Kolink Core 300W

C3001220191757

Lab ID KL25001791

Certification ID 251791

Test Result Report ID: 21PS1791A

Certificate Issue Date: Feb 11, 2021

230V

Scheme: ETA-EMI PSU

230V

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	Kolink
Model	Core 300W
OEM/ODM	
Serial Number	C3001220191757
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	200-240
□□□□ (Arms)	3
□□□□ (Hz)	50

□□□□ (W)	250
Operating Temperature (Continuous Full Load) (°C)	
□□	ATX12V
□□□□	Fixed cables
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
□□	
□□□□□	✗
Cybenetics Testing Information	
Lab ID	KL25001791
Date of receipt	Jun 27, 2020
Testing Date	Feb 9, 2021
Report Issued Date	Feb 11, 2021
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□□ (Non-accredited measurements)

□□□□				
□□	□□□□	□□□□□□	Gauge	In Cable Capacitors
ATX □□ 20+4 pin (450mm)	1	1	18-22AWG	□
4+4 pin EPS 12V □□ (670mm)	1	1	18AWG	□
6 pin PCIe (480mm)	1	1	18AWG	□
SATA□□ (460mm+150mm)	1	2	20AWG	□
SATA□□ (400mm) / 4-pin Molex (+150mm+150mm)	1	1 / 2	20AWG	□

