mV
12V Load Regulation	0.57%
5V Load Regulation	0.98%
3.3V Load Regulation	1.51%
5VSB Load Regulation	3.75%
Inrush Current	62.200A

□□□□ & PG□□

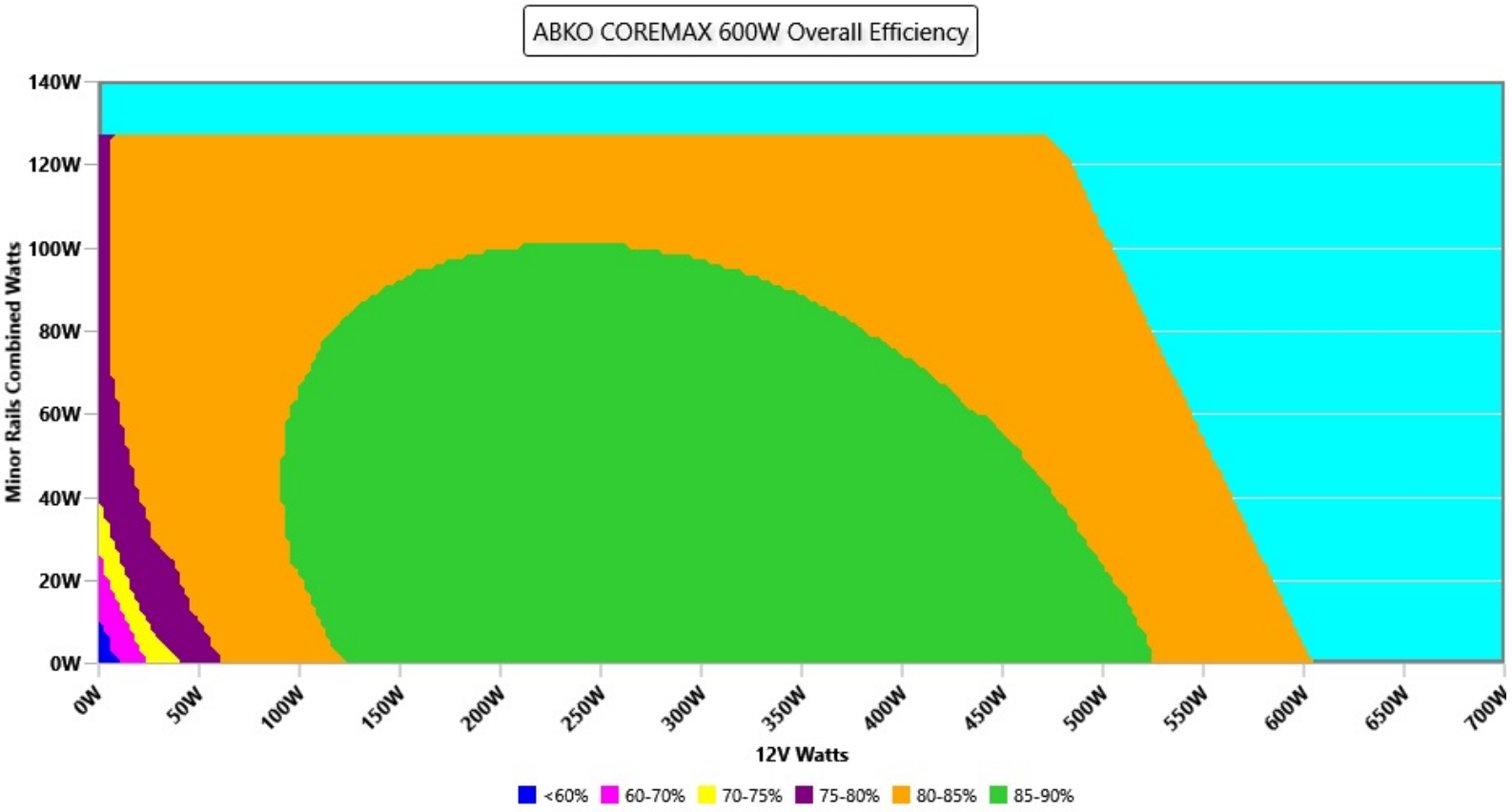
Hold-Up Time (ms)	13.5
AC Loss to PWR_OK Hold Up Time (ms)	11.4
PWR_OK Inactive to DC Loss Delay (ms)	2.1

