

# Technical Documentation for Turkey Ecodesign Requirements for Computers and Computer Servers, Communiqué 2015/4

#### 2/21/2021

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Product Information							
Machine Type(s) Model(s) Part Number Product Type							
9009	41G	-	Computer server				

Manufacturer's name, registered trade name and registered trade address:



® Registered Trademark of International Business Machines Corporation New Orchard Road Armonk, New York 10504

## Year of manufacture

2021

Noise levels (declared A-weighted sound power level of the computer)

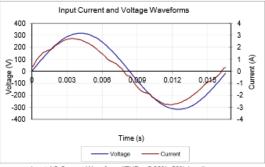
#### 58 decibels

Internal/external power supply efficiency

691-XXXX
691-XXXX
4Y8092YK10812BA007
5/13

Rated Specifications	Value	Units
Input Voltage	100-127 / 200-240	Volts
Input Current	10.0/5.0	Amps
Input Frequency	50/60	Hz
Rated Output Power	900	Watts

Note: All measurements were taken with input voltage at 230 V nominal and 60 Hz.



Input AC Current Waveform (ITHD = 5.39%, 50% Load)

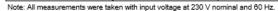
I <sub>RM3</sub>	PF	I <sub>THD</sub> (%)	Load	Fraction Input External		DC Terminal Voltage (V)/ DC Load Current (A)		Output		
Α			(%)	of Load	Watts	Fan (W)*	12.2V	12Vsb	Watts	Efficiency %
0.58	0.76	15.36	10%	Low	102	0.84	12.28/7.15	12.07/0.25	91	88.92%
0.92	0.92	13.03	20%	Light	194	0.84	12.27/14.22	12.06/0.49	180	92.85%
2.13	0.98	5.39	50%	Typical	481	0.84	12.26/35.74	12.04/1.22	453	94.16%
4.29	0.99	6.74	100%	Full	978	2.88	12.26/71.5	11.99/2.43	905	92.57%

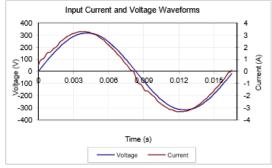
<sup>\*</sup> Fan power is not included in the efficiency calculations



Ecos ID#	SO-732
Manufacturer	IBM Corporation
Model Number	MPS1025
Serial Number	YL10KFF23034
Year	2014
Туре	CUSTOM
Test Date	04/17/14

Rated Specifications	Value	Units
Input Voltage	100-127 / 200-240	Volts
Input Current	12-7	Amps
Input Frequency	50/60	Hz
Rated Output Power	1,025	Watts





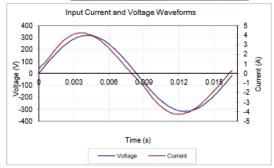
Input AC Current Waveform (ITHD = 3.03%, 50% Load)

I <sub>RM8</sub>	PF	I <sub>THD</sub> (%)	Load	Fraction	Input	External	DC Terminal Voltage (V)/ DC L	oad Current (A)	Output	
Α			(%)	of Load	Watts	Fan (W)*	12.3V	12.3Vsb	Watts	Efficiency %
0.60	0.84	39.26	10%	Low	117	16.92	12.32/6.67	12.3/1.66	103	87.66%
1.02	0.96	27.40	20%	Light	226	16.92	12.32/13.4	12.3/3.32	206	91.22%
2.40	0.99	3.03	50%	Typical	548	16.92	12.33/33.47	12.29/8.29	515	94.00%
4.83	1.00	2.04	100%	Full	1110	16.92	12.34/66.97	12.27/16.58	1030	92.78%
* Fan po	Fan power is not included in the efficiency calculations									

Ecos ID #	SO-542
Manufacturer	IBM
Model Number	7001692-XXXX
Serial Number	11S94Y8090YK10812AZ003
Year	2012
Туре	10
Test Date	04/25/13

Rated Specifications	Value	Units
Input Voltage	100-127   200-240	Volts
Input Current	10-8	Amps
Input Frequency	50/60	Hz
Rated Output Power	1,400	Watts

Note: All measurements were taken with input voltage at 230 V nominal and 60 Hz.



Input AC Current Waveform (ITHD = 3.91%, 50% Load)

I <sub>RM3</sub>	PF	I <sub>THD</sub> (%)	Load	Fraction	raction Input External		DC Terminal Voltage (V)/ DC Load Current (A)		Output	
Α			(%)	of Load	Watts	Fan (W)*	12.2V	12Vsb	Watts	Efficiency %
0.78	0.86	16.03	10%	Low	155	0.84	12.28/11.25	12.24/0.25	141	90.93%
1.39	0.94	9.64	20%	Light	302	0.84	12.28/22.5	12.21/0.49	282	93.52%
3.30	0.99	3.91	50%	Typical	748	1.58	12.27/56.26	12.11/1.23	705	94.21%
6.71	0.99	3.75	100%	Full	1533	4.58	12.25/112.54	11.94/2.45	1408	91.85%

<sup>\*</sup> Fan power is not included in the efficiency calculations

### Maximum power (watts)

1600 watts

Idle State power (watts)

244 watts

Sleep mode power (watts)

Not applicable for computer servers

Off mode power (watts) **21 watts** 



Test parameters	Properties
Test voltage and frequency	230 V ac at 50 Hz or 60 Hz
Total harmonic distortion of the electricity supply system	The maximum harmonic content of the input voltage waveform is equal to or less than 2%. The qualification is compliant with EN 61000-3-2.
Information and documentation on the instrumentation setup and circuits that are used for electrical testing	SPEC SERT suite version 2.x. ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies
Measurement methodology that is used to determine information in this document	SPEC SERT suite version 2.x. ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies

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