ABKO COREMAX 700W BRONZE

Serial Number -

Lab ID AB70003397

Certification ID 263397

Test Result Report ID: 26PS3397A

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 700W BRONZE
OEM/ODM	PREE
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	115-230
Rated Current (Arms)	10
Rated Frequency (Hz)	50-60

Rated Power (W)	700
Operating Temperature (Continuous Full Load) (°C)	0 - 40
Type	ATX12V
Cable Design	Fixed cables
Warranty	No Info
Cybenetics Measurements	
Dimensions (W x H x D)	150 x 85 x 140mm
Weight	1.25 kg (2.75 lb)
Cooling	120mm Sleeve Bearing Fan (W12025HZ12SEMA)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	AB70003397
Date of receipt	Jul 30, 2026
Testing Date	Aug 17, 2026
Report Issued Date	Sep 3, 2026
Engineer Name	Efstathios Papadopoulos
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors(Non-accredited measurements)

Captive Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	Cable Type
ATX connector 20+4 pin (520mm)	1	1	18AWG	Tinned Copper
4+4 pin EPS12V (630mm+150mm)	1	2	18AWG	Tinned Copper
6+2 pin PCIe (600mm)	2	2	18AWG	Tinned Copper
6+2 pin 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	✗

Power Specifications

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	20	20	58.4	2.5	0.3
	Watts	125		700	12.5	3.6
Total Max. Power (W)		700				

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 Guangdong Juxing GBU1008 (800V, 10A @ 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, 330uF, 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 6NX014
5V & 3.3V	DC-DC Converters: 4x AP70N03NF (30V, 51A @ 100°C, Rds(on): 5.5mOhm) PWM Controller(s): ANPEC APW7159C
Filtering Capacitors	 Electrolytic: 12x 12Kuang Jin (2-3,000 @ 105°C, GR) Polymer: 3x
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

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	✓
Conducted Emissions EN 55032 & CISPR 32	Passed

Performance Summary 115V

Accredited	
Average Efficiency (>1450 load combinations)	84.719%
Average Noise Output (>1450 Load Combinations)	43.51dBA
Average PF (>1450 Load Combinations)	0.976
Efficiency With 10W (≤500W) or 2% (>500W) Load	61.482%
Standby Power Consumption	0.0730W
Non-Accredited	

12V Ripple (Full Load)	86.91mV
5V Ripple (Full Load)	26.17mV
3.3V Ripple (Full Load)	27.16mV
5VSB Ripple (Full Load)	29.55mV
12V Load Regulation	0.31%
5V Load Regulation	0.96%
3.3V Load Regulation	0.93%
5VSB Load Regulation	2.45%
Inrush Current	71.230A

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	8.9
AC Loss to PWR_OK Hold Up Time (ms)	6.9
PWR_OK Inactive to DC Loss Delay (ms)	2