□□□□

Tables 115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.00 V	114.98 V	113.85 V	115.01 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.416	1.340	1.417	1.490	PASS
Mains Voltage THD:	0.14 %	0.07 %	N/A	0.22 %	2.00 %	PASS
Real Power:	0.062 W	0.002 W	N/A	0.094 W	N/A	N/A
Apparent Power:	5.883 W	5.861 W	N/A	5.906 W	N/A	N/A
Power Factor:	0.013	N/A	N/A	N/A	N/A	N/A

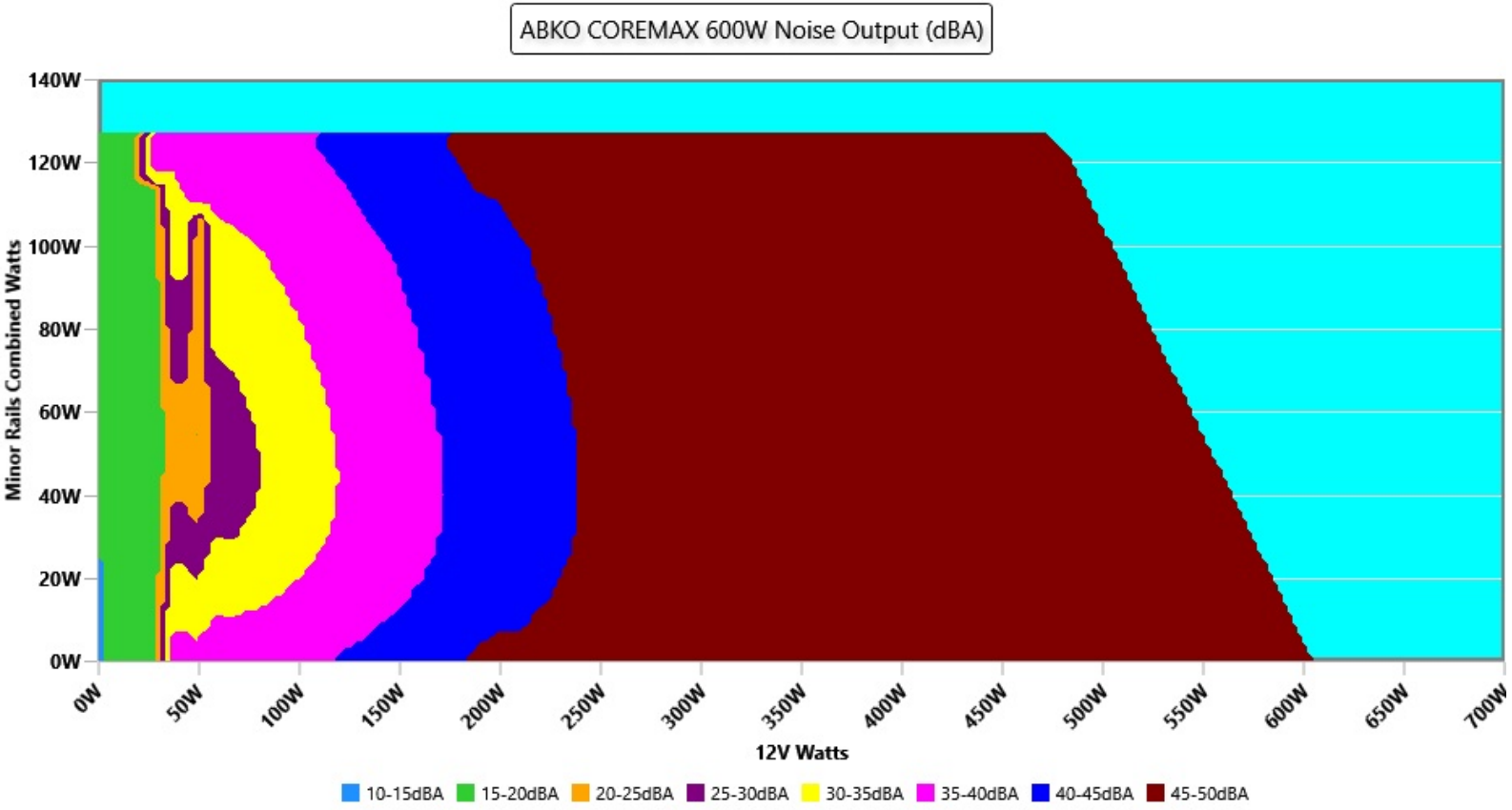
115V



□□

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

