CORSAIR

# Corsair RM1000e (ATX v3.1)

Serial Number A9DAF4420003AV

Lab ID CR10002624

Certification ID 252624

Test Result Report ID: 24PS2624A

Certificate Issue Date: Nov 1, 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<br>Chroma 63600-2<br>Chroma 63640-80-80 x10<br>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 | Corsair |
| Model | RM1000e (ATX v3.1) |
| OEM/ODM | HEC |
| Serial Number | A9DAF4420003AV |
| Product Specifications | |
| Manufacturer-Provided Information | |
| Rated Voltage (Vrms) | 100-240 |

| | |
|---|---|
| Rated Current (Arms) | 6-12 |
| Rated Frequency (Hz) | 47-63 |
| 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 | 120mm Rifle Bearing Fan (HA1225H12SF-Z) |
| Semi-Passive Operation | ✓ |
| Cybenetics Testing Information | |
| Lab ID | CR10002624 |
| Date of receipt | Oct 22, 2024 |
| Testing Date | Oct 31, 2024 |
| Report Issued Date | Nov 1, 2024 |
| DUT Notes | The results apply to both the black and white variants. |
| Engineer Name | Ioannis Kalyviotis |
| 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 24 pin (600mm) | 1 | 1 | 16-20AWG | No |
| 4+4 pin EPS12V (740mm) | 2 | 2 | 18AWG | No |
| 6+2 pin PCIe (640mm) | 2 | 2 | 16AWG | No |
| 2 x 6+2 pin PCIe (640mm) | 1 | 2 | 16-18AWG | No |

| | | | | |
|---|---|---|---|---|
| 12+2 pin PCIe (650mm) (600W) | 1 | 1 | 16-24AWG | No |
| SATA (450mm+100mm) / 4-pin Molex (+100mm+100mm) | 1 | 2 / 2 | 18AWG | No |
| SATA (450mm+100mm+100mm+100mm) | 1 | 4 | 18AWG | No |
| AC Power Cord (1390mm) - C13 coupler | 1 | 1 | 14AWG | - |

## 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 | 20 | 20 | 83.3 | 3 | 0 |
| | Watts | 150 | | 1000 | 15 | 0 |
| Total Max. Power (W) | | 1000 | | | | |

## Parts Description

| | |
|---|---|
| **General Data** | - |
| Manufacturer (OEM) | HEC |
| PCB Type | Single-Sided |
| **Primary Side** | - |
| Transient Filter | 4x Y caps, 3x X caps, 2x CM chokes, 1x MOV, 1x Power IntegrationsCAP200DG (Discharge IC) |
| Inrush Protection | NTC Thermistor SCK-056 (5 Ohm) & Relay |
| Bridge Rectifier(s) | 2x GBU15L06 (600V, 15A @ 115°C) |
| APFC MOSFETs | 2x Great Power GP47S60 (600V, 47A, Rds(on): 0.081Ohm) |

| | |
|---|---|
| APFC Boost Diode | 1x CREE C6D10065A (650V, 10A @ 155°C) |
| Bulk Cap(s) | 1x Teapo (400V, 680uF, 2,000h @ 105°C, LS) |
| Main Switchers | 2x Great Power GP36S60YERD |
| APFC Controller | Champion CM6500UN & CM03AX |
| Resonant Controller | Champion CM6901T6X |
| Topology | Primary side: APFC, Half-Bridge & LLC Resonant converter Secondary side: Synchronous Rectification & DC-DC converters |
| **Secondary Side** | - |
| +12V MOSFETs | no info |
| 5V & 3.3V | DC-DC Converters: 4x Potens Semiconductor PDC3906X (30V, 51A @ 100°C, Rds(on): 5.5mOhm) PWM Controller(s): 1x ANPECAPW7159C |
| Filtering Capacitors | Electrolytic: 6x Teapo (1-3,000h @ 105°C, SC), 2x Nippon Chemi-con (2-5,000h @ 105°C, KZE) 1x Rubycon (4-10,000h @ 105°C, YXF) Polymer: 6x Teapo, 17x |
| Supervisor IC | Weltrend WT7527RT (OCP, OVP, UVP, SCP, PG) |
| Fan Controller | Nuvoton M031FB0AE |
| Fan Model | Hong Hua HA1225H12F-Z (120mm, 12V, 0.58A, Rifle Bearing Fan) |
| **5VSB Circuit** | - |
| Rectifier | 1x PS1060L SBR (60V, 10A) |
| Standby PWM Controller | Excelliance MOS EM8569D |

# 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) | 89.483% |
| Average Noise Output (>1450 Load Combinations) | 25.54dBA |
| Average PF (>1450 Load Combinations) | 0.975 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 70.962% |
| Standby Power Consumption | 0.0481W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 30.07mV |
| 5V Ripple (Full Load) | 10.80mV |
| 3.3V Ripple (Full Load) | 12.07mV |
| 5VSB Ripple (Full Load) | 14.41mV |
| 12V Load Regulation | 0.81% |
| 5V Load Regulation | 0.60% |
| 3.3V Load Regulation | 1.20% |
| 5VSB Load Regulation | 2.27% |
| Inrush Current | 32.120A |

### 230V

| | |
|---|---|
| Accredited | |
| Average Efficiency (>1450 load combinations) | 91.576% |
| Average Noise Output (>1450 Load Combinations) | 25.32dBA |
| Average PF (>1450 Load Combinations) | 0.942 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 71.493% |
| Standby Power Consumption | 0.1168W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 31.31mV |
| 5V Ripple (Full Load) | 11.77mV |
| 3.3V Ripple (Full Load) | 11.67mV |