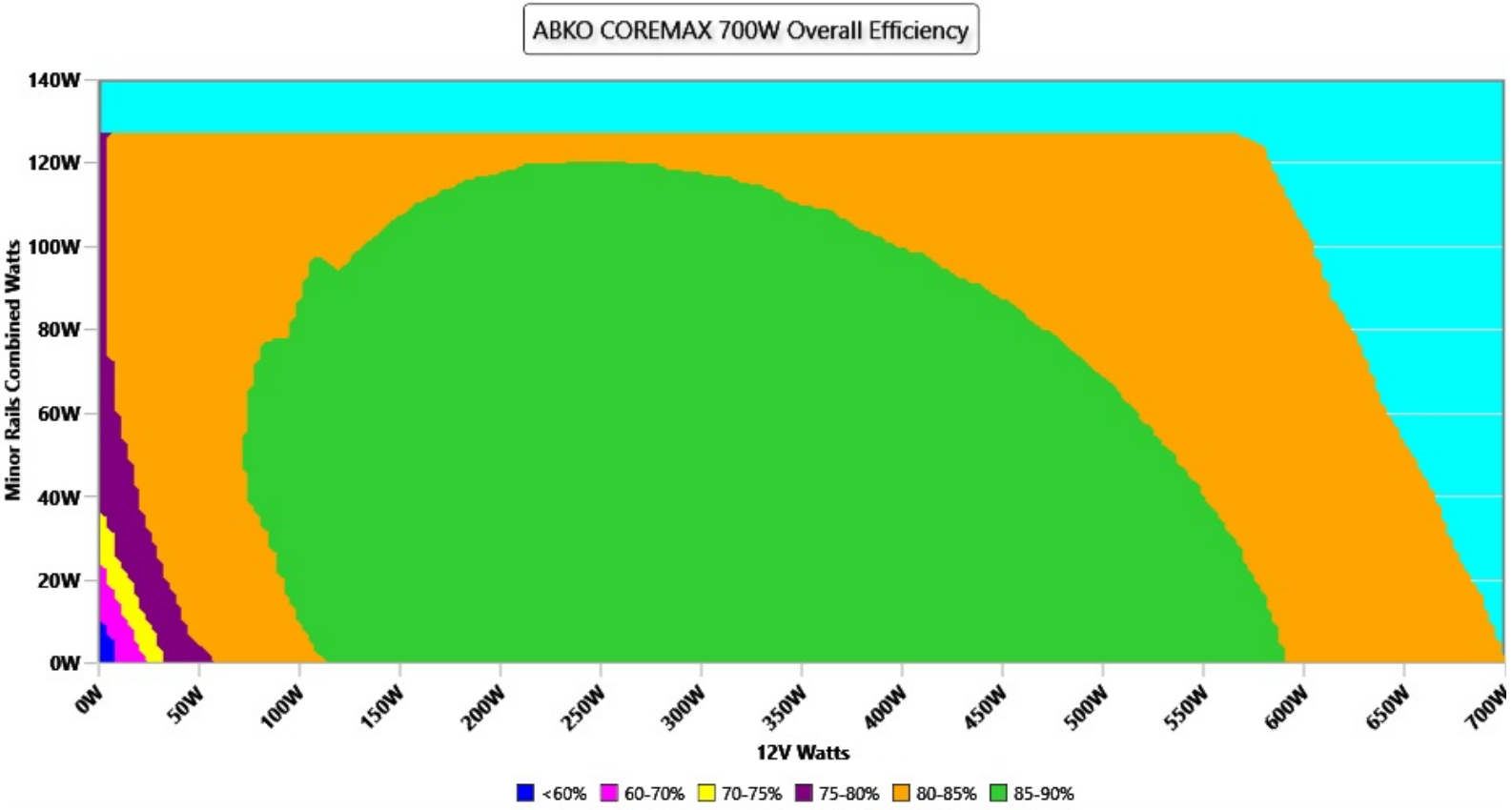
Vampire Power

Tables 115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.00 V	114.97 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	0.21 %	2.00 %	PASS
Real Power:	0.073 W	0.050 W	N/A	0.102 W	N/A	N/A
Apparent Power:	5.782 W	5.758 W	N/A	5.811 W	N/A	N/A
Power Factor:	0.011	N/A	N/A	N/A	N/A	N/A