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

Noise under high ambient temperature (indicative)

115V

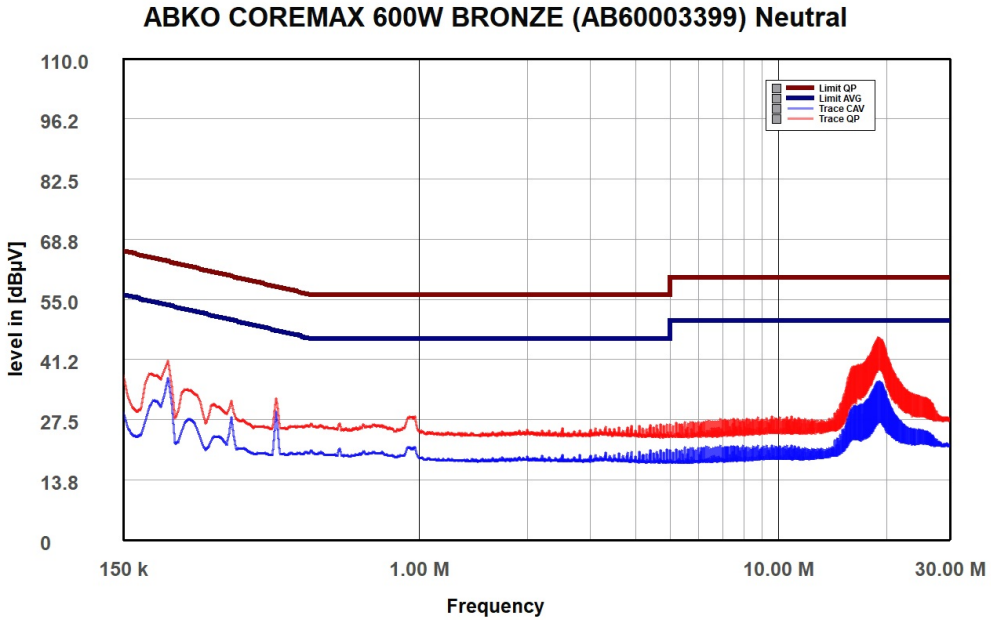
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	727 RPM · 16.5 dB(A) · 30.2 °C	733 RPM · 16.5 dB(A) · 34.1 °C	**+0.0 dB(A)**
20%	729 RPM · 16.5 dB(A) · 30.5 °C	739 RPM · 17.1 dB(A) · 34.9 °C	**+0.6 dB(A)**
50%	1661 RPM · 41.7 dB(A) · 30.8 °C	1828 RPM · 45.6 dB(A) · 36.1 °C	**+3.9 dB(A)**
100%	1832 RPM · 45.6 dB(A) · 30.1 °C	1839 RPM · 45.6 dB(A) · 39.7 °C	**+0.0 dB(A)**