| | | |
|---|---|---|
| 5VSB Ripple (Full Load) | | 12.52mV |
| 12V Load Regulation | | 0.81% |
| 5V Load Regulation | | 0.60% |
| 3.3V Load Regulation | | 1.20% |
| 5VSB Load Regulation | | 2.21% |
| Inrush Current | | 66.590A |
| 12V Transient Response (200%) | | 11.21V |
| 5V Transient Response (200%) | | 4.868V |
| 3.3V Transient Response (200%) | | 3.147V |
| 5VSB Transient Response (200%) | | 4.847V |
| Hold-Up Time & PWR_OK Signal | | 16.40ms |
| AC Loss to PWR_OK Hold Up Time | | 13.80ms |
| PWR_OK Inactive to DC Loss Delay | | 2.50ms |
| PSU Timings: T1 (20% / 100%) | 48.0ms | 49.0ms |
| PSU Timings: T3 (20% / 100%) | 121.0ms | 120.0ms |
| 12V OCP (27.3°C / 43.1°C) | 104.00A (124.85%), 11.971V | 103.60A (124.37%), 11.973V |
| 5V OCP (27.3°C / 43.1°C) | 28.1A (140.50%), 4.992V | 27.6A (138.00%), 4.992V |
| 3.3V OCP (27.3°C / 43.1°C) | 28.3A (141.50%), 3.268V | 28.1A (140.50%), 3.269V |
| 5VSB OCP (27.3°C / 43.1°C) | 4.1A (136.67%), 4.896V | 4.1A (136.67%), 4.896V |
| OPP (30.81°C / 42.35°C) | 123.76% | 123.15% |

## Hold-Up Time & PWR_OK Signal

| | |
|---|---|
| Hold-Up Time (ms) | 16.4 |
| AC Loss to PWR_OK Hold Up Time (ms) | 13.8 |
| PWR_OK Inactive to DC Loss Delay (ms) | 2.6 |

# Stromverbrauch im Ruhezustand

## Tables

### 115V

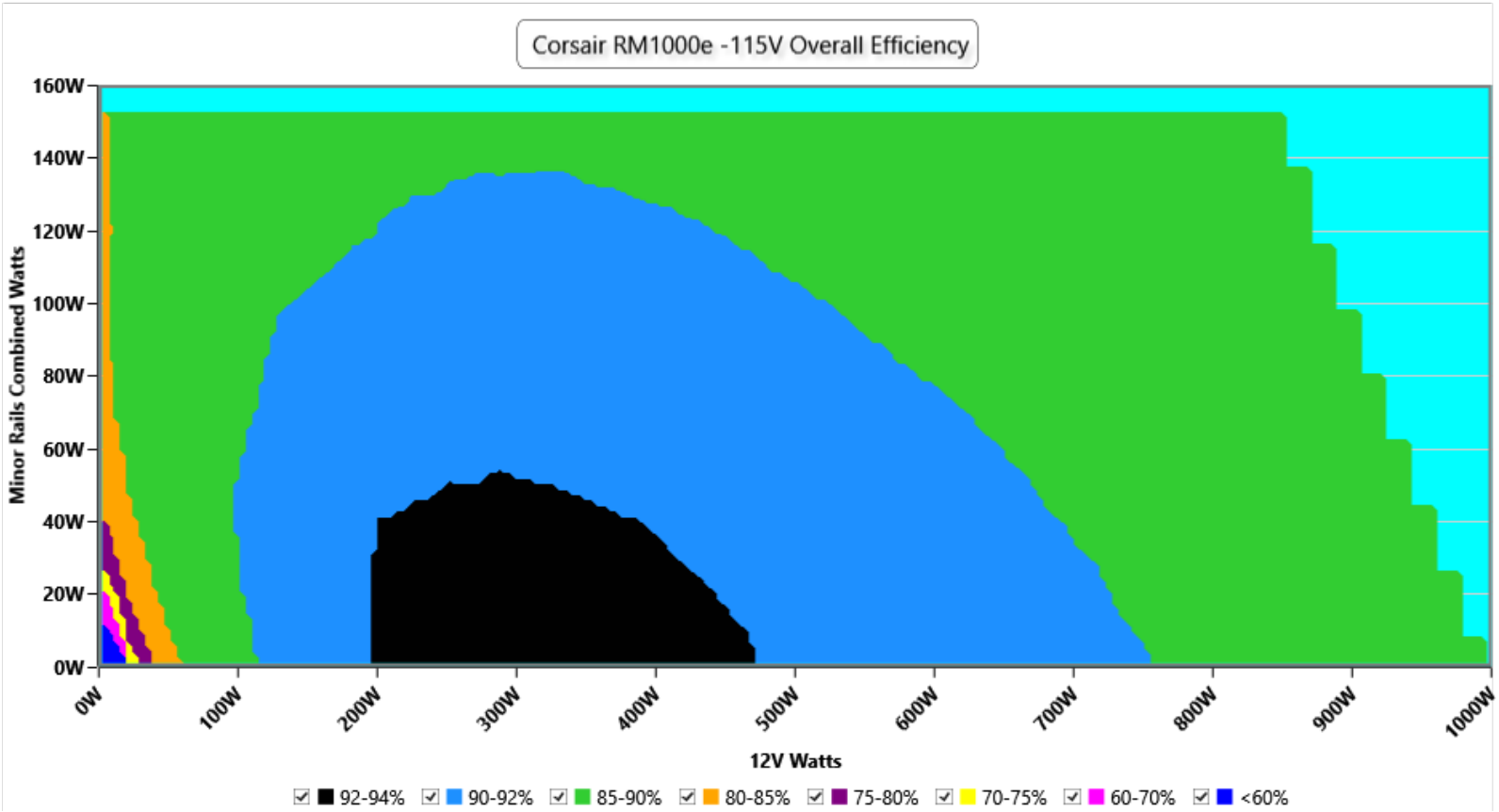
| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 115.06 V | 115.03 V | 113.85 V | 115.10 V | 116.15 V | PASS |
| Mains Frequency: | 60.00 Hz | 59.99 Hz | 59.40 Hz | 60.01 Hz | 60.60 Hz | PASS |
| Mains Voltage CF: | 1.416 | 1.415 | 1.340 | 1.418 | 1.490 | PASS |
| Mains Voltage THD: | 0.13 % | 0.09 % | N/A | 0.19 % | 2.00 % | PASS |
| Real Power: | 0.048 W | -0.003 W | N/A | 0.092 W | N/A | N/A |
| Apparent Power: | 13.105 W | 12.783 W | N/A | 13.449 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: | 231.03 V | 230.94 V | 227.70 V | 231.10 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 % | 0.15 % | N/A | 0.26 % | 2.00 % | PASS |
| Real Power: | 0.117 W | 0.070 W | N/A | 0.195 W | N/A | N/A |
| Apparent Power: | 43.936 W | 43.257 W | N/A | 44.649 W | N/A | N/A |
| Power Factor: | 0.003 | N/A | N/A | N/A | N/A | N/A |