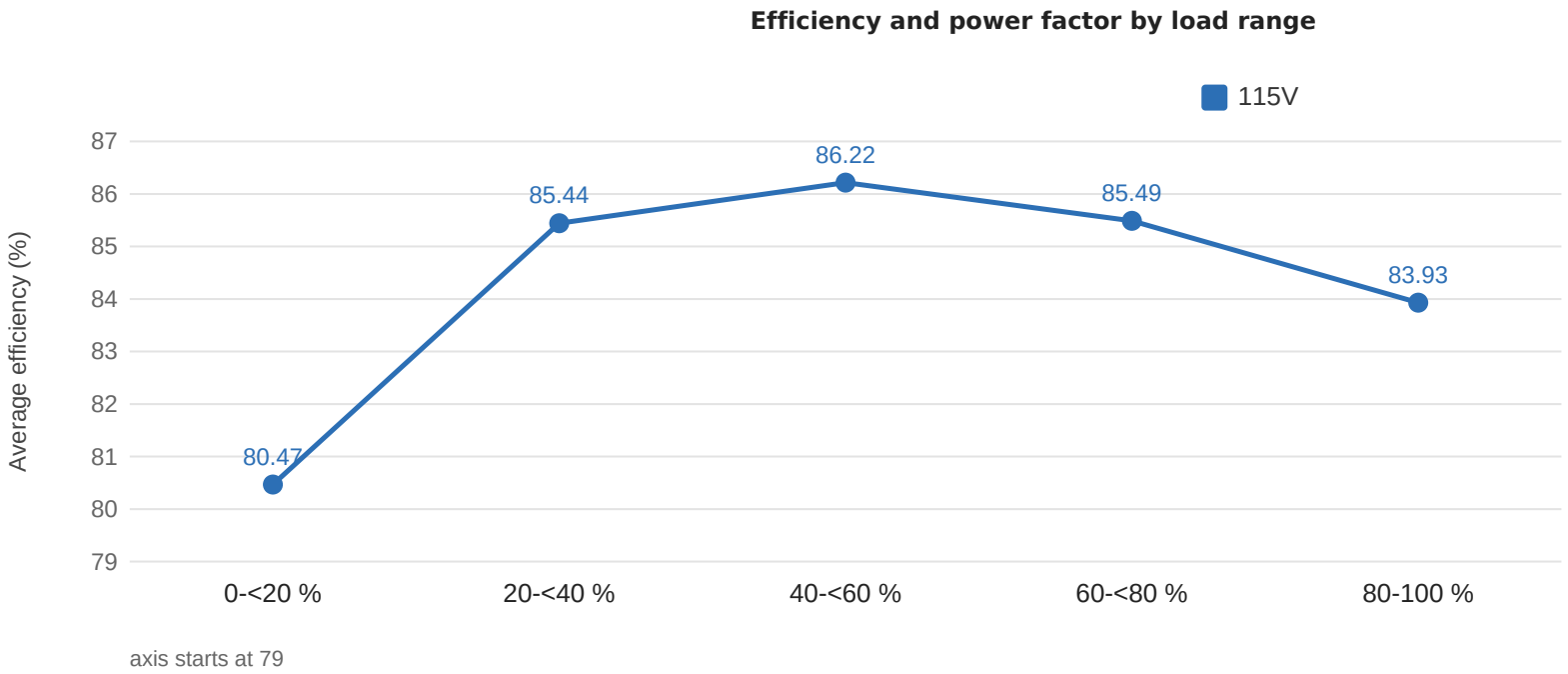
Efficiency Graph

115V

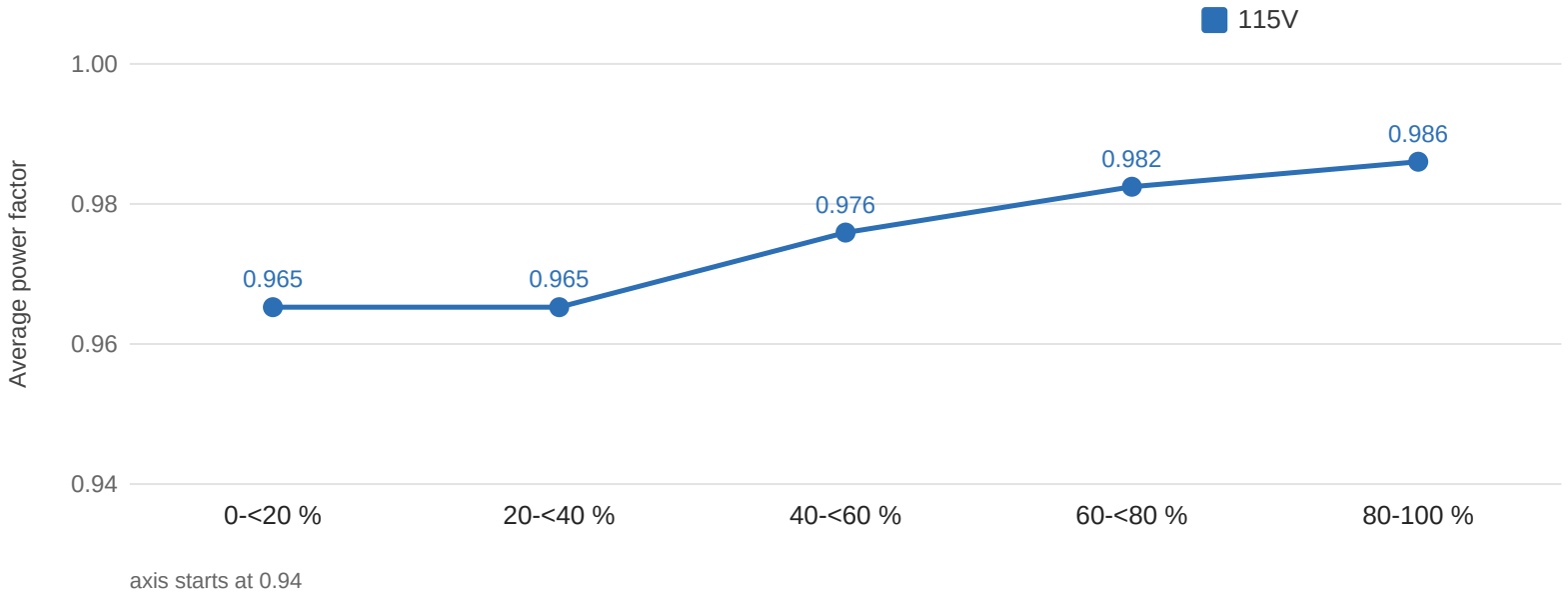


INFO

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



axis starts at 79



axis starts at 0.94

Load range	Points	Efficiency 115V	PF 115V
0-<20 %	185	80.47%	0.965
20-<40 %	362	85.44%	0.965
40-<60 %	361	86.22%	0.976
60-<80 %	362	85.49%	0.982
80-100 %	371	83.93%	0.986
