MODECOM

Modecom Volcano HEX 850W

Serial Number -

Lab ID MO85002948

Certification ID 252948

Test Result Report ID: 25PS2948A

Certificate Issue Date: Sep 1, 2025

Scheme: ETA-EMI PSU

115V



230V



115V



230V



Scheme: LAMBDA PSU



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	Modecom
Model	Volcano HEX 850W
OEM/ODM	Jiumeng
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	6-12
Rated Frequency (Hz)	50-60
Rated Power (W)	850
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	140mm Fluid Dynamic Bearing Fan (HA1425M12F-Z)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	MO85002948
Date of receipt	Aug 13, 2025
Testing Date	Aug 29, 2025
Report Issued Date	Sep 1, 2025
DUT Notes	Inrush current was retested and updated on November 6, 2025.
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**	Cable Type
ATX connector 20+4 pin (600mm)	1	1	18AWG	Tinned Copper
4+4 pin EPS12V (700mm)	2	2	18AWG	Tinned Copper
6+2 pin PCIe (555mm+150mm)	2	4	18AWG	Tinned Copper
12+4 pin PCIe (560mm) (600W)	1	1	16-26AWG	Tinned Copper

SATA (500mm+145mm+145mm)	2	6	18AWG	Tinned Copper
4-pin Molex (500mm+150mm+150mm) / FDD (+150mm)	1	3 / 1	18-20AWG	Tinned Copper

Protection Features

Under Voltage Protection	✓
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	70	3	0.3
	Watts	100		840	15	3.6
Total Max. Power (W)		850				

Parts Description

General Data	
Manufacturer (OEM)	Huizhou Jiumeng Electronics Technology Co., Ltd
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor NTC10D-20 (10 Ohm @ 25°C) & Relay
Bridge Rectifier(s)	2x GBU1506 (600V, 15A @ 100°C)
APFC MOSFETs	2x Lonten LSD55R140GF (550V, 14.5A @ 100°C, Rds(on): 0.14Ohm)
APFC Boost Diode	Sanan SDS065J008C3 (650V, 8A @ 155°C)
Bulk Cap(s)	Rubycon (420V, 680uF, 2000h @ 105°C, MXE)
Main Switchers	2x Sanrise Tech SRC60R090BS (600V, 18.7A @ 125°C, Rds(on): 90mOhm)

APFC Controller	Texas Instrument UCC28180
Resonant Controller	EGmicro EG6599S
Topology	Primary side: APFC, Half-Bridge & LLC Resonant converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	6x Maple Semi SLM160N04G
5V & 3.3V	DC-DC Converters: 4x Nexperia PSMN2R4-30YLD (30V, 100A @ 25°C, Rds(on): 2.4mOhm) PWM Controller(s): Anpec APW7159C
Filtering Capacitors	Electrolytic: 6x Rubycon (4-10,000h @105°C, YXS) 3x Rubycon (6-10,000h @105°C, ZLH) Rubycon (2-10,000 @ 105°C, YXF) Polymer: 17x FPCAP
Synchronous Rectifier IC	Monolithic Power MP6924
Supervisor IC	Grenergy GR8313F (OVP, UVP, PG)
Fan Model	Hong Hua HA1425M12F-Z (140mm, 12V, 0.36A, Fluid Dynamic Bearing Fan)
5VSB	
Rectifier	SB1045L (45V, 10A)
Standby PWM Controller	Chipown PN8141

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)	89.641%
Average Noise Output (>1450 Load Combinations)	23.04dBA
Average PF (>1450 Load Combinations)	0.989
Efficiency With 10W (≤500W) or 2% (>500W) Load	67.817%
Standby Power Consumption	0.0375W
Non-Accredited	
12V Ripple (Full Load)	33.95mV
5V Ripple (Full Load)	16.55mV
3.3V Ripple (Full Load)	19.75mV
5VSB Ripple (Full Load)	18.36mV
12V Load Regulation	0.93%
5V Load Regulation	0.28%
3.3V Load Regulation	0.77%
5VSB Load Regulation	2.73%
Inrush Current	18.180A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.569%
Average Noise Output (>1450 Load Combinations)	22.64dBA
Average PF (>1450 Load Combinations)	0.941
Efficiency With 10W (≤500W) or 2% (>500W) Load	67.517%
Standby Power Consumption	0.0767W
Non-Accredited	
12V Ripple (Full Load)	34.01mV
5V Ripple (Full Load)	19.41mV
3.3V Ripple (Full Load)	21.40mV

5VSB Ripple (Full Load)		20.43mV
12V Load Regulation		0.90%
5V Load Regulation		0.42%
3.3V Load Regulation		1.05%
5VSB Load Regulation		2.71%
Inrush Current		33.030A
12V Transient Response (200%)		11.49V
5V Transient Response (200%)		4.973V
3.3V Transient Response (200%)		3.164V
5VSB Transient Response (200%)		4.975V
Hold-Up Time & PWR_OK Signal		19.40ms
AC Loss to PWR_OK Hold Up Time		16.80ms
PWR_OK Inactive to DC Loss Delay		2.60ms
PSU Timings: T1 (20% / 100%)	73.0ms	79.0ms
PSU Timings: T3 (20% / 100%)	119.0ms	120.0ms
12V OCP (29.6°C / 43.0°C)	102.80A (146.86%), 12.054V	92.60A (132.29%), 12.055V
5V OCP (29.6°C / 43.0°C)	27A (135.00%), 5.011V	25.6A (128.00%), 5.018V
3.3V OCP (29.6°C / 43.0°C)	24.7A (123.50%), 3.212V	23.7A (118.50%), 3.205V
5VSB OCP (29.6°C / 43.0°C)	4.9A (163.33%), 4.974V	4.8A (160.00%), 5.009V
OPP (29.90°C / 43.10°C)	143.90%	126.54%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	19.4
AC Loss to PWR_OK Hold Up Time (ms)	16.8
PWR_OK Inactive to DC Loss Delay (ms)	2.6