## Efficiency Graph

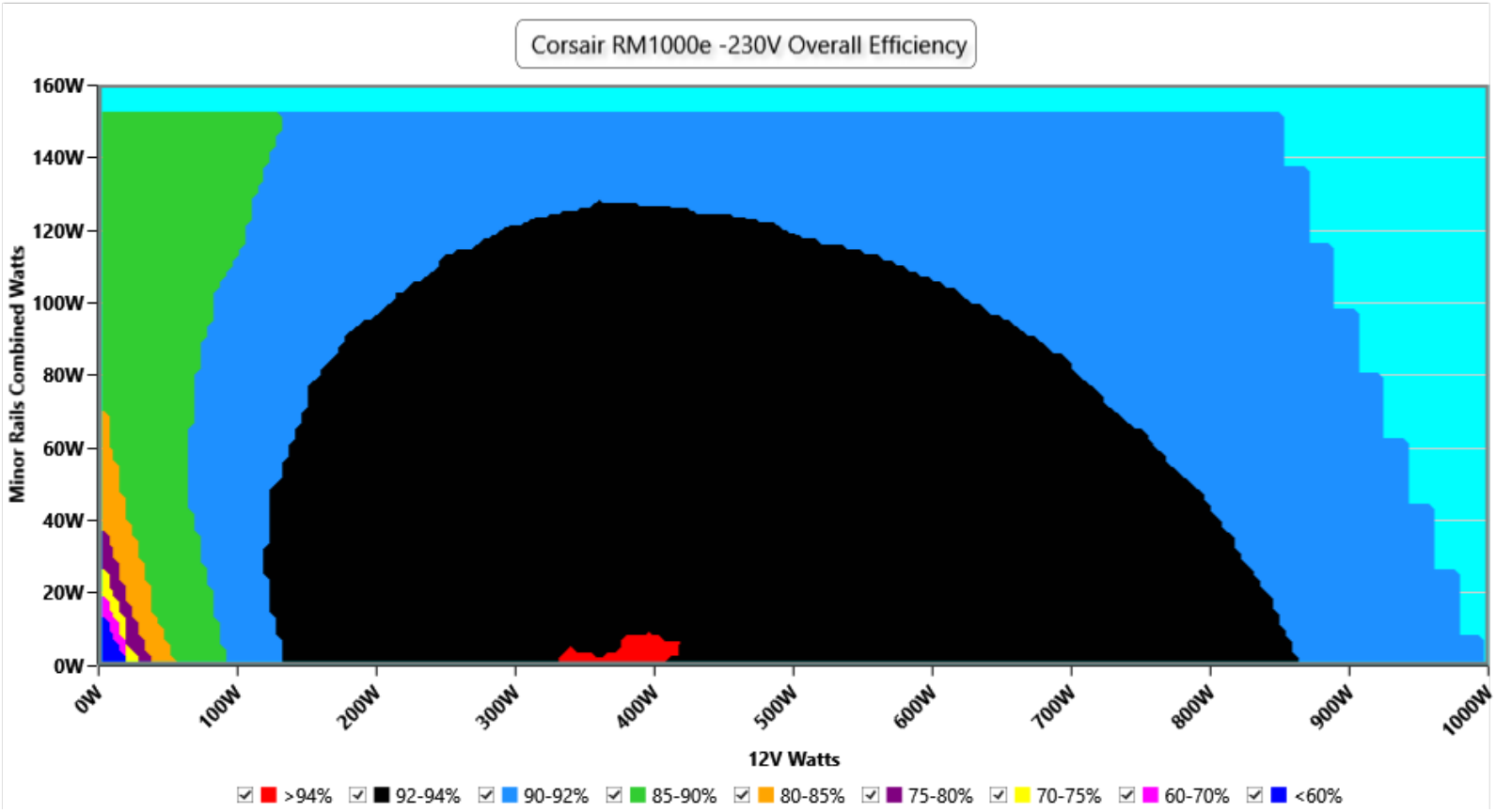
**115V**




**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

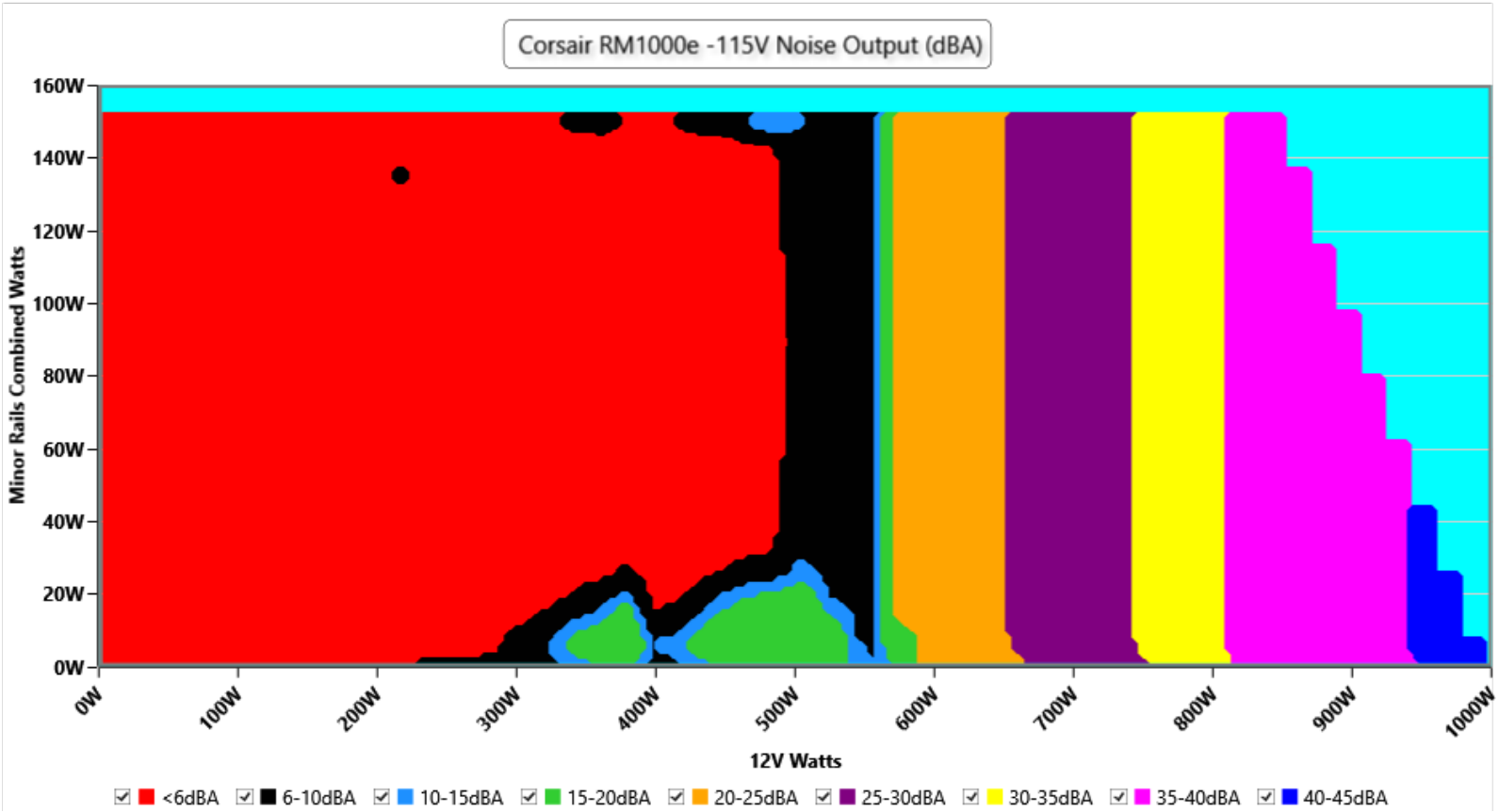



### INFO

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

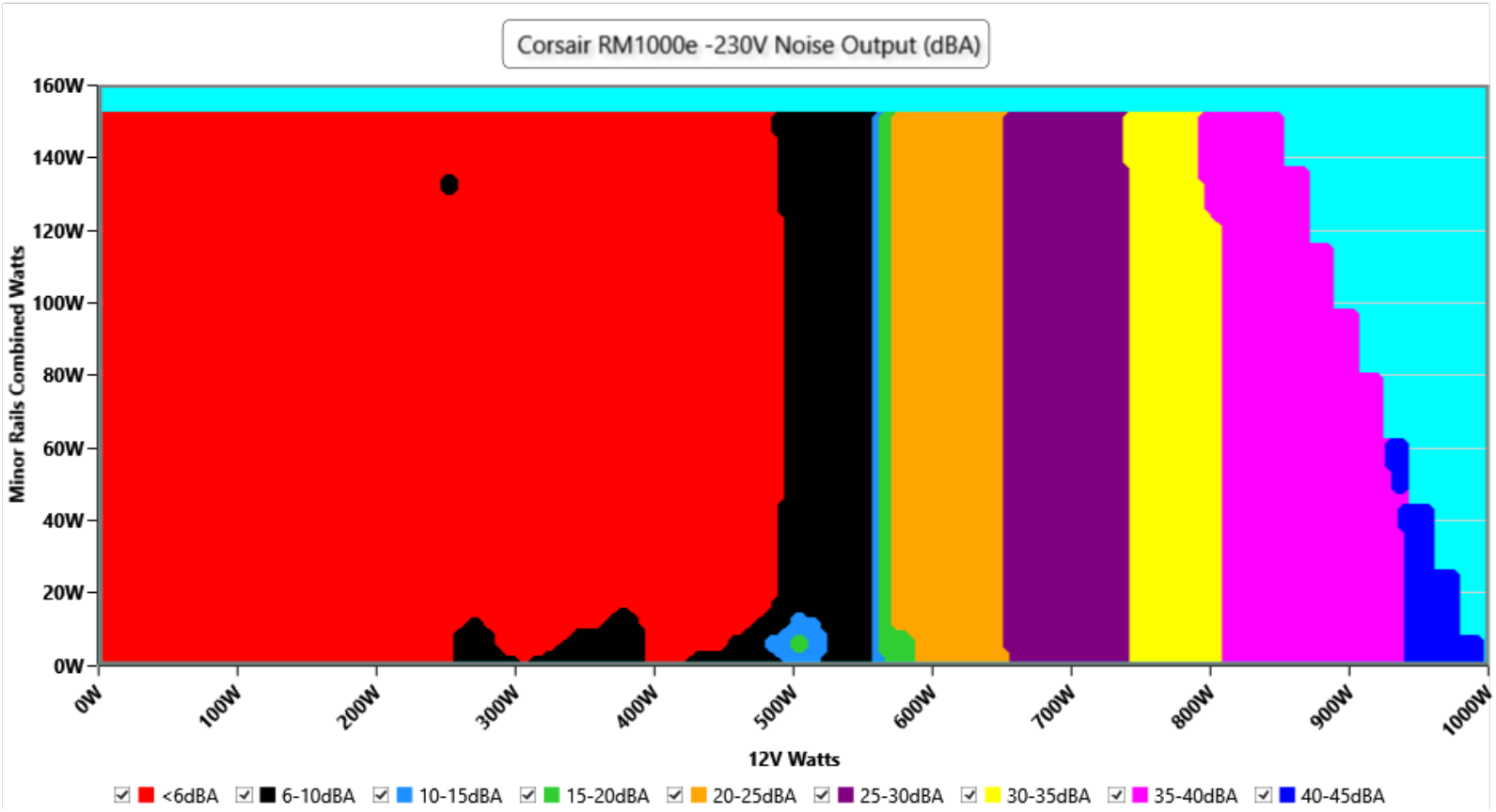
**115V**




**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<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 0 RPM · <6.0 dB(A) · 34.1 °C | 0 RPM · <6.0 dB(A) · 46.4 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 36.2 °C | 0 RPM · <6.0 dB(A) · 47.2 °C | fan off in both |
| 50% | 454 RPM · <6.0 dB(A) · 30.2 °C | 465 RPM · <6.0 dB(A) · 42.1 °C | <6.0 in both |
| 100% | 1570 RPM · 39.0 dB(A) · 30.8 °C | 2094 RPM · 46.7 dB(A) · 45.8 °C | **+7.7 dB(A)** |