70-100 % (High-Load)	551	84.35%	0.985
All (published average)	1641	84.72%	0.976

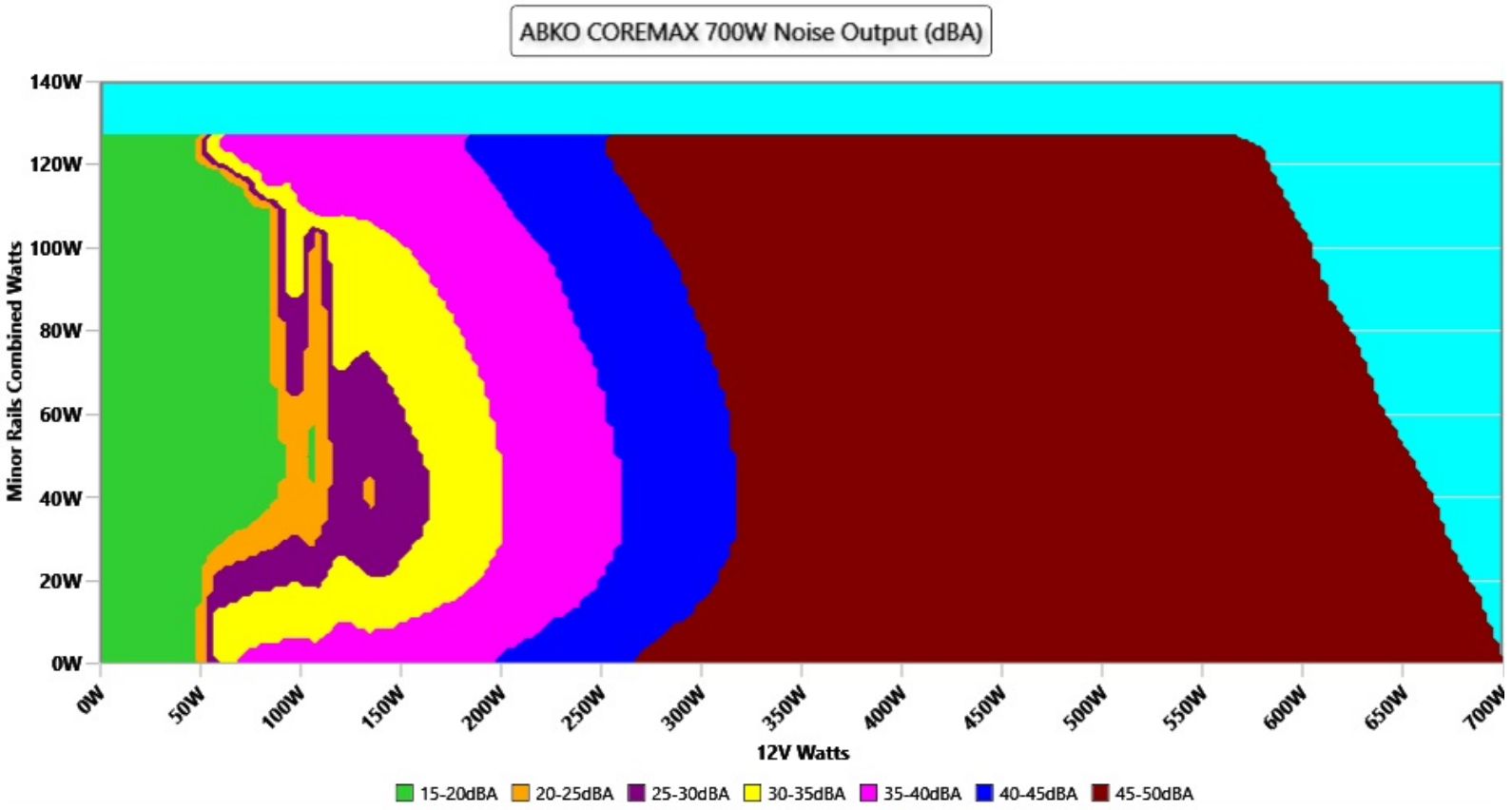
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1641 (115V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 700 W. These are plain averages of the valid readings, as for the ETA rating, so the ranges combined give back the published averages.