□□□□

□		3.3V	5V	12V	5VSB	-12V
□□□□	□□	13	13	20	2.5	0.5
	□	90		240	12.5	6
□□□□□ (W)		250				

Test Results

Temperature & Compliance Info

□□□□ (°C /°F)	28-32 / 82.4-89.6
□□ ErP Lot3/6□□	✓
□□ (EU) No 617/2013□□	✓

Performance Summary 230V

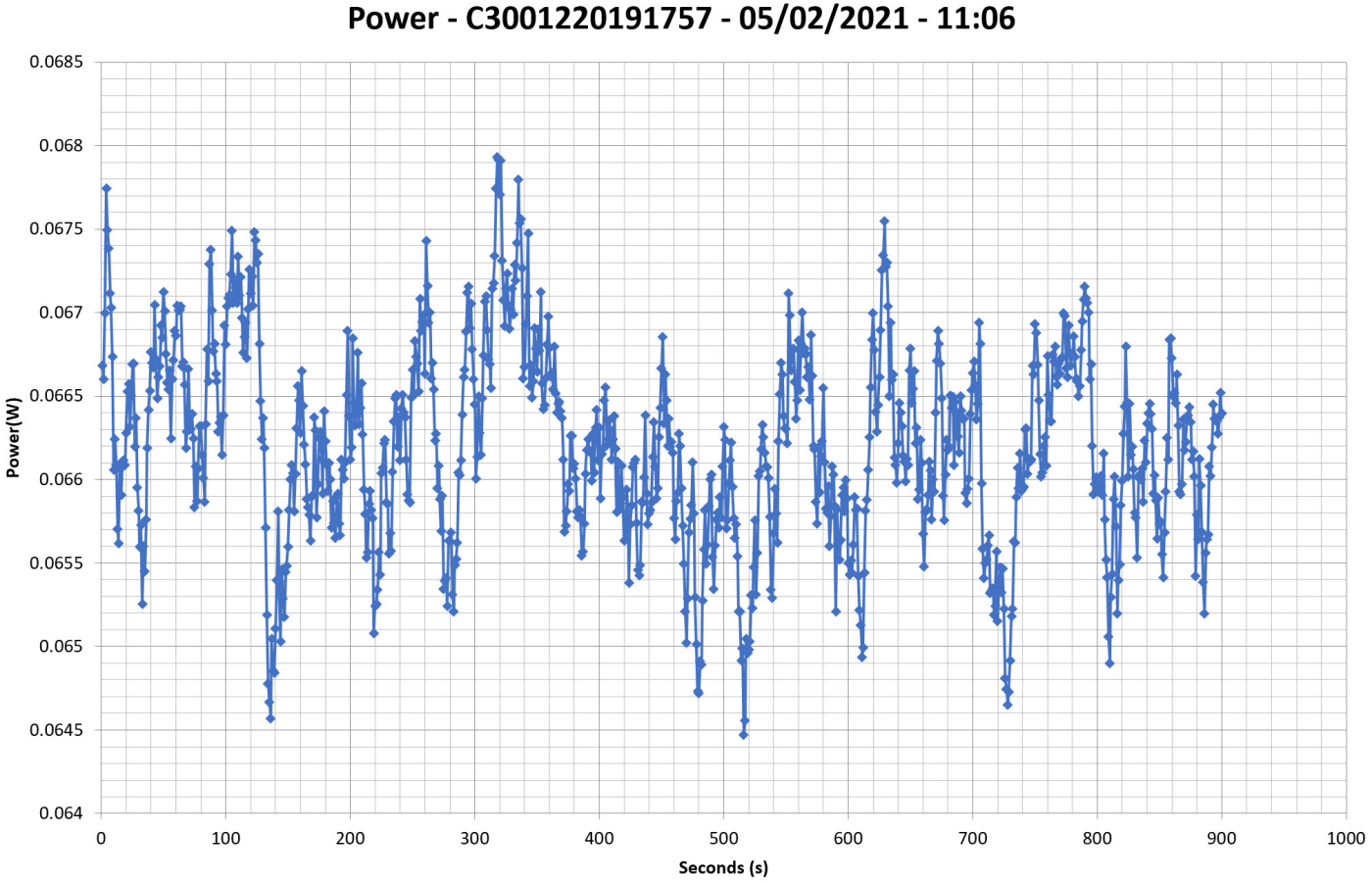
Accredited	
□□□□ (>1450 load combinations)	82.634%
Average Noise Output (>1450 Load Combinations)	16.77dBA
PF□□□ (>1450 Load Combinations)	0.954
Efficiency With 10W (≤500W) or 2% (>500W) Load	-
□□□□□□	0.0664W
Non-Accredited	
12V Ripple (Full Load)	14.47mV
5V Ripple (Full Load)	35.96mV
3.3V Ripple (Full Load)	25.73mV
5VSB Ripple (Full Load)	18.92mV
12V Load Regulation	6.89%
5V Load Regulation	5.91%
3.3V Load Regulation	3.52%
5VSB Load Regulation	4.21%
Inrush Current	73.300A

□□□□ & PG□□		16.10ms
AC Loss to PWR_OK Hold Up Time		11.30ms
PWR_OK Inactive to DC Loss Delay		4.80ms
PSU Timings: T1 (20% / 100%)	66.0ms	68.0ms
PSU Timings: T3 (20% / 100%)	308.0ms	310.0ms
OPP (27.50°C / 0.00°C)	144.25%	-