Vampire Power

Tables

115V

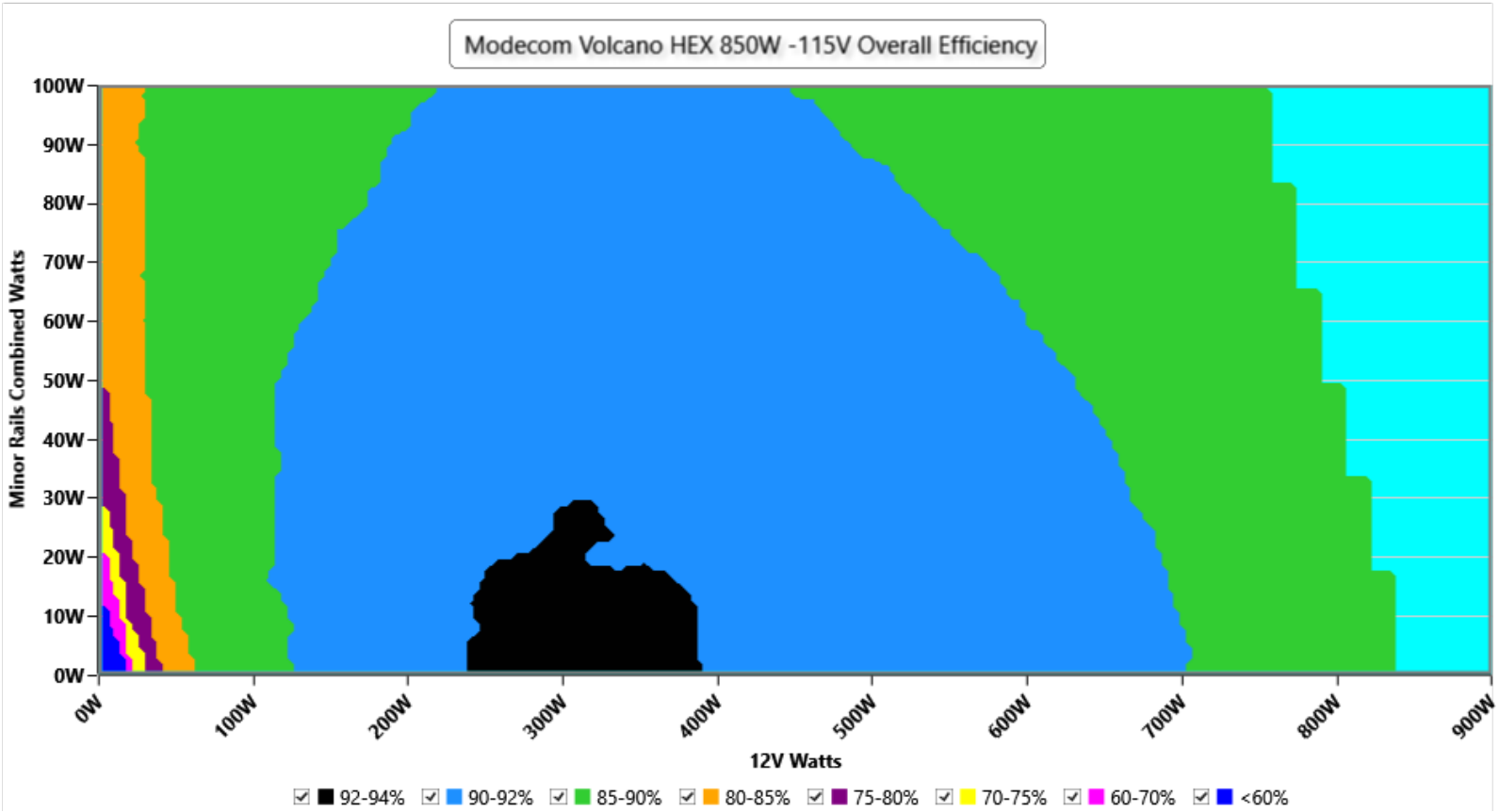
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.08 V	115.03 V	113.85 V	115.13 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.14 %	0.11 %	N/A	0.20 %	2.00 %	PASS
Real Power:	0.037 W	0.022 W	N/A	0.057 W	N/A	N/A
Apparent Power:	10.104 W	10.041 W	N/A	10.164 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:	231.05 V	230.92 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:	0.077 W	0.044 W	N/A	0.119 W	N/A	N/A
Apparent Power:	34.241 W	33.987 W	N/A	34.494 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