Informational. Not part of the ETA or LAMBDA rating.

Noise Graph

115V



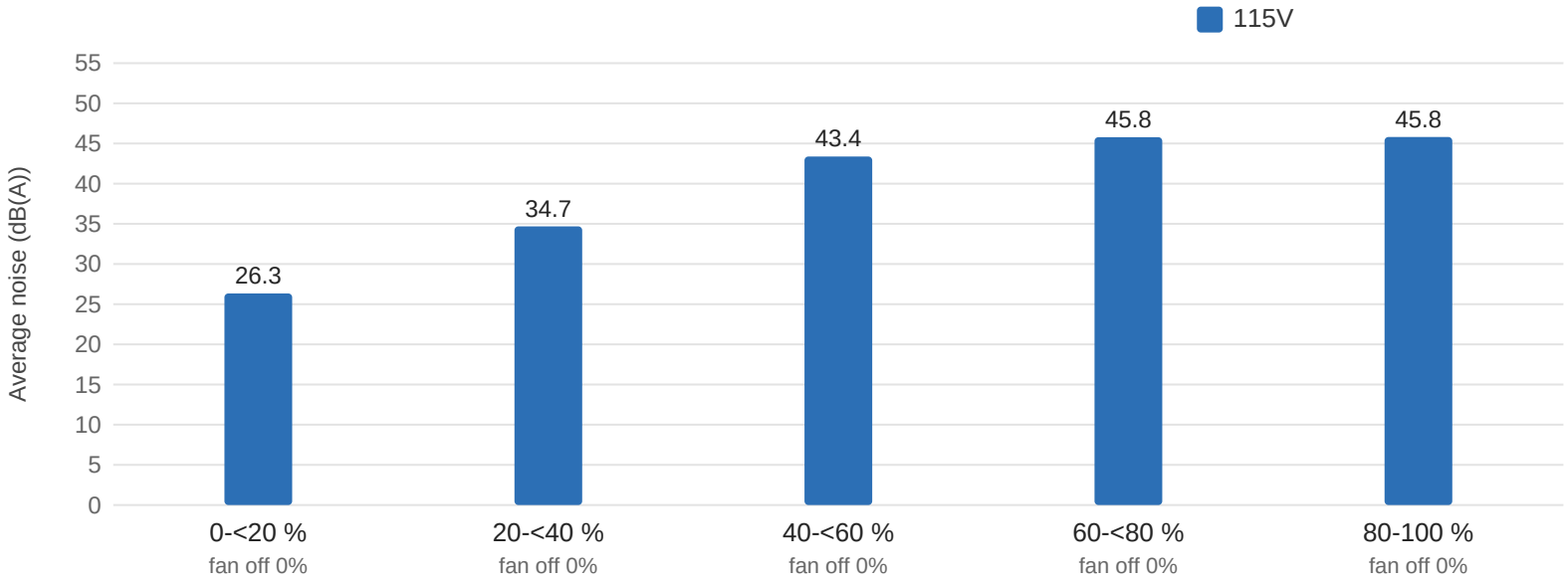
INFO

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

Noise by load range

High-Load Index (70-100 % load)
Noise **45.8 dB(A)** at 115V · loudest point 45.8 dB(A)

Efficiency 84.35% · power factor 0.985 (115V)



Load range	Noise 115V avg (loudest)	Fan off 115V
0-<20 %	26.3 (37.8)	0%
20-<40 %	34.7 (45.4)	0%
40-<60 %	43.4 (45.8)	0%
60-<80 %	45.8 (45.8)	0%
80-100 %	45.8 (45.8)	0%
70-100 % (High-Load)	45.8 (45.8)	0%
All (published average)	43.5 (45.8)	0%

INFO

The average noise in five ranges of load, the share of points with the fan stopped (semi-passive operation), and the High-Load Index: the same figures for all points at 70 % of the rated output and above. Calculated from the 1641 (115V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 700 W. Noise is averaged on the energy scale, as for LAMBDA, so the ranges combined give back the published average noise. Each load combination is held for about five seconds; the stabilized readings at fixed loads

are under "Noise under high ambient temperature".