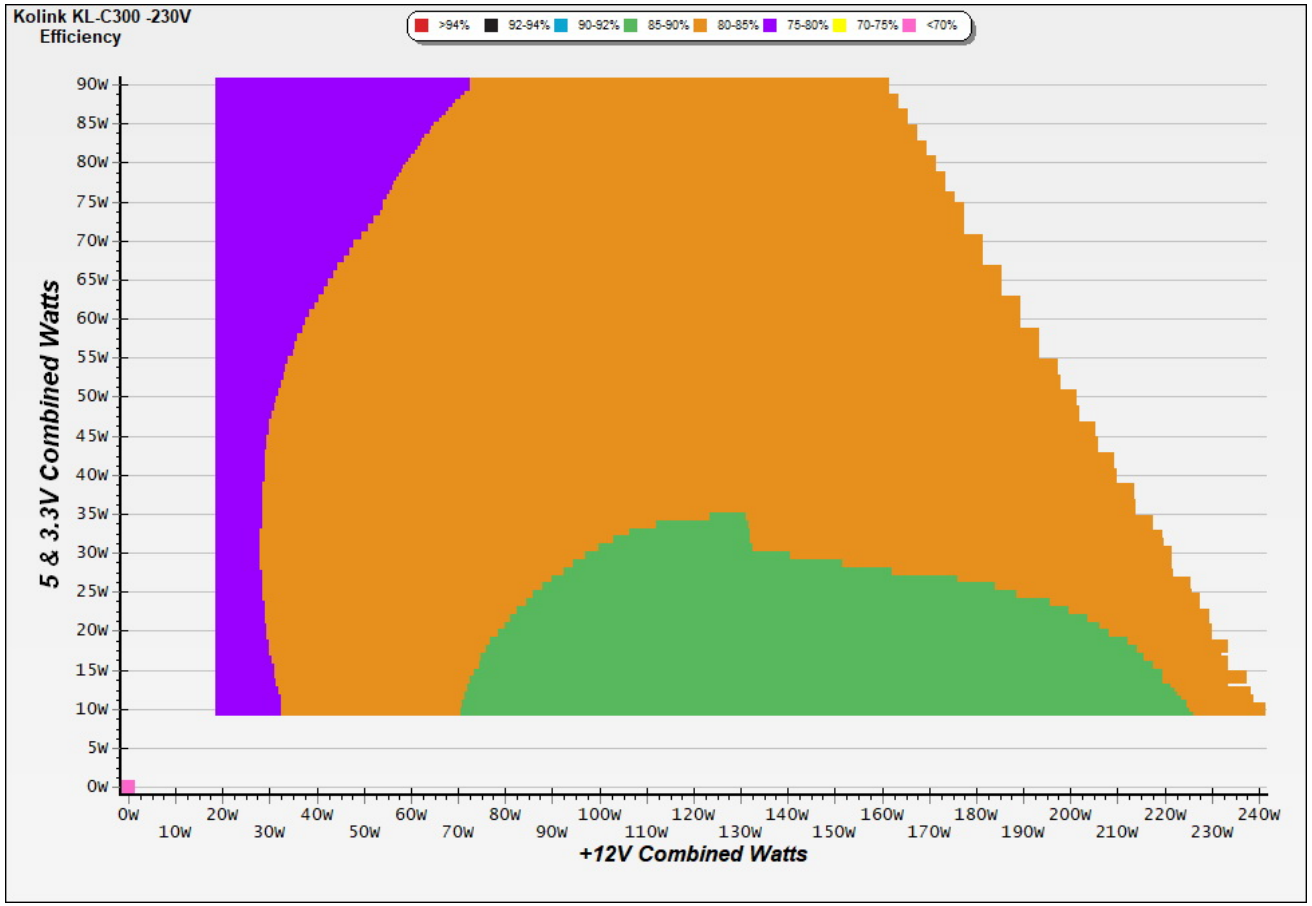
□□□□ & PG□□

Hold-Up Time (ms)	16.1
AC Loss to PWR_OK Hold Up Time (ms)	11.3
PWR_OK Inactive to DC Loss Delay (ms)	4.8

Graphs 230V


Power - C3001220191757 - 05/02/2021 - 11:06
Power(W)
0.0685
0.068
0.0675
0.067
0.0665
0.066
0.0655
0.065
0.0645
0.064
0
100
200
300
400
500
600
700
800
900
1000
Seconds (s)