### 230V

| Load | Normal ambient<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 0 RPM · <6.0 dB(A) · 32.8 °C | 0 RPM · <6.0 dB(A) · 45.8 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 35.0 °C | 0 RPM · <6.0 dB(A) · 47.3 °C | fan off in both |
| 50% | 453 RPM · <6.0 dB(A) · 30.7 °C | 464 RPM · <6.0 dB(A) · 42.3 °C | <6.0 in both |
| 100% | 1569 RPM · 39.0 dB(A) · 30.8 °C | 2001 RPM · 45.5 dB(A) · 45.4 °C | **+6.5 dB(A)** |

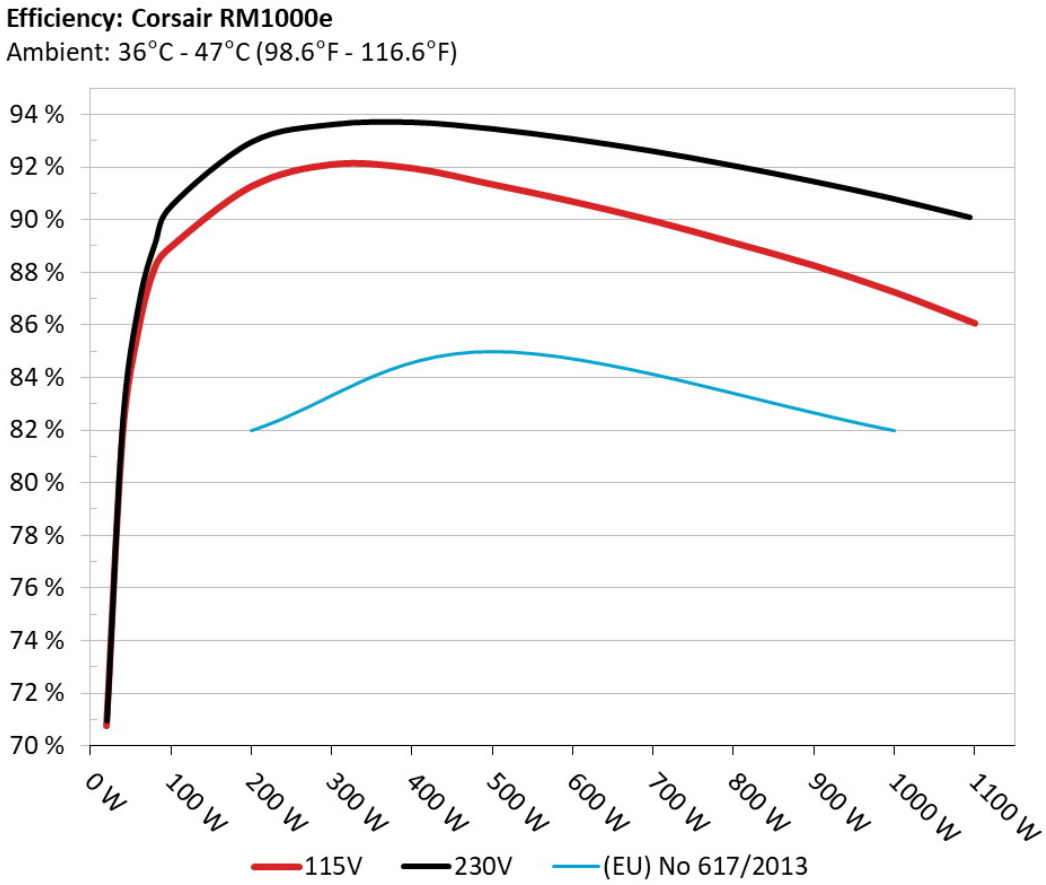
### INFO

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

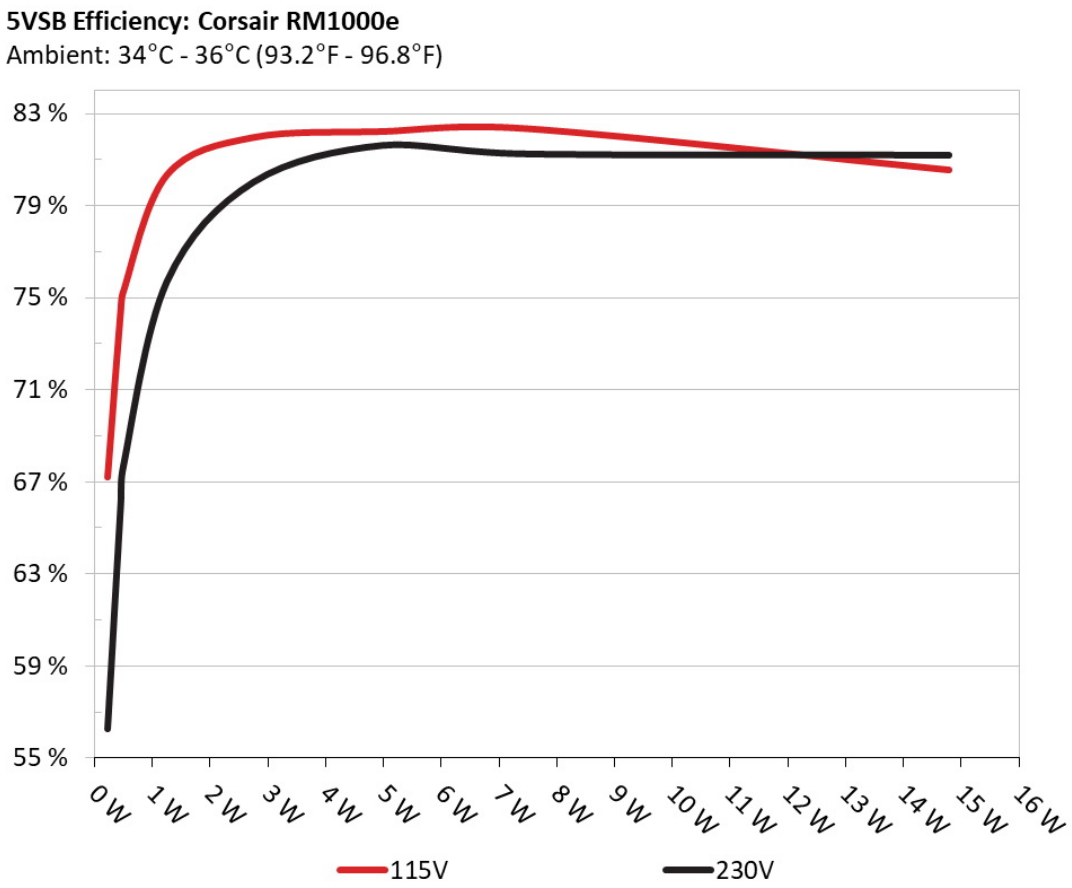
### Efficiency under high ambient temperature