INFO

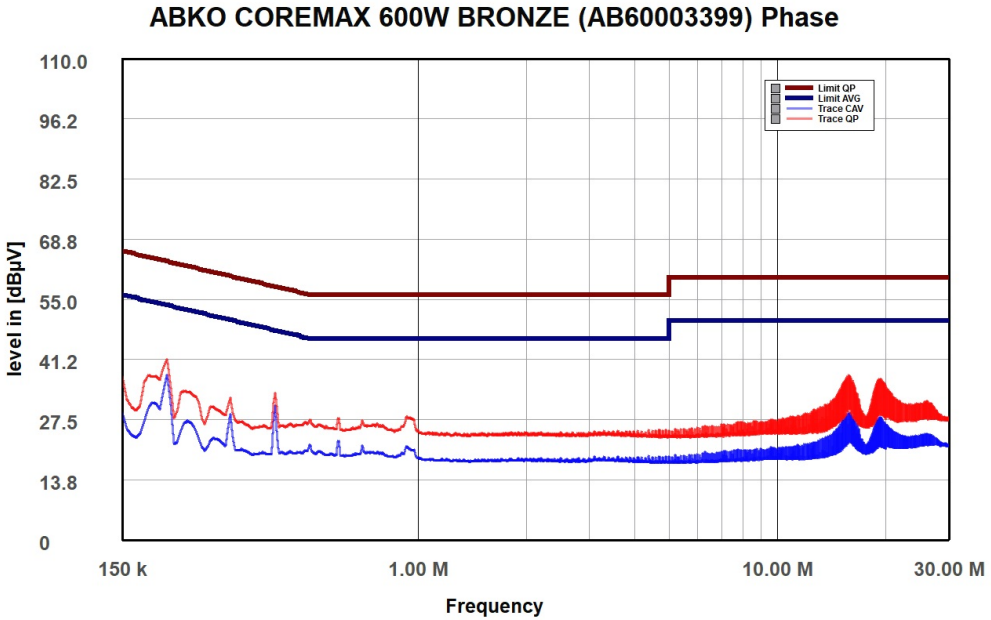
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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