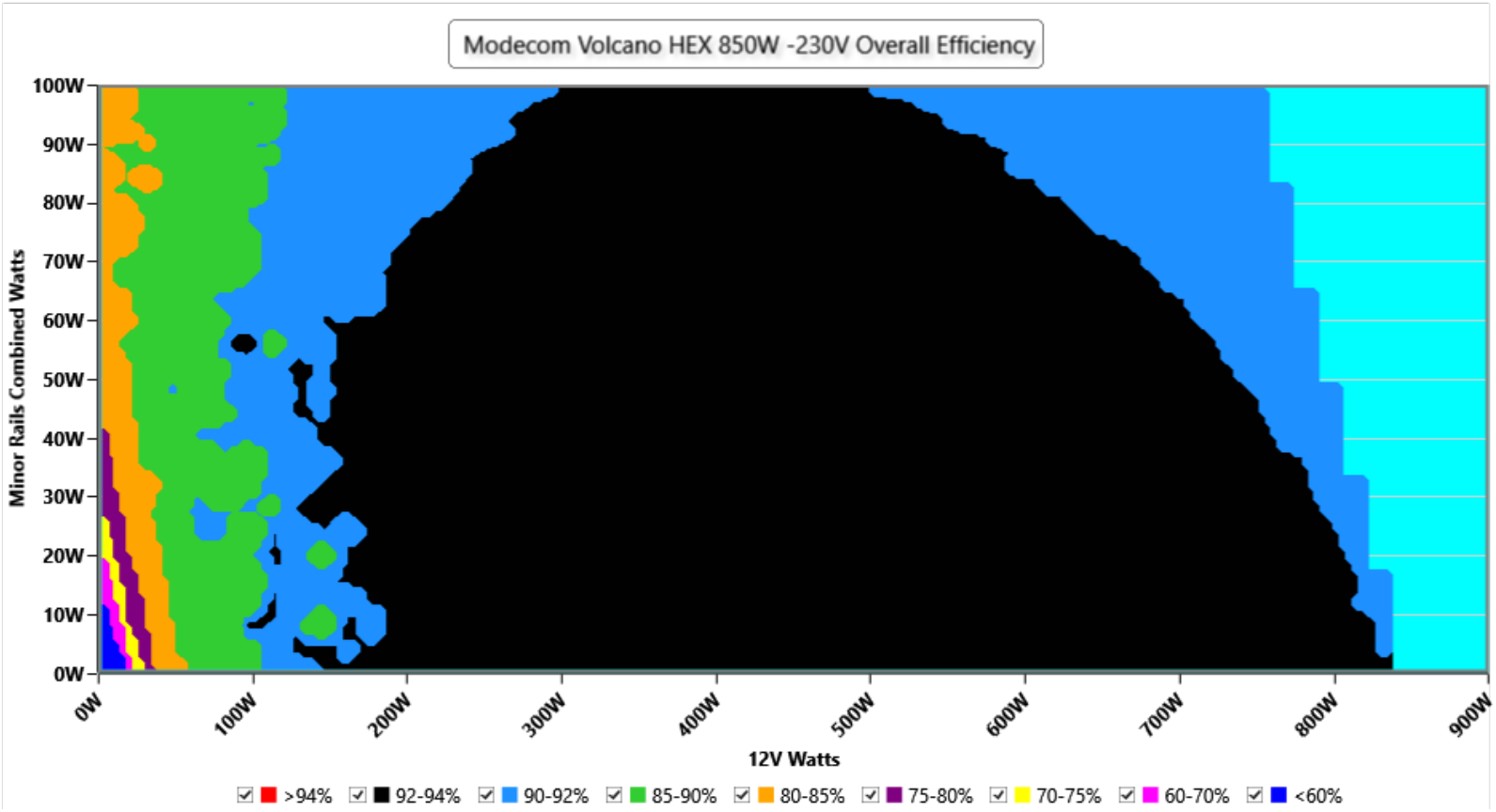
115V



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

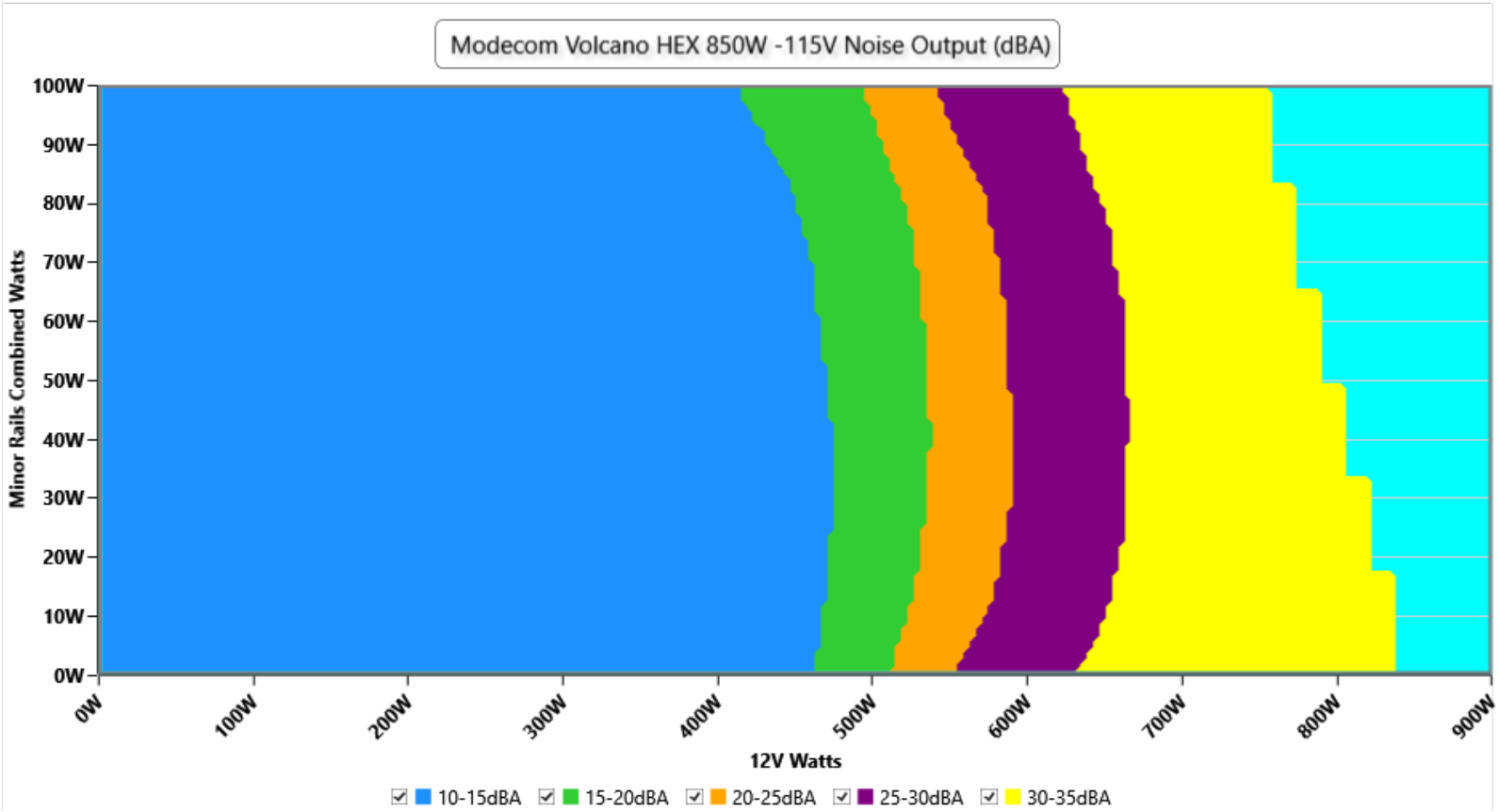


INFO

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

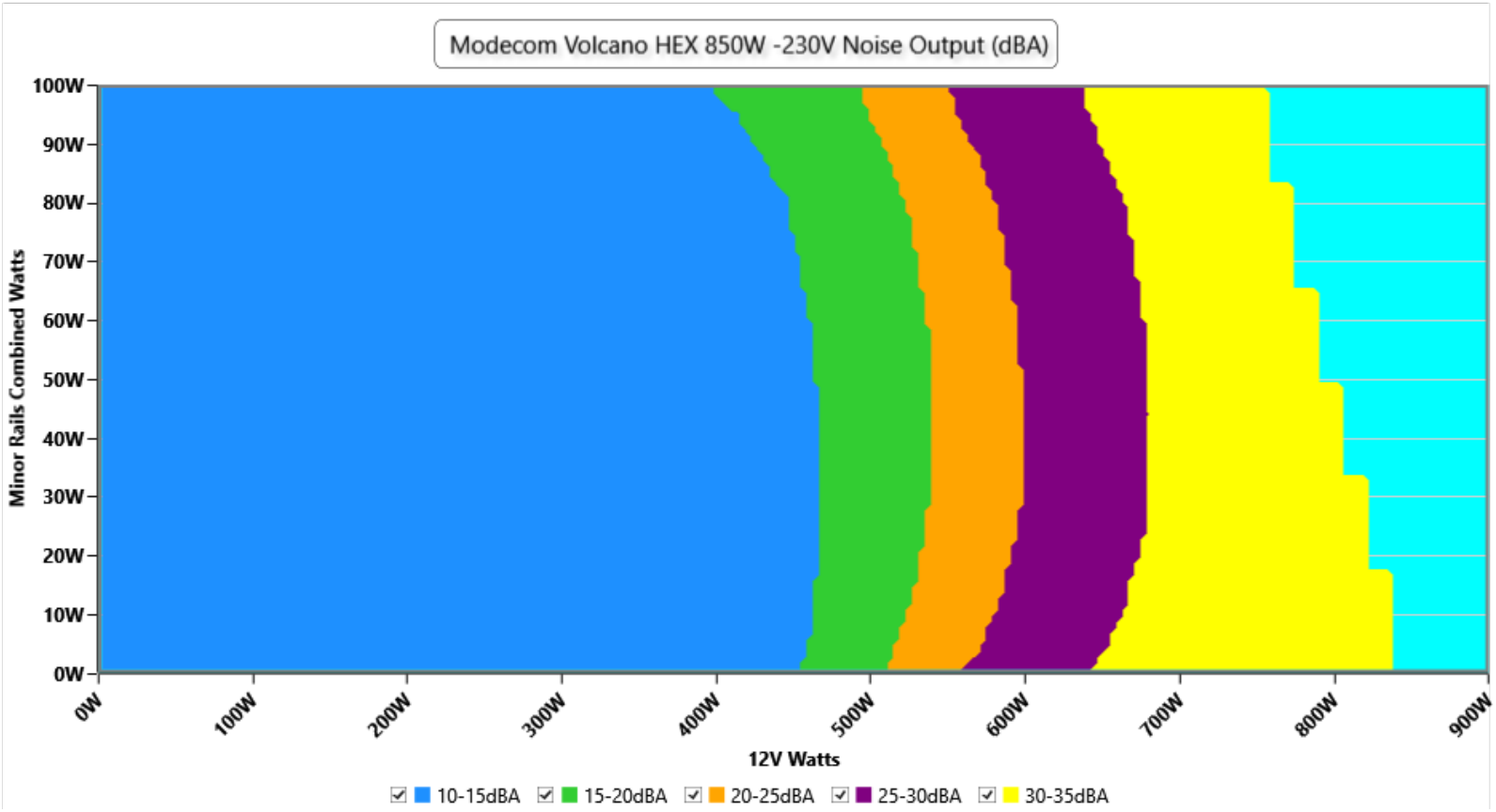
115V



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

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%	581 RPM · 12.3 dB(A) · 30.3 °C	601 RPM · 13.2 dB(A) · 40.2 °C	**+0.9 dB(A)**
20%	585 RPM · 12.5 dB(A) · 30.6 °C	604 RPM · 13.4 dB(A) · 40.8 °C	**+0.9 dB(A)**
50%	596 RPM · 12.9 dB(A) · 30.7 °C	628 RPM · 15.1 dB(A) · 42.2 °C	**+2.2 dB(A)**
100%	1087 RPM · 33.0 dB(A) · 30.5 °C	1336 RPM · 38.5 dB(A) · 45.1 °C	**+5.5 dB(A)**