**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** | 0.225W | 67.189% | 0.027 |
| | 5.003V | 0.335W | | 115.18V |
| **2** | **0.09A** | 0.45W | 74.386% | 0.048 |
| | 5.002V | 0.605W | | 115.17V |
| **3** | **0.55A** | 2.746W | 81.956% | 0.225 |
| | 4.991V | 3.351W | | 115.17V |
| **4** | **1A** | 4.983W | 82.212% | 0.327 |
| | 4.981V | 6.061W | | 115.17V |
| **5** | **1.5A** | 7.456W | 82.342% | 0.385 |
| | 4.969V | 9.056W | | 115.17V |
| **6** | **3.001A** | 14.779W | 80.545% | 0.465 |
| | 4.926V | 18.349W | | 115.16V |

### 230V

| Test # | 5VSB | DC/AC (Watts) | Efficiency | PF/AC Volts |
|---|---|---|---|---|
| **1** | **0.045A** | 0.225W | 56.276% | 0.01 |
| | 5.005V | 0.4W | | 230.43V |
| **2** | **0.09A** | 0.45W | 65.954% | 0.017 |
| | 5.003V | 0.683W | | 230.42V |
| **3** | **0.55A** | 2.746W | 80.038% | 0.081 |
| | 4.991V | 3.432W | | 230.43V |
| **4** | **1A** | 4.982W | 81.638% | 0.137 |
| | 4.98V | 6.104W | | 230.43V |
| **5** | **1.501A** | 7.453W | 81.268% | 0.191 |
| | 4.967V | 9.17W | | 230.43V |
| **6** | **3.001A** | 14.78W | 81.213% | 0.297 |
| | 4.926V | 18.199W | | 230.43V |

## Protection Features

| | |
|---|---|
| OCP (Normal @ 27.3°C) | 12V: 104A (124.85%), 11.971V<br>5V: 28.1A (140.5%), 4.992V<br>3.3V: 28.3A (141.5%), 3.268V<br>5VSB: 4.1A (136.67%), 4.896V |
| OCP (Hot @ 43.1°C) | 12V: 103.6A (124.37%), 11.973V<br>5V: 27.6A (138%), 4.992V<br>3.3V: 28.1A (140.5%), 3.269V<br>5VSB: 4.1A (136.67%), 4.896V |
| OPP (Normal @ 30.8°C) | 1237.56W (123.76%) |
| OPP (Hot @ 42.4°C) | 1231.49W (123.15%) |
| OTP | ✓ (120°C @ Heat Sink) |
| SCP | 12V to Earth: ✓<br>5V to Earth: ✓<br>3.3V to Earth: ✓<br>5VSB to Earth: ✓ |
| PWR_OK | Proper Operation |
| NLO | ✓ |
| Fan Failure Protection | ✗ |
| SIP | Surge: MOV<br>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%** | **6.514A** | **1.996A** | **2.005A** | **1.005A** | 100.041 | 88.978% | 0 | <6.0 | 46.43°C | 0.877 |
| | 12.042V | 5.012V | 3.292V | 4.977V | 112.433 | | | | 40.09°C | 115.16V |

| Test | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| **20%** | **14.052A** | **2.995A** | **3.012A** | **1.208A** | 200.007 | 91.272% | 0 | <6.0 | 47.16°C | 0.904 |
| | 12.033V | 5.009V | 3.288V | 4.968V | 219.133 | | | | 40.88°C | 115.13V |
| **30%** | **21.955A** | **3.496A** | **3.517A** | **1.411A** | 300.07 | 92.113% | 0 | <6.0 | 49.28°C | 0.982 |
| | 12.025V | 5.007V | 3.285V | 4.961V | 325.761 | | | | 41.43°C | 115.08V |
| **40%** | **29.852A** | **3.997A** | **4.023A** | **1.616A** | 399.911 | 91.969% | 0 | <6.0 | 52.4°C | 0.984 |
| | 12.016V | 5.005V | 3.281V | 4.953V | 434.831 | | | | 41.9°C | 115.06V |
| **50%** | **37.412A** | **5A** | **5.036A** | **1.821A** | 499.635 | 91.355% | 465 | <6.0 | 42.08°C | 0.986 |
| | 12.004V | 5.002V | 3.277V | 4.944V | 546.915 | | | | 48.29°C | 115.03V |
| **60%** | **45.058A** | **6.005A** | **6.051A** | **2.001A** | 600.069 | 90.701% | 683 | 11.6 | 42.72°C | 0.989 |
| | 11.993V | 4.998V | 3.273V | 4.936V | 661.585 | | | | 47.67°C | 115V |
| **70%** | **52.646A** | **7.01A** | **7.068A** | **2.233A** | 699.926 | 89.973% | 907 | 21.9 | 43.04°C | 0.991 |
| | 11.982V | 4.995V | 3.269V | 4.928V | 777.935 | | | | 47.44°C | 114.97V |
| **80%** | **60.319A** | **8.016A** | **8.087A** | **2.338A** | 799.961 | 89.138% | 1318 | 33.7 | 43.55°C | 0.992 |
| | 11.970V | 4.992V | 3.265V | 4.921V | 897.45 | | | | 48.36°C | 114.94V |
| **90%** | **68.339A** | **8.522A** | **8.587A** | **2.443A** | 899.754 | 88.273% | 1813 | 42.9 | 44.83°C | 0.993 |
| | 11.959V | 4.989V | 3.261V | 4.914V | 1019.286 | | | | 49.81°C | 114.92V |
| **100%** | **76.173A** | **9.028A** | **9.119A** | **3.067A** | 999.791 | 87.263% | 2094 | 46.7 | 45.81°C | 0.994 |
| | 11.948V | 4.986V | 3.257V | 4.892V | 1145.729 | | | | 51.49°C | 114.89V |
| **110%** | **83.956A** | **10.037A** | **10.237A** | **3.069A** | 1100.406 | 86.075% | 2354 | 49.5 | 46.58°C | 0.995 |
| | 11.936V | 4.983V | 3.253V | 4.889V | 1278.418 | | | | 53.47°C | 114.87V |
| **CL1** | **0.118A** | **18.077A** | **18.196A** | **0A** | 151.323 | 84.407% | 1577 | 39.2 | 41.46°C | 0.893 |
| | 12.018V | 4.996V | 3.276V | 4.996V | 179.277 | | | | 45.03°C | 115.15V |
| **CL2** | **0.117A** | **20.005A** | **0A** | **0A** | 101.409 | 84.149% | 1106 | 28.5 | 40.9°C | 0.879 |
| | 12.034V | 4.999V | 3.294V | 5.004V | 120.514 | | | | 43.55°C | 115.15V |
| **CL3** | **0.117A** | **0A** | **20.132A** | **0A** | 67.405 | 79.206% | 655 | 9.8 | 41.05°C | 0.864 |
| | 12.030V | 5.014V | 3.278V | 5.002V | 85.103 | | | | 42.96°C | 115.16V |
| **CL4** | **83.634A** | **0A** | **0A** | **0A** | 1000.292 | 88.07% | 1903 | 44.2 | 45.68°C | 0.994 |
| | 11.960V | 4.997V | 3.268V | 4.978V | 1135.797 | | | | 50.12°C | 114.9V |