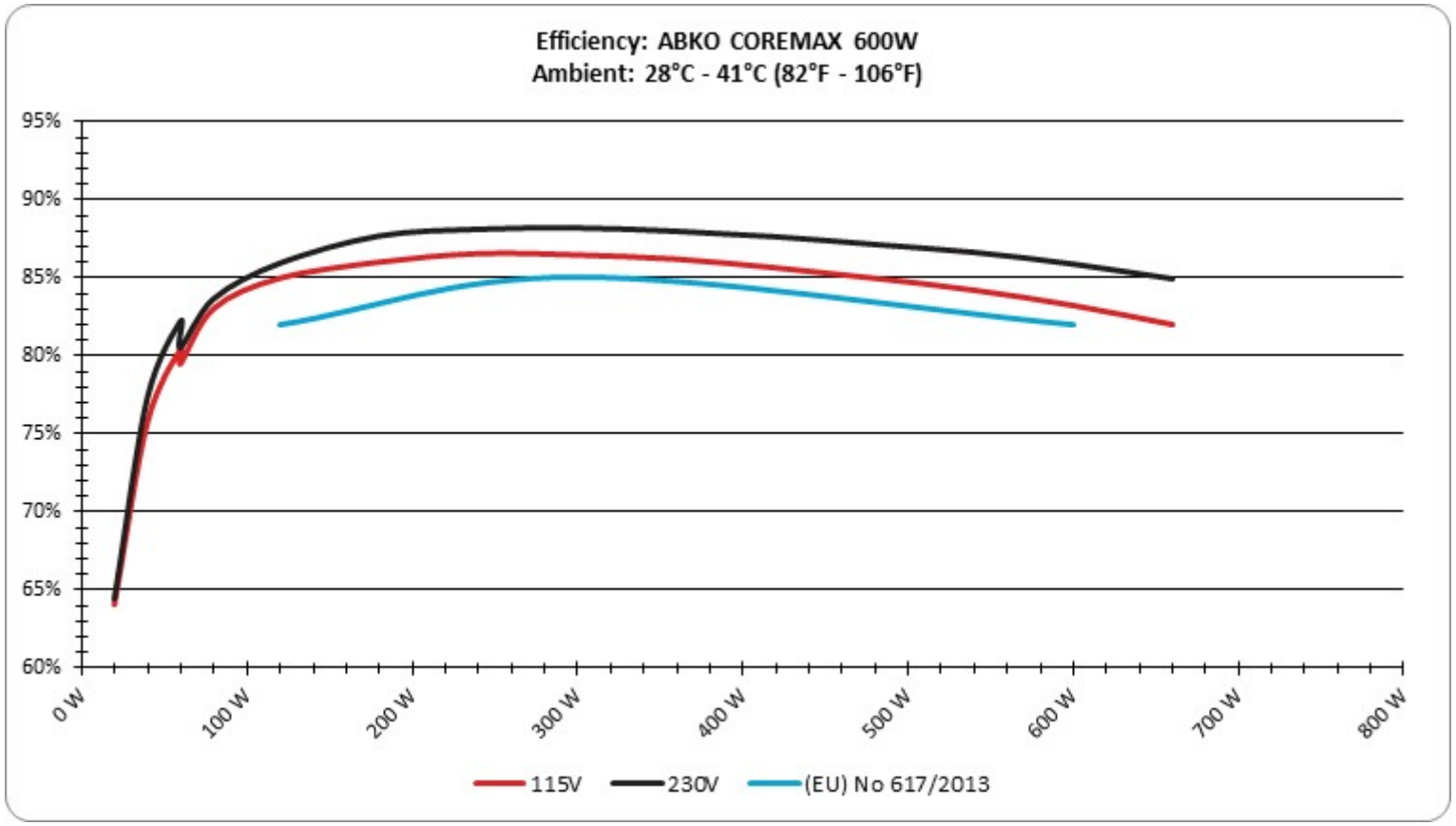


NEUTRAL



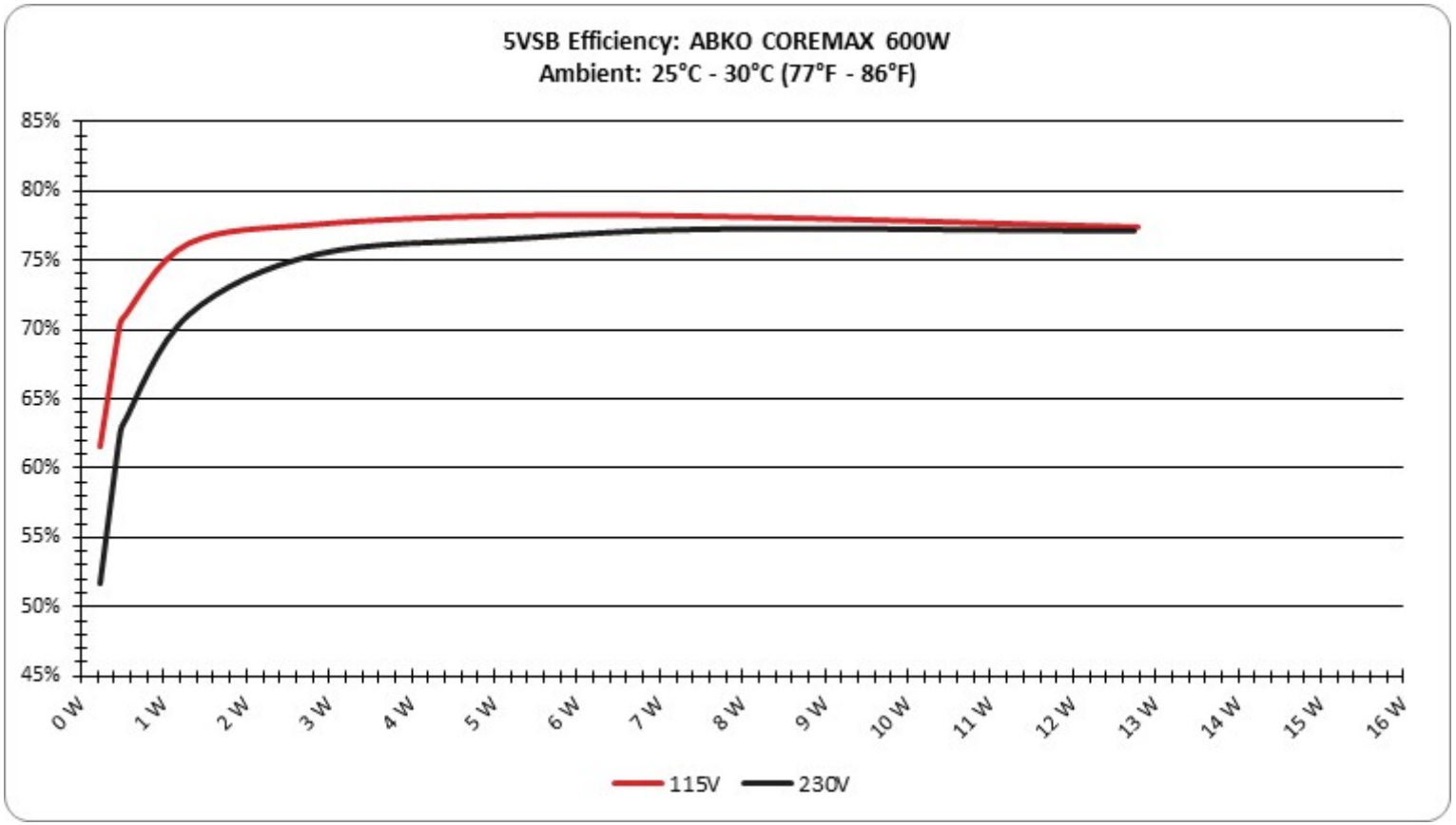
PHASE

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**	0.236W	61.573%	0.079
	5.241V	0.383W		114.96V

2	**0.09A**	0.472W	70.284%	0.133
	5.239V	0.671W		114.97V
3	**0.55A**	2.869W	77.588%	0.342
	5.214V	3.697W		114.93V
4	**1A**	5.193W	78.208%	0.382
	5.192V	6.64W		114.94V
5	**1.5A**	7.753W	78.144%	0.407
	5.167V	9.921W		114.95V
6	**2.501A**	12.791W	77.383%	0.436
	5.116V	16.53W		114.95V

Protection Features

OCP (Normal @ 27.6°C)	12V: 69.600A (139.20%), 11.409V — DID NOT SHUT DOWN 5V: 30.700A (153.50%), 5.042V — shut down 3.3V: 30.700A (153.50%), 3.316V — shut down 5VSB: 4.100A (164.00%), 4.958V — shut down
OCP (Hot @ 38.5°C)	12V: 67.700A (135.40%), 11.477V — DID NOT SHUT DOWN 5V: 30.300A (151.50%), 5.041V — shut down 3.3V: 30.400A (152.00%), 3.318V — shut down 5VSB: 4.100A (164.00%), 4.965V — shut down
OPP (Normal @ 28.3°C)	796.08W (132.68%) — shut down
OPP (Hot @ 39.5°C)	773.48W (128.91%) — shut down
OTP	✓ (152°C @ 12V Heatsink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Accurate but short
UVP (Typical Load @ 90V)	✓
UVP (No Damage @ 80V)	✓
Conducted Emissions EN 55032 & CISPR 32	✓
NLO	✓

Fan Failure Protection	✗
SIP	Surge: None Inrush: NTC

Supplementary Tests (For Reference)