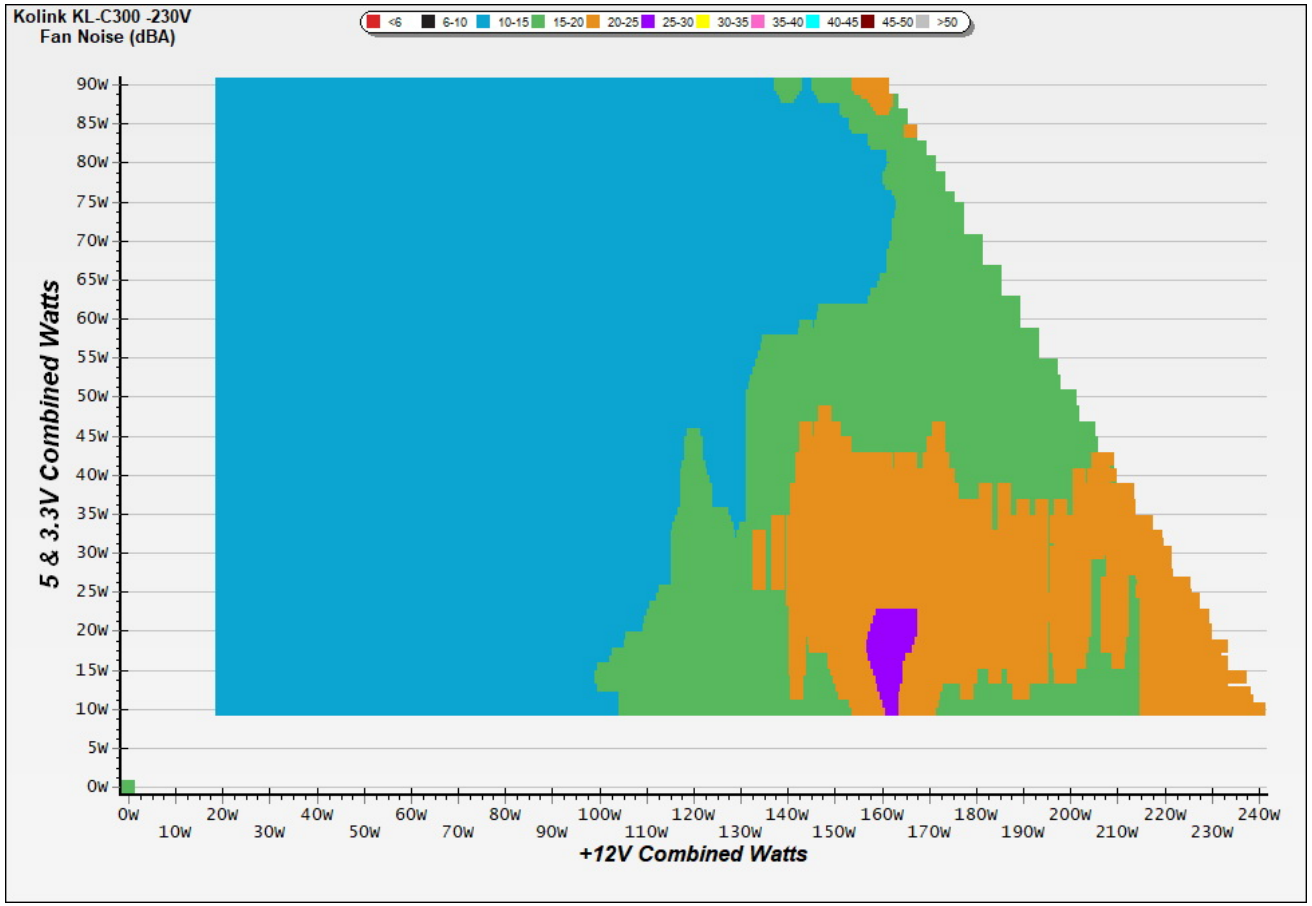
230V



□□

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

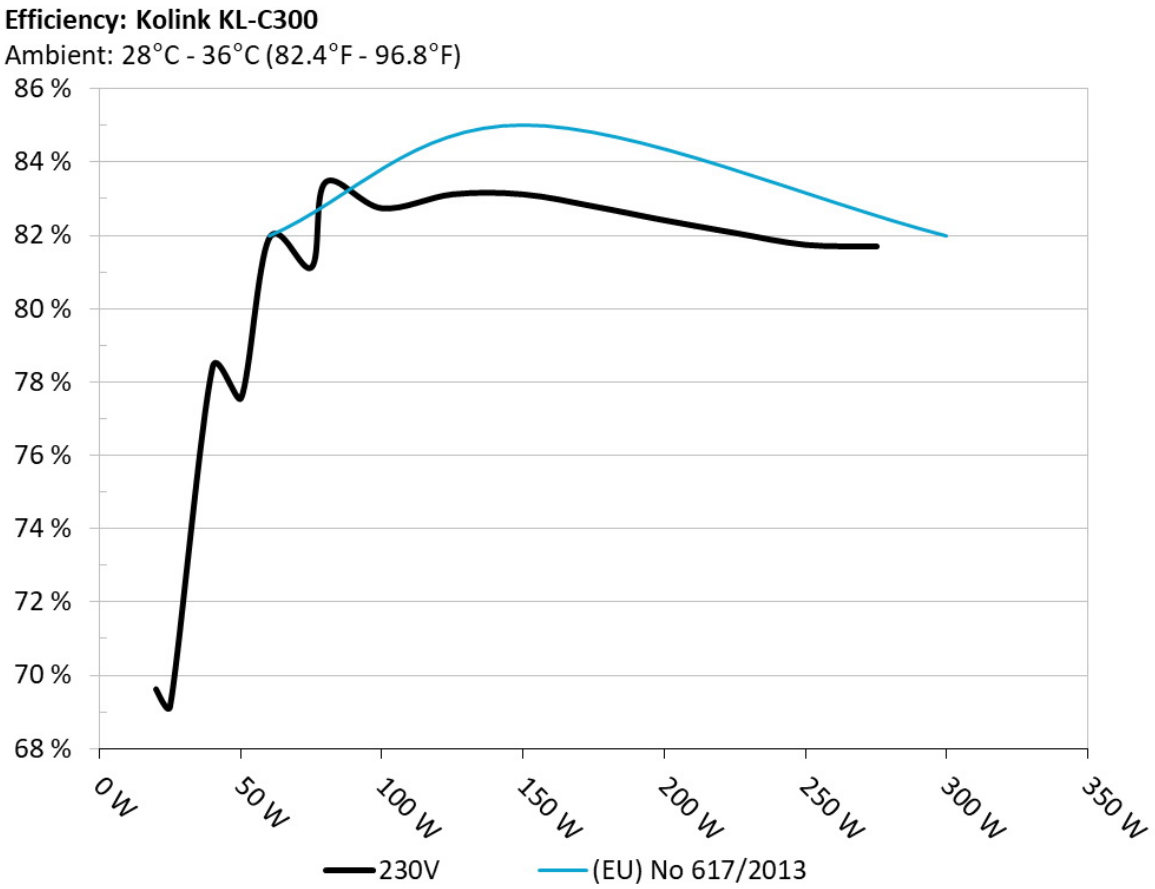
230V



□□

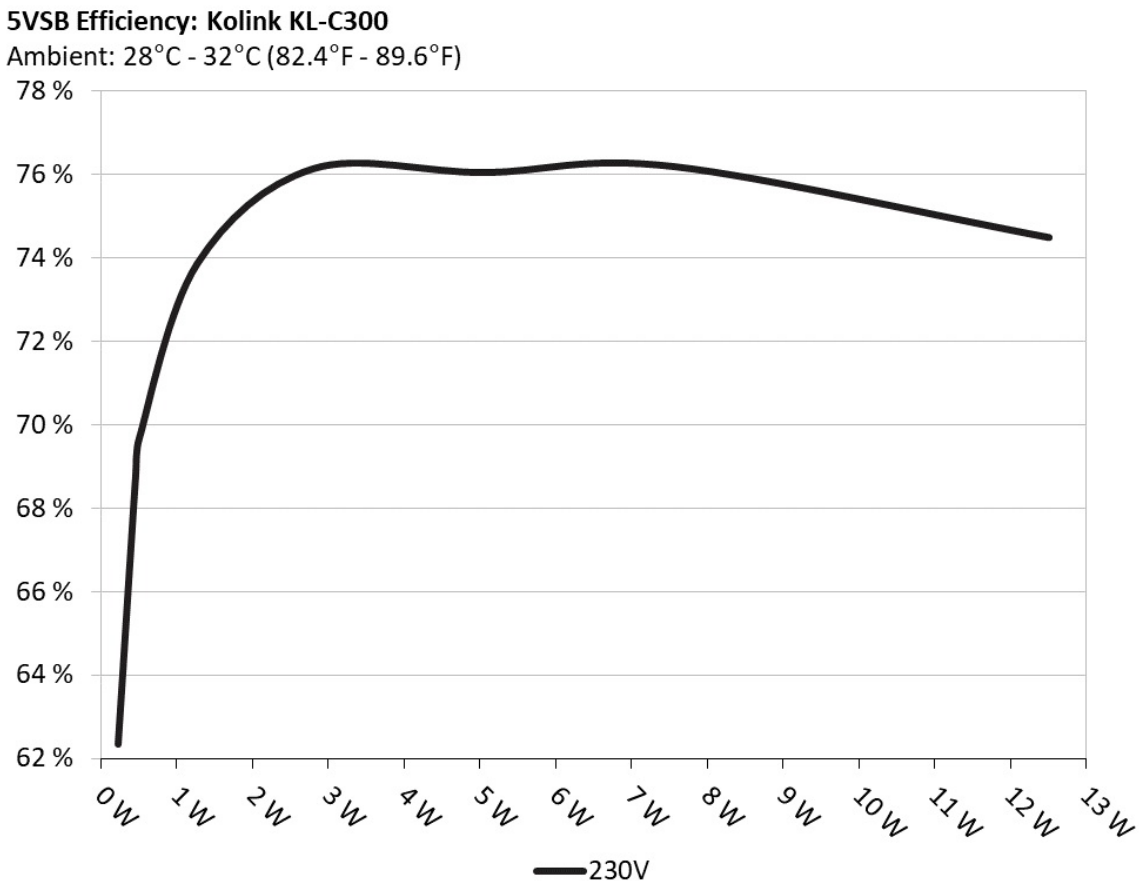
The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

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) 230V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	0.045A	0.230	62.331%	0.024
	5.100V	0.369		230.33V

2	0.090A	0.459	68.713%	0.043
	5.098V	0.668		230.33V
3	0.550A	2.794	76.110%	0.194
	5.079V	3.671		230.35V
4	1.000A	5.061	76.025%	0.278
	5.060V	6.657		230.33V
5	1.500A	7.564	76.166%	0.332