230V

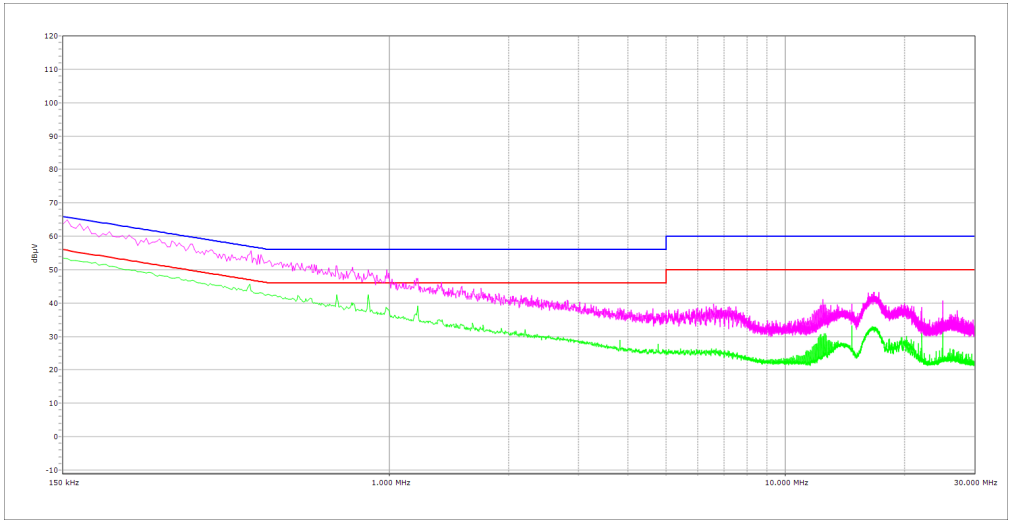
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	585 RPM · 12.5 dB(A) · 30.7 °C	607 RPM · 13.6 dB(A) · 40.2 °C	**+1.1 dB(A)**
20%	589 RPM · 12.7 dB(A) · 30.9 °C	610 RPM · 13.7 dB(A) · 40.8 °C	**+1.0 dB(A)**
50%	599 RPM · 13.1 dB(A) · 30.1 °C	658 RPM · 16.7 dB(A) · 42.5 °C	**+3.6 dB(A)**
100%	1092 RPM · 33.1 dB(A) · 30.4 °C	1357 RPM · 38.8 dB(A) · 45.2 °C	**+5.7 dB(A)**

INFO

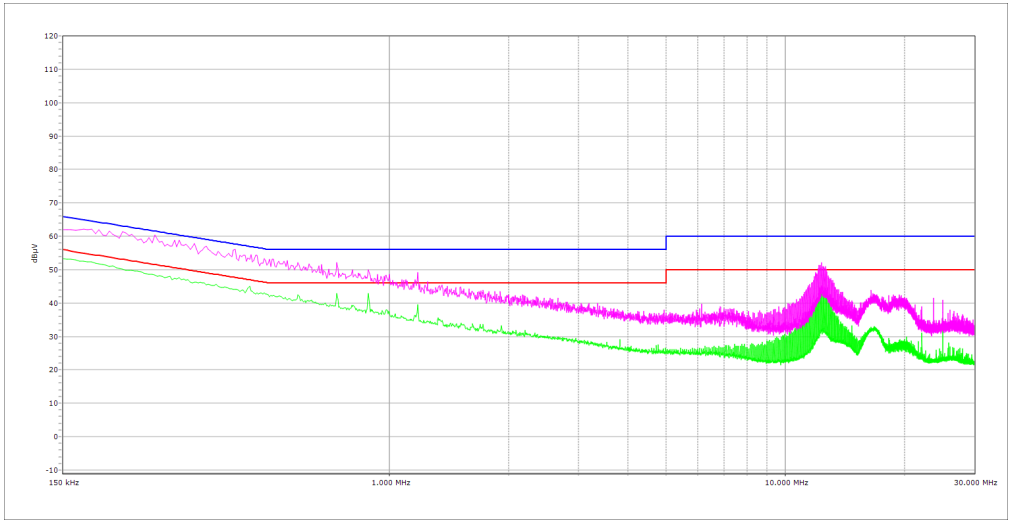
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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