10-110%□□□□ 115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	**3.132A**	**1.978A**	**1.96A**	**0.966A**	60.002	79.498%	733	16.5	34.12°C	0.947
	12.262V	5.056V	3.367V	5.179V	75.477				36.4°C	114.94V
20%	**7.266A**	**2.971A**	**2.945A**	**1.163A**	119.944	84.97%	739	17.1	34.94°C	0.973
	12.255V	5.05V	3.361V	5.162V	141.16				35.75°C	114.92V
30%	**11.753A**	**3.469A**	**3.441A**	**1.361A**	179.989	86.003%	1508	38.8	35.13°C	0.966
	12.246V	5.046V	3.356V	5.145V	209.282				36.71°C	114.9V
40%	**16.245A**	**3.968A**	**3.939A**	**1.56A**	240.033	86.549%	1691	42.1	35.85°C	0.971
	12.239V	5.042V	3.352V	5.128V	277.337				37.27°C	114.88V
50%	**20.394A**	**4.964A**	**4.93A**	**1.762A**	299.987	86.46%	1828	45.6	36.13°C	0.976
	12.232V	5.037V	3.347V	5.11V	346.964				40.33°C	114.85V
60%	**24.556A**	**5.963A**	**5.926A**	**1.965A**	360.011	86.191%	1834	45.6	36.8°C	0.979
	12.225V	5.032V	3.341V	5.091V	417.69				41.71°C	114.85V
70%	**28.685A**	**6.965A**	**6.925A**	**2.169A**	419.581	85.65%	1836	45.6	37.16°C	0.982
	12.218V	5.027V	3.336V	5.072V	489.881				44.31°C	114.82V
80%	**32.896A**	**7.966A**	**7.926A**	**2.273A**	479.58	84.978%	1839	45.6	37.76°C	0.985
	12.210V	5.021V	3.33V	5.061V	564.356				46.58°C	114.8V
90%	**37.442A**	**8.472A**	**8.416A**	**2.376A**	539.409	84.215%	1839	45.6	38.3°C	0.986
	12.203V	5.017V	3.326V	5.051V	640.511				48.77°C	114.78V
100%	**42.058A**	**8.978A**	**8.938A**	**2.48A**	600.116	83.227%	1839	45.6	39.67°C	0.988
	12.196V	5.012V	3.322V	5.04V	721.058				51.72°C	114.77V
110%	**46.293A**	**9.987A**	**10.037A**	**2.483A**	659.95	82.006%	1840	45.8	40.69°C	0.988
	12.186V	5.006V	3.317V	5.035V	804.757				55.24°C	114.76V

CL1	**0.114A**	**14.994A**	**14.89A**	**0.001A**	126.291	77.931%	1745	42.9	34.84°C	0.968
	12.247V	5.022V	3.331V	5.219V	162.054				40.24°C	114.92V
CL2	**0.114A**	**19.862A**	**0.001A**	**0.001A**	101.395	77.352%	1418	37.2	34.68°C	0.977
	12.255V	5.034V	3.355V	5.229V	131.082				37.2°C	114.93V
CL3	**0.114A**	**0.001A**	**19.766A**	**0.001A**	67.391	71.767%	1207	32.4	34.51°C	0.977
	12.255V	5.039V	3.339V	5.226V	93.902				39.93°C	114.94V
CL4	**49.178A**	**0.001A**	**0A**	**0A**	600.072	84.321%	1831	45.6	39.84°C	0.988
	12.202V	5.036V	3.346V	5.21V	711.652				43°C	114.77V