Informational. Not part of the ETA or LAMBDA rating.

Noise under high ambient temperature (indicative)

115V

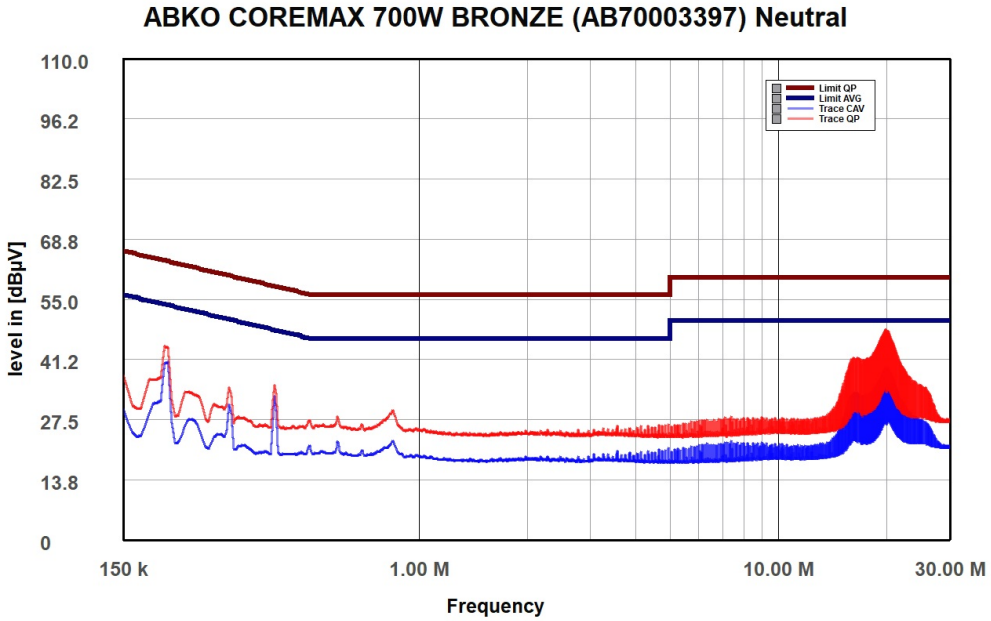
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	768 RPM · 17.9 dB(A) · 30.3 °C	747 RPM · 17.4 dB(A) · 34.1 °C	**-0.5 dB(A)**
20%	746 RPM · 17.1 dB(A) · 30.1 °C	754 RPM · 17.4 dB(A) · 34.9 °C	**+0.3 dB(A)**
50%	1550 RPM · 39.8 dB(A) · 29.1 °C	1856 RPM · 46.0 dB(A) · 36.4 °C	**+6.2 dB(A)**
100%	1853 RPM · 46.0 dB(A) · 30.8 °C	1872 RPM · 46.3 dB(A) · 39.5 °C	**+0.3 dB(A)**

INFO

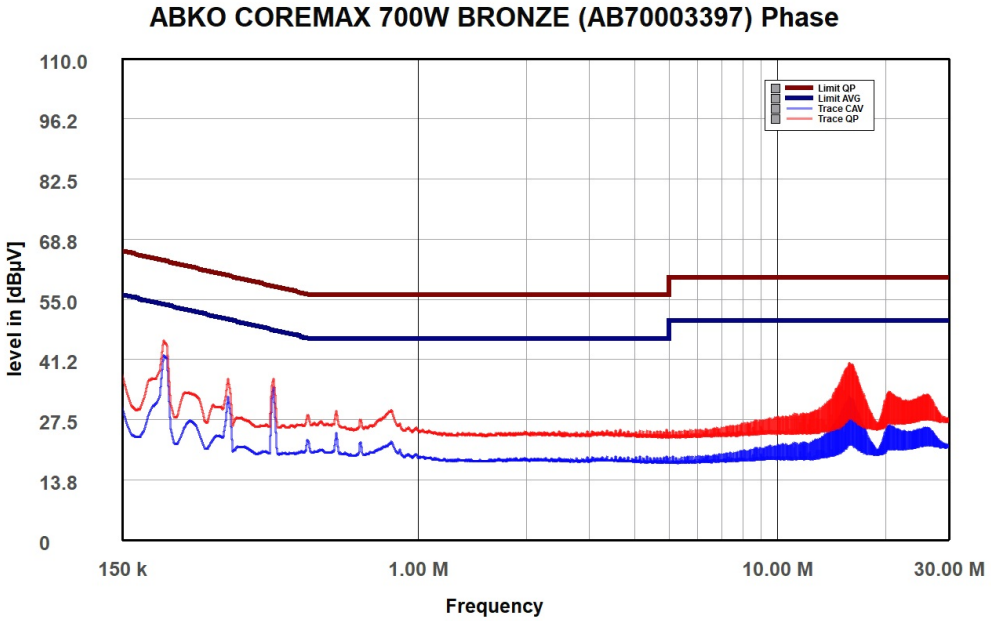
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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