Conducted Emissions EN 55032 & CISPR 32



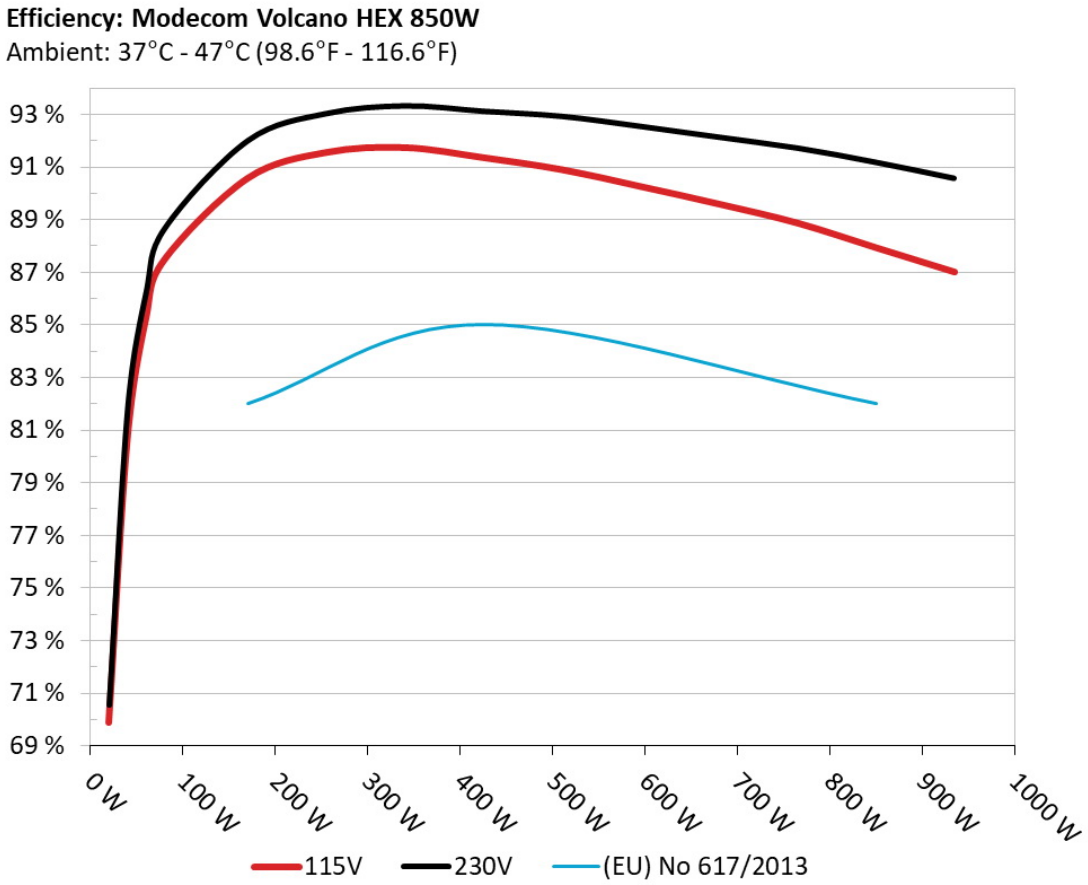
NEUTRAL



PHASE

Indicative Performance

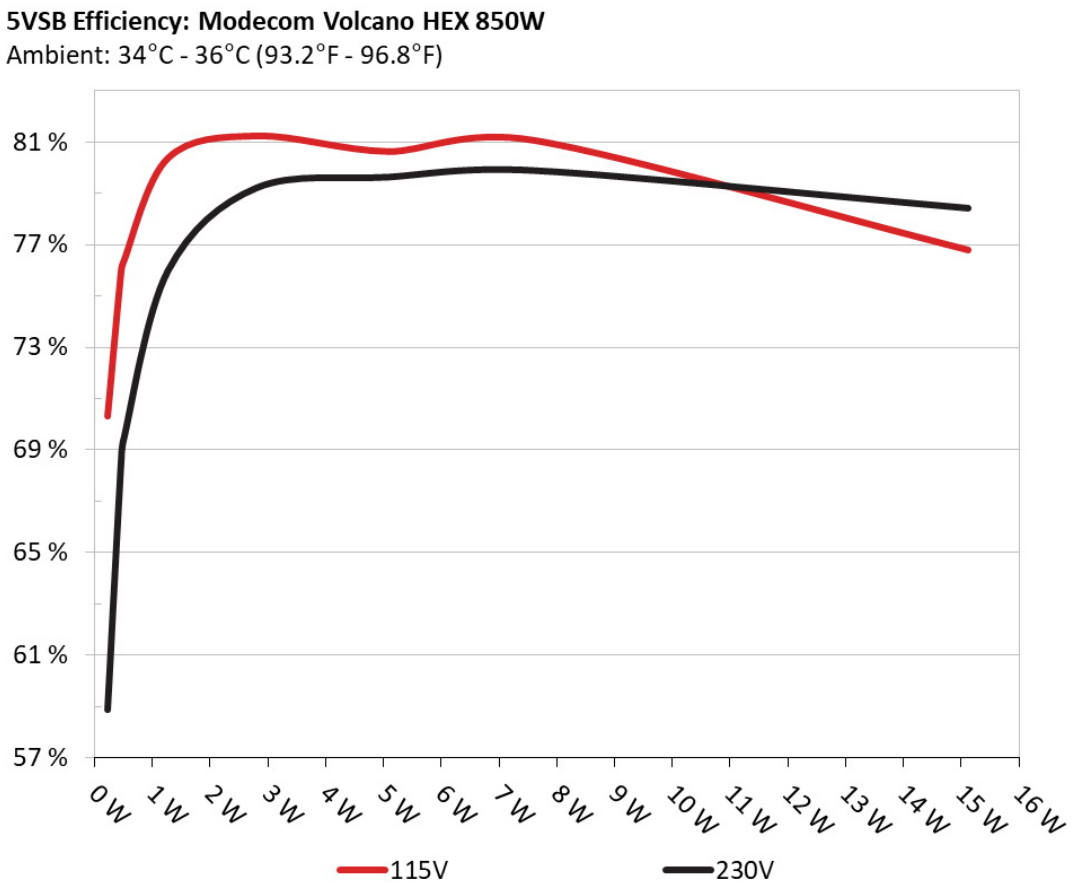
Efficiency under high ambient temperature



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**	0.231W	70.336%	0.031
	5.123V	0.328W		114.92V
2	**0.09A**	0.461W	75.895%	0.058
	5.122V	0.608W		114.9V
3	**0.55A**	2.811W	81.241%	0.27
	5.109V	3.46W		114.88V
4	**1A**	5.098W	80.634%	0.384
	5.097V	6.323W		114.87V
5	**1.5A**	7.628W	81.06%	0.446
	5.084V	9.41W		114.87V
6	**3A**	15.127W	76.804%	0.529
	5.042V	19.696W		114.86V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.231W	58.889%	0.012
	5.122V	0.393W		230.05V
2	**0.09A**	0.461W	68.432%	0.02
	5.121V	0.674W		230.05V
3	**0.55A**	2.81W	79.222%	0.103
	5.11V	3.548W		230.04V
4	**1A**	5.098W	79.643%	0.175
	5.098V	6.401W		230.04V
5	**1.5A**	7.628W	79.896%	0.238
	5.084V	9.547W		230.04V
6	**3A**	15.13W	78.43%	0.358
	5.043V	19.291W		230.04V

Protection Features

OCP (Normal @ 29.6°C)	12V: 102.8A (146.86%), 12.054V 5V: 27A (135%), 5.011V 3.3V: 24.7A (123.5%), 3.212V 5VSB: 4.9A (163.33%), 4.974V
OCP (Hot @ 43°C)	12V: 92.6A (132.29%), 12.055V 5V: 25.6A (128%), 5.018V 3.3V: 23.7A (118.5%), 3.205V 5VSB: 4.8A (160%), 5.009V
OPP (Normal @ 29.9°C)	1223.14W (143.9%)
OPP (Hot @ 43.1°C)	1075.62W (126.54%)
OTP	✓ (105°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)