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%** | **6.546A** | **2.001A** | **2A** | **1A** | 100.411 | 90.176% | 0 | <6.0 | 45.83°C | 0.777 |
| | 12.042V | 5.012V | 3.291V | 4.977V | 111.349 | | | | 40.05°C | 230.38V |
| **20%** | **14.107A** | **3.001A** | **3A** | **1.2A** | 200.617 | 92.965% | 0 | <6.0 | 47.27°C | 0.853 |
| | 12.033V | 5.009V | 3.288V | 4.969V | 215.798 | | | | 40.65°C | 230.36V |
| **30%** | **22.005A** | **3.501A** | **3.5A** | **1.4A** | 300.579 | 93.621% | 0 | <6.0 | 48.73°C | 0.946 |
| | 12.025V | 5.007V | 3.284V | 4.962V | 321.06 | | | | 41.21°C | 230.35V |
| **40%** | **29.912A** | **4.001A** | **4A** | **1.6A** | 400.473 | 93.706% | 0 | <6.0 | 51.29°C | 0.959 |
| | 12.015V | 5.005V | 3.281V | 4.954V | 427.375 | | | | 41.94°C | 230.33V |
| **50%** | **37.476A** | **5.002A** | **5.001A** | **1.801A** | 500.145 | 93.455% | 464 | <6.0 | 42.31°C | 0.965 |
| | 12.003V | 5.001V | 3.277V | 4.945V | 535.18 | | | | 47.81°C | 230.32V |
| **60%** | **45.044A** | **6.001A** | **6A** | **2.001A** | 599.679 | 93.071% | 679 | 11.3 | 42.84°C | 0.97 |
| | 11.992V | 4.997V | 3.273V | 4.937V | 644.322 | | | | 48.27°C | 230.3V |
| **70%** | **52.609A** | **7.002A** | **7A** | **2.201A** | 698.999 | 92.611% | 965 | 23.5 | 43.46°C | 0.973 |
| | 11.981V | 4.994V | 3.269V | 4.928V | 754.77 | | | | 49.05°C | 230.29V |
| **80%** | **60.211A** | **8.002A** | **8A** | **2.3A** | 798.063 | 92.067% | 1305 | 33.4 | 43.97°C | 0.976 |
| | 11.969V | 4.991V | 3.265V | 4.922V | 866.833 | | | | 50.09°C | 230.27V |
| **90%** | **68.149A** | **8.501A** | **8.499A** | **2.4A** | 896.858 | 91.474% | 1744 | 41.8 | 44.48°C | 0.978 |
| | 11.958V | 4.988V | 3.261V | 4.915V | 980.453 | | | | 51.15°C | 230.25V |
| **100%** | **75.894A** | **9.002A** | **9A** | **3A** | 995.608 | 90.823% | 2001 | 45.5 | 45.43°C | 0.98 |
| | 11.948V | 4.985V | 3.257V | 4.895V | 1096.209 | | | | 52.71°C | 230.23V |
| **110%** | **83.533A** | **10.001A** | **10A** | **3A** | 1094.101 | 90.093% | 2266 | 48.4 | 46.27°C | 0.981 |
| | 11.936V | 4.982V | 3.253V | 4.892V | 1214.415 | | | | 54.96°C | 230.21V |
| **CL1** | **0.118A** | **18.072A** | **18.072A** | **0A** | 150.893 | 85.665% | 1573 | 39.1 | 40.01°C | 0.835 |
| | 12.018V | 4.995V | 3.276V | 4.996V | 176.14 | | | | 45.84°C | 230.36V |
| **CL2** | **0.118A** | **20A** | **0A** | **0A** | 101.391 | 85.234% | 1105 | 28.5 | 40.99°C | 0.788 |
| | 12.033V | 4.999V | 3.293V | 5.004V | 118.958 | | | | 44.47°C | 230.36V |
| **CL3** | **0.117A** | **0A** | **19.999A** | **0A** | 66.974 | 79.997% | 840 | 18.3 | 40.51°C | 0.725 |
| | 12.030V | 5.014V | 3.278V | 5.002V | 83.718 | | | | 44.17°C | 230.37V |

| Test | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| **CL4** | **83.356A** | **0A** | **0A** | **0A** | 996.946 | 91.481% | 1894 | 44.1 | 45.97°C | 0.98 |
| | 11.960V | 4.996V | 3.267V | 4.978V | 1089.79 | | | | 51.16°C | 230.24V |