The results above are not used in the certification process

20-80□□□□ 115V

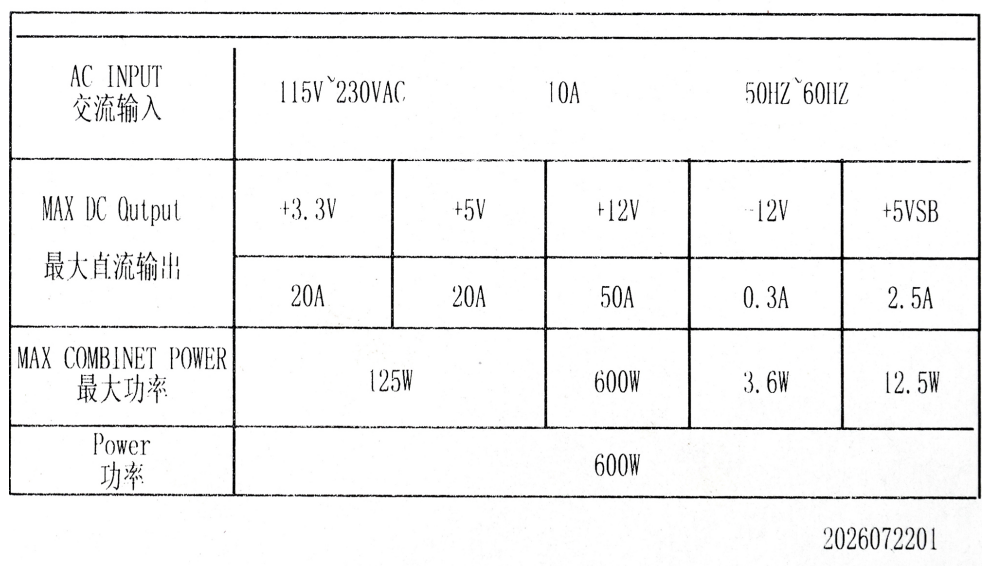
□□	**12V**	**5V**	**3.3V**	**5VSB**	**DC/AC (□)**	□□	□□□□ **(RPM)**	□□□□□□□ **(dB[A])**	□□ **(□□ /□□)**	**PF/AC □□**
20W	**1.210A**	**0.494A**	**0.489A**	**0.191A**	19.996	64.083%	713	16.0	30.45°C	0.913
	12.266V	5.061V	3.372V	5.229V	31.204				32.08°C	114.98V
40W	**2.666A**	**0.692A**	**0.685A**	**0.287A**	39.998	75.775%	717	16.0	31.11°C	0.959
	12.265V	5.06V	3.371V	5.223V	52.786				31.96°C	114.96V
60W	**4.120A**	**0.89A**	**0.882A**	**0.384A**	60.001	80.429%	726	16.5	32.25°C	0.946
	12.262V	5.057V	3.369V	5.215V	74.601				34.44°C	114.93V
80W	**5.573A**	**1.088A**	**1.078A**	**0.48A**	79.957	83.026%	729	16.5	28.3°C	0.981
	12.260V	5.057V	3.368V	5.208V	96.303				33.58°C	114.93V

The results above are not used in the certification process

□□□□ **115V**

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	18.37mV	18.87mV	11.55mV	21.81mV	Pass
20% Load	18.62mV	19.89mV	12.46mV	19.31mV	Pass
30% Load	22.24mV	20.40mV	13.38mV	19.77mV	Pass
40% Load	23.36mV	21.12mV	22.74mV	26.54mV	Pass
50% Load	26.56mV	22.60mV	15.56mV	20.07mV	Pass
60% Load	30.22mV	24.08mV	17.45mV	19.31mV	Pass









Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	38.42mV	25.76mV	18.77mV	19.31mV	Pass
80% Load	41.19mV	28.82mV	23.50mV	19.97mV	Pass
90% Load	45.13mV	31.37mV	24.92mV	20.99mV	Pass
100% Load	53.09mV	34.38mV	26.15mV	22.37mV	Pass
110% Load	56.09mV	37.19mV	28.79mV	22.72mV	Pass
Crossload1	21.63mV	31.01mV	26.60mV	21.20mV	Pass
Crossload2	23.66mV	39.23mV	21.77mV	22.11mV	Pass
Crossload3	25.44mV	19.49mV	26.80mV	16.35mV	Pass
Crossload4	50.29mV	29.64mV	19.94mV	17.12mV	Pass

The results above are not used in the certification process

ABKO COREMAX 600W BRONZE

Top side

Power specifications label

Fan

PSU Internals

本测试报告中包含的所有数据和图表均可在以下条件下由任何人使用：使用过程需提及测试结果由Cybenetics提供。Cybenetics 提供自愿性认证计划：电源方面有 ETA (效率)、LAMBDA (噪声) 与 SAFE (安全与正确运行)；散热产品方面有 DELTA (机箱隔音) 与 PHI (风扇风量与静压)

在任何情况下都应提供原始测试结果文档的网站链接