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%	**5.228A**	**1.982A**	**2.018A**	**0.982A**	85.012	87.169%	601	13.2	40.22°C	0.973
	12.130V	5.046V	3.272V	5.093V	97.524				42.86°C	114.84V
20%	**11.475A**	**2.974A**	**3.029A**	**1.181A**	169.973	90.576%	604	13.4	40.79°C	0.981
	12.120V	5.045V	3.269V	5.081V	187.658				41.93°C	114.81V
30%	**18.073A**	**3.47A**	**3.536A**	**1.38A**	254.959	91.561%	600	13.1	41.12°C	0.987
	12.112V	5.043V	3.267V	5.071V	278.459				42.89°C	114.84V
40%	**24.696A**	**3.967A**	**4.043A**	**1.581A**	340.055	91.747%	609	13.7	41.68°C	0.991
	12.101V	5.042V	3.265V	5.06V	370.642				45.71°C	114.81V
50%	**30.971A**	**4.959A**	**5.058A**	**1.783A**	424.896	91.365%	628	15.1	42.15°C	0.993
	12.088V	5.042V	3.263V	5.047V	465.057				50.67°C	114.78V
60%	**37.240A**	**5.952A**	**6.074A**	**1.987A**	509.445	90.91%	846	25.4	42.67°C	0.995
	12.074V	5.041V	3.26V	5.035V	560.392				53.58°C	114.75V
70%	**43.574A**	**6.947A**	**7.094A**	**2.19A**	594.752	90.269%	1031	31.5	43.29°C	0.996
	12.063V	5.039V	3.257V	5.022V	658.866				55.05°C	114.71V
80%	**49.922A**	**7.939A**	**8.114A**	**2.295A**	679.572	89.601%	1156	34.7	43.78°C	0.996
	12.052V	5.038V	3.254V	5.012V	758.442				56.37°C	114.68V
90%	**56.676A**	**8.437A**	**8.611A**	**2.399A**	764.991	88.873%	1254	36.8	44.23°C	0.997
	12.042V	5.036V	3.252V	5.002V	860.773				57.77°C	114.65V
100%	**63.179A**	**8.936A**	**9.14A**	**3.012A**	849.797	87.938%	1336	38.5	45.06°C	0.997
	12.031V	5.035V	3.25V	4.981V	966.351				60.35°C	114.62V
110%	**69.569A**	**9.931A**	**10.258A**	**3.017A**	934.372	87.016%	1422	39.9	46.92°C	0.997
	12.019V	5.034V	3.247V	4.972V	1073.789				64.26°C	114.58V
CL1	**0.116A**	**11.947A**	**12.22A**	**0A**	101.289	82.769%	656	16.5	40.13°C	0.979
	12.115V	5.038V	3.249V	5.103V	122.378				50.46°C	114.9V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	**0.114A**	**19.832A**	**0A**	**0A**	101.348	82.078%	661	16.9	40.38°C	0.978
	12.119V	5.04V	3.272V	5.107V	123.472				48.56°C	114.89V
CL3	**0.114A**	**0A**	**20.383A**	**0A**	67.4	75.716%	647	16	41.85°C	0.965
	12.118V	5.046V	3.238V	5.106V	89.017				52.47°C	114.91V
CL4	**70.582A**	**0A**	**0A**	**0.001A**	849.57	88.911%	1357	38.8	45.34°C	0.997
	12.037V	5.048V	3.273V	5.055V	955.533				60.82°C	114.62V

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%	**5.228A**	**1.982A**	**2.018A**	**0.982A**	85.01	88.268%	607	13.6	40.18°C	0.746
	12.130V	5.045V	3.271V	5.093V	96.305				43.19°C	230.02V
20%	**11.475A**	**2.975A**	**3.031A**	**1.181A**	169.963	91.985%	610	13.7	40.81°C	0.852
	12.119V	5.043V	3.267V	5.081V	184.828				43.58°C	230V
30%	**18.080A**	**3.471A**	**3.538A**	**1.381A**	254.978	93.014%	616	14.1	41.17°C	0.938
	12.109V	5.042V	3.265V	5.07V	274.129				45.71°C	229.98V
40%	**24.703A**	**3.968A**	**4.046A**	**1.582A**	340.069	93.307%	621	14.5	41.52°C	0.973
	12.098V	5.041V	3.263V	5.058V	364.469				47.02°C	229.98V
50%	**30.977A**	**4.963A**	**5.064A**	**1.784A**	424.921	93.104%	658	16.7	42.48°C	0.98
	12.087V	5.038V	3.259V	5.046V	456.4				48.38°C	229.97V
60%	**37.238A**	**5.958A**	**6.084A**	**1.987A**	509.456	92.91%	867	26.1	42.56°C	0.983
	12.075V	5.036V	3.255V	5.034V	548.332				50.27°C	229.96V
70%	**43.573A**	**6.955A**	**7.108A**	**2.191A**	594.763	92.529%	1044	31.9	43.15°C	0.984
	12.063V	5.033V	3.251V	5.022V	642.777				51.29°C	229.95V
80%	**49.918A**	**7.95A**	**8.132A**	**2.295A**	679.576	92.118%	1164	34.8	43.66°C	0.985
	12.053V	5.03V	3.246V	5.012V	737.729				51.69°C	229.94V
90%	**56.671A**	**8.45A**	**8.632A**	**2.399A**	764.989	91.703%	1267	37.1	44.31°C	0.985
	12.043V	5.029V	3.244V	5.002V	834.199				53.15°C	229.93V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**63.177A**	**8.949A**	**9.164A**	**3.012A**	849.793	91.162%	1357	38.8	45.17°C	0.986
	12.031V	5.027V	3.241V	4.981V	932.175				55.28°C	229.92V
110%	**69.564A**	**9.948A**	**10.292A**	**3.017A**	934.358	90.556%	1427	40	46.29°C	0.986
	12.019V	5.025V	3.235V	4.972V	1031.8				57.49°C	229.9V
CL1	**0.116A**	**11.971A**	**12.271A**	**0A**	101.296	83.714%	728	20.5	41.8°C	0.769
	12.114V	5.028V	3.236V	5.103V	121.098				49.57°C	230.03V
CL2	**0.116A**	**19.899A**	**0A**	**0A**	101.352	83.135%	667	17.2	41.51°C	0.774
	12.118V	5.023V	3.272V	5.107V	122.042				47.35°C	230.03V
CL3	**0.114A**	**0A**	**20.541A**	**0A**	67.397	76.808%	628	15.1	41.18°C	0.731
	12.119V	5.046V	3.213V	5.106V	87.829				46.57°C	230.03V
CL4	**70.556A**	**0A**	**0A**	**0.001A**	849.561	92.078%	1318	38.1	45.35°C	0.986
	12.041V	5.047V	3.273V	5.057V	922.661				52.91°C	229.91V