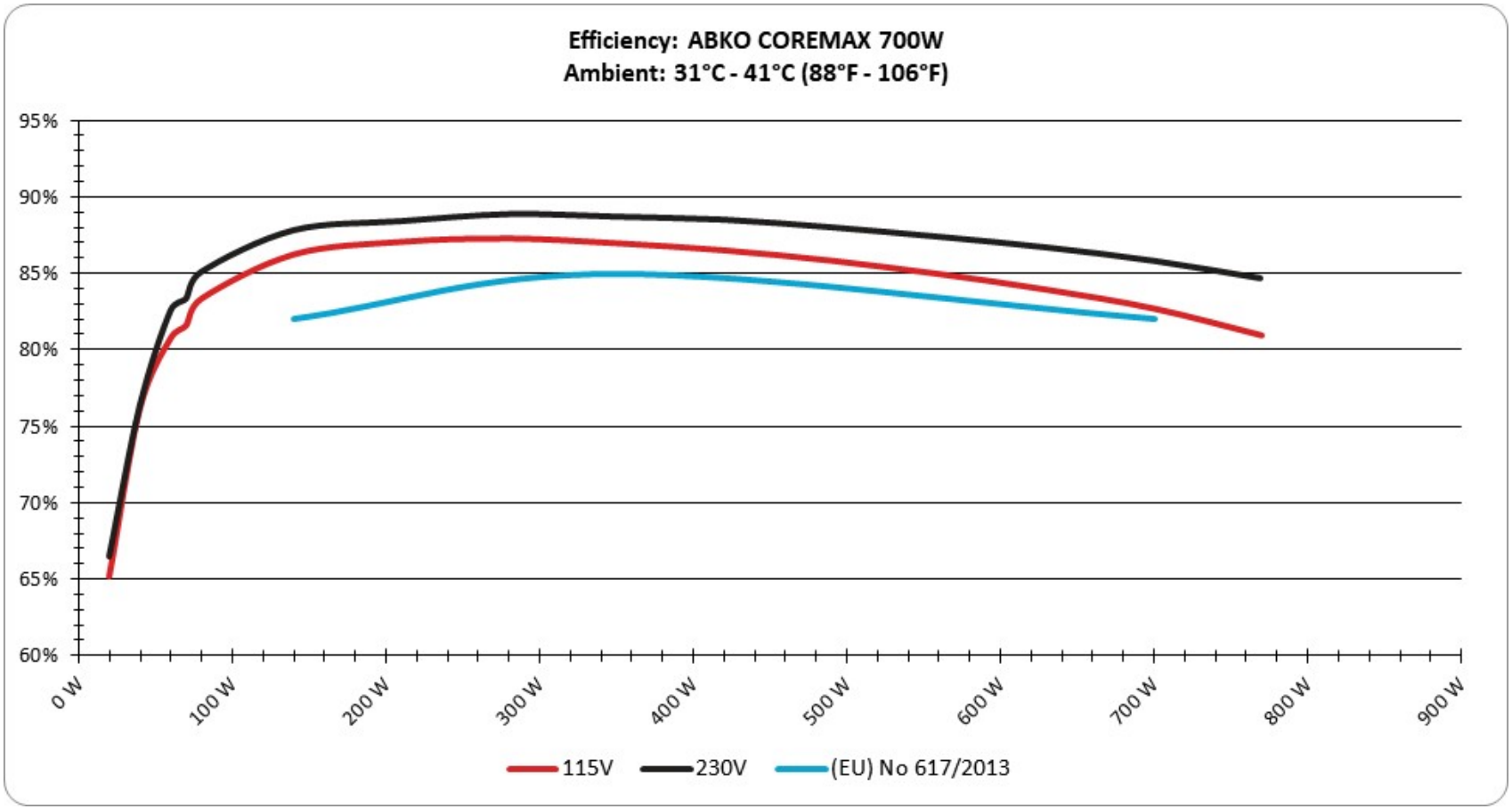
NEUTRAL



PHASE

Indicative Performance

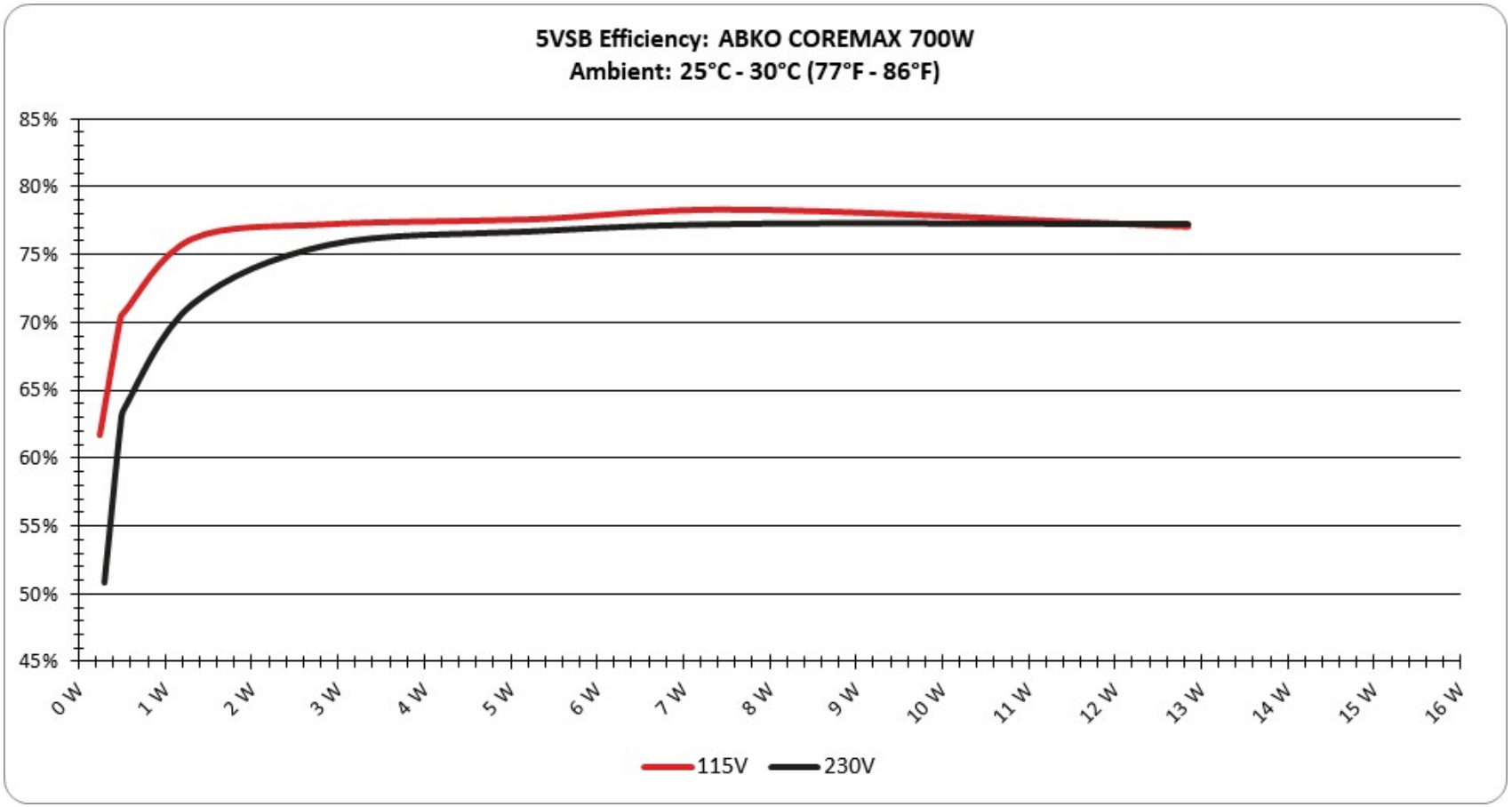
Efficiency under high ambient temperature



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**	0.237W	61.69%	0.079
	5.256V	0.384W		114.95V

2	**0.09A**	0.474W	70.246%	0.132
	5.254V	0.675W		114.95V
3	**0.55A**	2.879W	77.224%	0.343
	5.232V	3.728W		114.94V
4	**1A**	5.213W	77.583%	0.383
	5.212V	6.72W		114.95V
5	**1.5A**	7.786W	78.288%	0.408
	5.189V	9.946W		114.94V
6	**2.501A**	12.855W	77.051%	0.438
	5.141V	16.683W		114.94V

Protection Features

OCP (Normal @ 27.3°C)	12V: 72.100A (123.60%), 12.256V — DID NOT SHUT DOWN 5V: 30.500A (152.50%), 5.032V — shut down 3.3V: 30.900A (154.50%), 3.327V — shut down 5VSB: 4.200A (168.00%), 5.072V — shut down
OCP (Hot @ 36.9°C)	12V: 71.000A (121.71%), 12.260V — DID NOT SHUT DOWN 5V: 30.700A (153.50%), 5.033V — shut down 3.3V: 30.600A (153.00%), 3.328V — shut down 5VSB: 4.200A (168.00%), 5.071V — shut down
OPP (Normal @ 28.0°C)	801.34W (114.48%) — shut down
OPP (Hot @ 37.1°C)	821.21W (117.31%) — shut down
OTP	✓ (110°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)