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** | **0.499A** | **0.501A** | **0.2A** | 20.014 | 70.77% | 0 | <6.0 | 41.27°C | 0.771 |
| | 12.041V | 5.016V | 3.296V | 5.003V | 28.28 | | | | 36.22°C | 115.18V |
| **40W** | **2.715A** | **0.698A** | **0.701A** | **0.3A** | 40.01 | 81.81% | 0 | <6.0 | 42.48°C | 0.831 |
| | 12.045V | 5.015V | 3.295V | 4.999V | 48.903 | | | | 37.07°C | 115.17V |
| **60W** | **4.196A** | **0.898A** | **0.902A** | **0.401A** | 60.01 | 85.884% | 0 | <6.0 | 44.49°C | 0.858 |
| | 12.045V | 5.015V | 3.294V | 4.994V | 69.821 | | | | 38.55°C | 115.18V |
| **80W** | **5.676A** | **1.098A** | **1.103A** | **0.501A** | 79.986 | 88.18% | 0 | <6.0 | 45.38°C | 0.869 |
| | 12.044V | 5.014V | 3.293V | 4.99V | 90.71 | | | | 39.23°C | 115.17V |

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** | **1.242A** | **0.5A** | **0.5A** | **0.2A** | 20.105 | 70.948% | 0 | <6.0 | 40.49°C | 0.439 |
| | 12.042V | 5.015V | 3.296V | 5.003V | 28.338 | | | | 36.25°C | 230.43V |
| **40W** | **2.721A** | **0.7A** | **0.7A** | **0.3A** | 40.089 | 82.448% | 0 | <6.0 | 41.6°C | 0.594 |
| | 12.044V | 5.014V | 3.295V | 4.999V | 48.623 | | | | 37.18°C | 230.41V |
| **60W** | **4.224A** | **0.9A** | **0.9A** | **0.4A** | 60.361 | 86.888% | 0 | <6.0 | 43.72°C | 0.685 |
| | 12.045V | 5.014V | 3.294V | 4.994V | 69.47 | | | | 38.39°C | 230.4V |
| **80W** | **5.704A** | **1.1A** | **1.1A** | **0.5A** | 80.335 | 89.139% | 0 | <6.0 | 44.6°C | 0.739 |
| | 12.044V | 5.013V | 3.293V | 4.99V | 90.121 | | | | 39.05°C | 230.39V |

The results above are not used in the certification process

## Ripple Measurements

### 115V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| **10% Load** | 9.8 mV | 6.4 mV | 4.6 mV | 6.9 mV | Pass |
| **20% Load** | 12.8 mV | 6.5 mV | 4.5 mV | 7.0 mV | Pass |
| **30% Load** | 13.5 mV | 7.0 mV | 5.1 mV | 6.6 mV | Pass |
| **40% Load** | 15.1 mV | 10.7 mV | 8.0 mV | 7.2 mV | Pass |
| **50% Load** | 15.9 mV | 11.9 mV | 9.6 mV | 8.2 mV | Pass |
| **60% Load** | 16.0 mV | 10.5 mV | 7.8 mV | 7.5 mV | Pass |
| **70% Load** | 17.4 mV | 8.7 mV | 7.3 mV | 8.5 mV | Pass |
| **80% Load** | 19.1 mV | 9.5 mV | 10.9 mV | 8.5 mV | Pass |
| **90% Load** | 19.6 mV | 9.3 mV | 10.9 mV | 9.5 mV | Pass |
| **100% Load** | 30.1 mV | 10.8 mV | 12.1 mV | 14.4 mV | Pass |
| **110% Load** | 33.0 mV | 12.3 mV | 13.1 mV | 14.9 mV | Pass |
| **Crossload 1** | 17.7 mV | 9.5 mV | 14.2 mV | 7.3 mV | Pass |
| **Crossload 2** | 9.8 mV | 6.4 mV | 4.4 mV | 6.8 mV | Pass |
| **Crossload 3** | 9.1 mV | 6.4 mV | 13.7 mV | 6.4 mV | Pass |
| **Crossload 4** | 30.6 mV | 10.4 mV | 6.7 mV | 9.4 mV | Pass |

The results above are not used in the certification process

### 230V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| **10% Load** | 9.9 mV | 6.4 mV | 4.5 mV | 6.5 mV | Pass |
| **20% Load** | 13.0 mV | 6.5 mV | 4.6 mV | 6.5 mV | Pass |
| **30% Load** | 13.6 mV | 7.3 mV | 5.3 mV | 7.0 mV | Pass |
| **40% Load** | 13.6 mV | 10.4 mV | 8.1 mV | 7.5 mV | Pass |
| **50% Load** | 14.5 mV | 11.9 mV | 9.4 mV | 8.0 mV | Pass |
| **60% Load** | 16.8 mV | 11.0 mV | 9.8 mV | 8.0 mV | Pass |

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| **70% Load** | 17.2 mV | 9.3 mV | 9.9 mV | 10.2 mV | Pass |
| **80% Load** | 18.8 mV | 10.4 mV | 11.3 mV | 8.3 mV | Pass |
| **90% Load** | 20.0 mV | 10.2 mV | 10.9 mV | 9.5 mV | Pass |
| **100% Load** | 31.3 mV | 11.8 mV | 11.7 mV | 12.5 mV | Pass |
| **110% Load** | 34.9 mV | 11.4 mV | 12.1 mV | 12.9 mV | Pass |
| **Crossload 1** | 18.1 mV | 9.2 mV | 14.6 mV | 7.0 mV | Pass |
| **Crossload 2** | 10.0 mV | 6.6 mV | 4.4 mV | 6.9 mV | Pass |
| **Crossload 3** | 8.3 mV | 7.0 mV | 14.2 mV | 6.7 mV | Pass |
| **Crossload 4** | 31.0 mV | 10.6 mV | 6.4 mV | 9.2 mV | Pass |

The results above are not used in the certification process

## Corsair RM1000e (ATX v3.1)




Top side




Power specifications label

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