	5.041V	9.931		230.33V
6	2.500A	12.506	74.467%	0.388
	5.002V	16.794		230.31V

Supplementary Tests (For Reference)

10-110%□□□□ 230V

□□ #	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
1	0.261A	2.058A	1.951A	0.992A	24.960	69.157%	664	13.3	30.77°C	0.820
	12.853V	4.862V	3.381V	5.044V	36.092				34.29°C	230.31V
2	1.551A	3.017A	2.938A	1.195A	50.021	77.548%	677	14.0	30.82°C	0.897
	12.328V	4.973V	3.368V	5.023V	64.503				34.88°C	230.30V
3	3.176A	3.522A	3.442A	1.399A	75.011	81.117%	683	13.6	31.00°C	0.923
	12.265V	4.970V	3.356V	5.005V	92.473				35.77°C	230.30V
4	4.804A	4.036A	3.945A	1.605A	100.001	82.725%	695	14.0	31.45°C	0.941
	12.237V	4.958V	3.346V	4.987V	120.883				37.19°C	230.25V
5	6.082A	5.075A	4.953A	1.813A	124.989	83.106%	708	14.6	32.37°C	0.952
	12.245V	4.928V	3.332V	4.965V	150.397				38.58°C	230.27V
6	7.367A	6.126A	5.968A	2.000A	149.940	83.105%	705	14.8	32.54°C	0.957
	12.251V	4.898V	3.317V	4.943V	180.423				39.66°C	230.28V
7	8.635A	7.199A	6.995A	2.236A	174.995	82.776%	707	14.6	33.41°C	0.962
	12.262V	4.864V	3.302V	4.919V	211.407				41.16°C	230.28V
8	9.917A	8.002A	8.028A	2.451A	198.722	82.416%	893	19.6	33.70°C	0.966
	12.263V	4.838V	3.288V	4.896V	241.121				42.34°C	230.28V