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	**1.224A**	**0.495A**	**0.504A**	**0.195A**	20.005	69.892%	585	12.5	36.92°C	0.869
	12.143V	5.047V	3.275V	5.117V	28.623				37.97°C	114.88V
40W	**2.694A**	**0.693A**	**0.705A**	**0.293A**	40.006	80.656%	593	12.8	37.64°C	0.934
	12.138V	5.048V	3.275V	5.113V	49.603				38.22°C	114.87V
60W	**4.164A**	**0.891A**	**0.907A**	**0.392A**	60.007	85.236%	598	13	38.3°C	0.968
	12.134V	5.049V	3.275V	5.109V	70.399				39.86°C	114.86V
80W	**5.633A**	**1.089A**	**1.109A**	**0.49A**	79.964	87.476%	600	13.1	39.11°C	0.967
	12.132V	5.049V	3.275V	5.105V	91.411				40.67°C	114.85V

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	**1.224A**	**0.495A**	**0.504A**	**0.195A**	20.02	70.53%	596	12.9	36.83°C	0.531
	12.139V	5.048V	3.275V	5.116V	28.38				40.85°C	230.01V
40W	**2.694A**	**0.693A**	**0.705A**	**0.293A**	40.011	81.801%	599	13.1	37.36°C	0.694
	12.136V	5.048V	3.275V	5.113V	48.92				41.08°C	230.03V
60W	**4.165A**	**0.892A**	**0.907A**	**0.391A**	60.008	86.227%	601	13.2	38.53°C	0.771
	12.134V	5.048V	3.274V	5.109V	69.591				41.51°C	230.03V
80W	**5.632A**	**1.09A**	**1.109A**	**0.49A**	79.963	88.645%	602	13.3	39.36°C	0.681
	12.131V	5.048V	3.274V	5.105V	90.328				41.7°C	230.02V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	14.33mV	12.26mV	11.10mV	8.80mV	Pass
20% Load	16.83mV	12.41mV	11.97mV	9.21mV	Pass
30% Load	17.96mV	13.39mV	13.04mV	10.13mV	Pass
40% Load	20.41mV	13.95mV	13.20mV	11.25mV	Pass
50% Load	23.12mV	14.15mV	14.07mV	12.02mV	Pass
60% Load	25.73mV	15.43mV	15.04mV	12.79mV	Pass
70% Load	27.01mV	15.94mV	15.50mV	14.53mV	Pass
80% Load	28.75mV	16.25mV	19.39mV	15.81mV	Pass
90% Load	31.97mV	17.58mV	19.64mV	16.57mV	Pass
100% Load	33.95mV	16.55mV	19.75mV	18.36mV	Pass
110% Load	36.67mV	17.44mV	22.63mV	19.26mV	Pass
Crossload1	15.35mV	13.15mV	14.08mV	8.77mV	Pass
Crossload2	16.73mV	17.06mV	11.72mV	9.26mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	15.50mV	11.85mV	17.60mV	9.51mV	Pass
Crossload4	34.85mV	16.49mV	17.59mV	15.55mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	18.57mV	11.95mV	10.95mV	8.85mV	Pass
20% Load	20.05mV	12.26mV	11.87mV	9.77mV	Pass
30% Load	19.14mV	12.67mV	12.07mV	10.90mV	Pass
40% Load	22.25mV	13.18mV	13.04mV	11.26mV	Pass
50% Load	23.63mV	15.07mV	14.07mV	12.48mV	Pass
60% Load	25.79mV	15.48mV	14.79mV	13.66mV	Pass
70% Load	27.78mV	15.17mV	16.06mV	15.35mV	Pass
80% Load	29.88mV	16.60mV	19.39mV	16.93mV	Pass
90% Load	32.49mV	17.17mV	19.85mV	18.93mV	Pass
100% Load	34.01mV	19.41mV	21.40mV	20.43mV	Pass
110% Load	36.32mV	17.56mV	21.38mV	20.59mV	Pass
Crossload1	20.00mV	12.90mV	14.62mV	8.86mV	Pass
Crossload2	21.49mV	16.40mV	12.12mV	9.26mV	Pass
Crossload3	19.34mV	11.75mV	16.27mV	9.00mV	Pass
Crossload4	34.24mV	15.73mV	17.57mV	16.55mV	Pass

The results above are not used in the certification process

Modecom Volcano HEX 850W



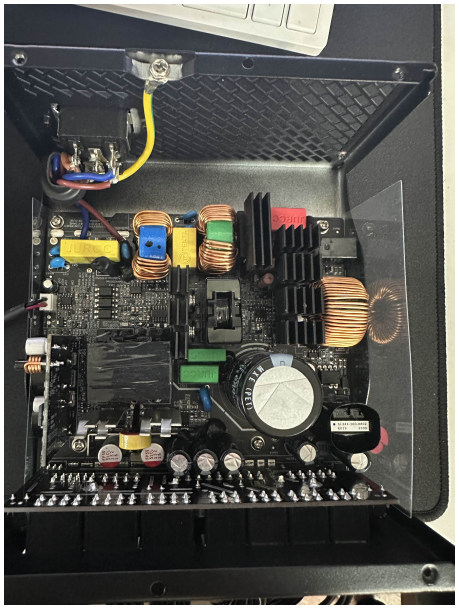
Top side

AC INPUT	100-240Vac		12-6A		50-60Hz
DC Output	+5V	+3.3V	+12V	-12V	+5VSB
Max.output current	20.0A	20.0A	70.0A	0.3A	3.0A
Max.Combined power	100.0W		840.0W	3.6W	15.0W
Total Power	850W Gold				
Date	2025-08-04				

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

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com