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%	**3.932A**	**1.976A**	**1.961A**	**0.962A**	70.006	81.562%	747	17.4	34.11°C	0.958
	12.311V	5.062V	3.366V	5.2V	85.832				38.46°C	114.93V
20%	**8.860A**	**2.967A**	**2.944A**	**1.157A**	139.96	86.2%	754	17.4	34.87°C	0.965
	12.308V	5.057V	3.363V	5.189V	162.366				40.53°C	114.9V
30%	**14.138A**	**3.464A**	**3.439A**	**1.352A**	210.008	87.024%	1365	35.9	35.21°C	0.965
	12.304V	5.054V	3.359V	5.177V	241.322				41.17°C	114.87V
40%	**19.418A**	**3.961A**	**3.933A**	**1.549A**	280.057	87.243%	1599	40.6	35.73°C	0.971
	12.300V	5.05V	3.356V	5.166V	321.006				41.96°C	114.85V
50%	**24.356A**	**4.957A**	**4.921A**	**1.747A**	350.02	86.93%	1856	46.0	36.35°C	0.976
	12.297V	5.045V	3.353V	5.154V	402.643				45.65°C	114.83V
60%	**29.297A**	**5.954A**	**5.911A**	**1.945A**	419.979	86.473%	1871	46.3	36.64°C	0.98
	12.294V	5.04V	3.35V	5.142V	485.677				48.78°C	114.81V
70%	**34.254A**	**6.954A**	**6.904A**	**2.145A**	490.09	85.79%	1874	46.4	37.17°C	0.983
	12.290V	5.034V	3.346V	5.129V	571.268				51.05°C	114.79V
80%	**39.217A**	**7.955A**	**7.898A**	**2.246A**	559.716	84.924%	1871	46.3	37.66°C	0.985
	12.286V	5.029V	3.342V	5.122V	659.079				53.45°C	114.76V
90%	**44.574A**	**8.459A**	**8.381A**	**2.346A**	629.937	83.9%	1878	46.4	38.49°C	0.986
	12.281V	5.025V	3.34V	5.115V	750.816				58.94°C	114.74V
100%	**49.944A**	**8.963A**	**8.898A**	**2.448A**	700.271	82.656%	1872	46.3	39.53°C	0.986
	12.275V	5.021V	3.338V	5.107V	847.207				62.49°C	114.73V
110%	**54.933A**	**9.971A**	**9.987A**	**2.45A**	769.693	80.922%	1873	46.4	40.72°C	0.986
	12.267V	5.015V	3.334V	5.103V	951.158				68.69°C	114.74V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL1	**0.114A**	**15.029A**	**14.851A**	**0.001A**	126.307	78.073%	1825	45.6	35.13°C	0.968
	12.308V	5.01V	3.34V	5.225V	161.78				47.95°C	114.89V
CL2	**0.113A**	**19.964A**	**0.001A**	**0.001A**	101.404	77.259%	1513	38.8	32.84°C	0.977
	12.311V	5.009V	3.359V	5.232V	131.253				42.07°C	114.91V
CL3	**0.113A**	**0A**	**19.73A**	**0.001A**	67.394	72.931%	765	17.9	34.17°C	0.971
	12.310V	5.054V	3.345V	5.229V	92.407				40.25°C	114.93V
CL4	**57.011A**	**0A**	**0A**	**0.001A**	700.193	83.488%	1874	46.4	39.5°C	0.988
	12.281V	5.058V	3.356V	5.216V	838.673				56.63°C	114.72V

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	**1.206A**	**0.493A**	**0.49A**	**0.191A**	20.003	65.181%	683	14.8	30.62°C	0.907
	12.312V	5.069V	3.369V	5.232V	30.689				32.39°C	114.95V
40W	**2.655A**	**0.691A**	**0.686A**	**0.287A**	40.002	76.181%	715	16.0	31.5°C	0.958
	12.313V	5.068V	3.369V	5.228V	52.51				34.71°C	114.93V
60W	**4.104A**	**0.888A**	**0.882A**	**0.383A**	60.002	80.75%	734	16.5	32.25°C	0.944
	12.312V	5.067V	3.369V	5.224V	74.306				36.55°C	114.93V
80W	**5.550A**	**1.086A**	**1.078A**	**0.479A**	79.962	83.309%	744	17.1	33.26°C	0.977
	12.311V	5.066V	3.368V	5.219V	95.982				37.48°C	114.93V

The results above are not used in the certification process

Ripple Measurements 115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	18.57mV	15.66mV	12.26mV	25.88mV	Pass
20% Load	18.62mV	16.43mV	13.27mV	23.74mV	Pass
30% Load	21.17mV	16.58mV	14.44mV	24.30mV	Pass
40% Load	23.20mV	17.24mV	15.56mV	24.05mV	Pass
50% Load	26.92mV	18.57mV	17.04mV	24.76mV	Pass

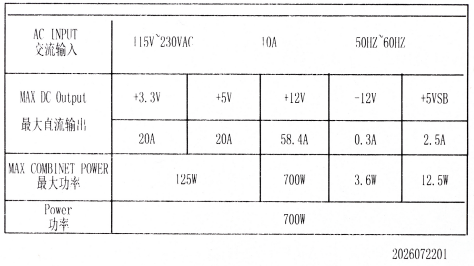
Test	12V	5V	3.3V	5VSB	Pass/Fail
60% Load	32.41mV	20.32mV	18.05mV	25.06mV	Pass
70% Load	41.47mV	20.91mV	19.48mV	25.52mV	Pass
80% Load	55.46mV	23.16mV	25.64mV	31.89mV	Pass
90% Load	70.32mV	24.18mV	27.16mV	28.43mV	Pass
100% Load	86.91mV	26.17mV	27.16mV	29.55mV	Pass
110% Load	114.94mV	29.33mV	28.64mV	31.07mV	Pass
Crossload1	34.90mV	26.22mV	25.68mV	33.52mV	Pass
Crossload2	23.56mV	24.94mV	18.72mV	26.59mV	Pass
Crossload3	23.00mV	17.04mV	26.70mV	18.95mV	Pass
Crossload4	86.35mV	24.99mV	19.94mV	25.37mV	Pass

The results above are not used in the certification process

ABKO COREMAX 700W BRONZE



Top side



Power specifications label



Fan



PSU Internals

All data and graphs included in this test report can be used by any individual on the following conditions:
› It should be mentioned that the test results are provided by Cybenetics
› The link to the original test results document should be provided in any case

Cybenetics runs voluntary certification programs for power supplies - ETA for efficiency, LAMBDA for noise and SAFE for safety and correct operation - and for cooling products, with DELTA for chassis soundproofing and PHI for fan airflow and static pressure. THETA rates cooler performance on AMD AM5 and Intel LGA1851 outside ISO 17065 and accreditation scope

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