9	11.621A	8.835A	8.549A	2.458A	224.953	82.053%	1056	24.3	34.93°C	0.968
	12.258V	4.811V	3.275V	4.882V	274.156				44.25°C	230.30V
10	13.297A	9.399A	9.102A	2.570A	250.017	81.728%	1280	31.2	35.07°C	0.970
	12.245V	4.788V	3.262V	4.865V	305.915				45.15°C	230.30V
11	15.394A	9.410A	9.130A	2.575A	275.062	81.686%	1341	32.1	35.52°C	0.972
	12.203V	4.783V	3.253V	4.855V	336.730				46.26°C	230.31V
CL1	5.767A	10.999A	10.997A	0.001A	160.378	80.419%	715	15.2	32.56°C	0.961
	12.489V	4.745V	3.288V	4.990V	199.427				38.64°C	230.28V
CL2	20.002A	1.002A	1.000A	1.000A	245.249	84.689%	1026	23.8	35.35°C	0.970
	11.592V	5.090V	3.313V	4.973V	289.588				44.88°C	230.29V

The results above are not used in the certification process

20-80□□□□ 230V

□□ #	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	PF/AC □□
1	1.237A	0.488A	0.485A	0.197A	19.983	69.620%	685	13.8	0.775
	11.998V	5.112V	3.392V	5.086V	28.703				230.31V
2	2.467A	0.983A	0.973A	0.395A	39.975	78.401%	687	13.8	0.871
	12.031V	5.086V	3.383V	5.069V	50.988				230.29V
3	3.695A	1.481A	1.467A	0.594A	60.006	81.907%	687	13.8	0.907
	12.059V	5.062V	3.374V	5.053V	73.261				230.21V
4	4.912A	1.985A	1.963A	0.794A	79.956	83.438%	688	13.8	0.925
	12.083V	5.038V	3.365V	5.036V	95.827				230.27V

The results above are not used in the certification process

□□□□ 230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	7.00mV	19.50mV	7.60mV	12.90mV	Pass
20% Load	7.40mV	28.00mV	10.50mV	15.80mV	Pass
30% Load	8.60mV	28.90mV	11.10mV	13.90mV	Pass
40% Load	8.10mV	28.00mV	11.40mV	13.00mV	Pass





Test	12V	5V	3.3V	5VSB	Pass/Fail
50% Load	8.00mV	28.50mV	12.10mV	22.10mV	Pass
60% Load	8.40mV	29.40mV	12.30mV	13.90mV	Pass
70% Load	10.00mV	30.40mV	13.60mV	15.30mV	Pass
80% Load	9.30mV	30.00mV	23.00mV	16.30mV	Pass
90% Load	9.90mV	31.40mV	23.00mV	17.30mV	Pass
100% Load	14.50mV	36.00mV	25.70mV	18.90mV	Pass
110% Load	15.40mV	36.30mV	26.20mV	19.00mV	Pass
Crossload1	22.90mV	20.90mV	7.60mV	7.30mV	Pass
Crossload2	17.50mV	21.60mV	12.40mV	15.70mV	Pass

The results above are not used in the certification process

Kolink Core 300W

Top side

Power specifications label

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。
在任何情况下都应提供原始测试结果文档的网站链接

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CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com