

Technical Documentation for EU Regulation 2019/424 laying down ecodesign requirements for servers and data storage product pursuant to Directive 2009/125/EC

3/3/2023

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Product Information									
Machine Type(s)	Model(s)	Part Number	Product Type						
9105	41B	-	Resilient server (1 socket) - Rack						
			Drawer System						

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

Marca Registrada

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International Business Machines Corporation

New Orchard Road Armonk, New York 10504

Year of manufacture - 2022

Power Supply Unit (PSU) efficiency, power factor and rated power output:

ID Number	SO-2021
Manufacturer	IBM
Model Number	AWF2DC1200W-E
Serial Number	03FP726YL30NH1C7133
Year	2022
Туре	10
Test Date	04/18/22

Rated Specifications	Value	Units
Input Voltage	100-127/200-240	Volts
Input Current	12/7.5	Amps
Input Frequency	50/60	Hz
Rated Output Power	1,200	Watts

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

Input Current and Voltage Waveforms	
400 6	
200	
	8
80 0 0.001 0.003 0.008 0.013 0.008	rrent (A)
200	5
-200	
-400 Time (s)	,

Input AC Current Waveform (ITHD = 7.107%, 50% Load)

			Fraction Input External DC Terminal Voltage (V)/ DC		oad Current (A)	Output	Efficiency			
RMS	PF	THD	Loau	of Load	Watts	Fan (W)*	12.3V	12.3Vsb	Watts	Efficiency
0.677	0.8473	42.10%	10%	Low	131.97	2.04	12.18/9.24	12.14/0.55	119.18	90.31%
1.149	0.9541	16.84%	20%	Light	252.12	2.04	12.16/18.47	12.1/1.11	238.06	94.42%
2.747	0.9778	7.11%	50%	Typical	617.67	2.04	12.13/46.16	12.04/2.78	593.29	96.05%
5.404	0.9930	4.86%	100%	Full	1234.64	8.52	12.07/92.32	11.94/5.55	1180.98	95.65%

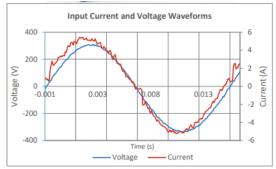
^{*} Fan power is not included in the efficiency calculations



ID Number	SO-2020.1
Manufacturer	IBM
Model Number	AWF2DC1600W-I
Serial Number	02PX119YL30NH22R186
Year	2022
Type	10
Test Date	04/18/22

Rated Specifications	Value	Units
Input Voltage	100-127/200-240	Volts
Input Current	12/9	Amps
Input Frequency	50/60	Hz
Rated Output Power	1,600	Watts

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



Input AC Current Waveform (ITHD = 5.052%, 50% Load)

	I _{RMS} PF I _{THD} Load Fraction Input of Load Watts		External	DC Terminal Voltage (V)/ DC Lo	Output	Efficiency				
RMS			Fan (W)*	12.3V	12.3Vsb	Watts	Efficiency			
0.822	0.9224	21.08%	10%	Low	174.44	1.92	12.27/12.48	12.25/0.57	160.15	91.80%
1.531	0.9597	9.13%	20%	Light	338.06	1.80	12.26/24.95	12.21/1.15	319.96	94.65%
3.643	0.9900	5.05%	50%	Typical	829.42	1.92	12.22/62.39	12.15/2.86	797.46	96.15%
7.277	0.9969	4.13%	100%	Full	1668.89	8.52	12.16/124.77	12.05/5.73	1586.12	95.04%

^{*} Fan power is not included in the efficiency calculations

Server product family configurations

	1-socket co	nfiguration	2-socket co	nfiguration	3-socket co	nfiguration	4-socket co	nfiguration
	High-end	Low-end	High-end	Low-end	High-end	Low-end	High-end	Low-end
(a)	323.6	376.1	n/a	n/a	n/a	n/a	n/a	n/a
(b)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(c)	962.3	646	n/a	n/a	n/a	n/a	n/a	n/a
(d)	A3	A3	n/a	n/a	n/a	n/a	n/a	n/a
(e)	578.6	631.1	n/a	n/a	n/a	n/a	n/a	n/a
(f)	15.2,	5.7, 2.4	n/a	n/a	n/a	n/a	n/a	n/a
	13.2							
list of all	components	for additional	idle power a	llowances, if	any (addition	nal PSU, HD	Ds or SSDs,	additional
	m	nemory, addit	ional buffere	d DDR chani	nels, addition	al I/O device	s)	
(g)	1	1	n/a	n/a	n/a	n/a	n/a	n/a
(h)	2	2	n/a	n/a	n/a	n/a	n/a	n/a
(i)	0	0	n/a	n/a	n/a	n/a	n/a	n/a
(j)	2	2	n/a	n/a	n/a	n/a	n/a	n/a
(k)	1044	127	n/a	n/a	n/a	n/a	n/a	n/a
(I)	0	0	n/a	n/a	n/a	n/a	n/a	n/a
	Insta	lled I/O devi	ces greater th	an two ports	of $>= 1$ Gbit,	onboard Eth	ernet	
(m)	1	1	n/a	n/a	n/a	n/a	n/a	n/a
(n)	0	0	n/a	n/a	n/a	n/a	n/a	n/a
(o)	0	0	n/a	n/a	n/a	n/a	n/a	n/a
(p)	0	0	n/a	n/a	n/a	n/a	n/a	n/a
(q)	0	0	n/a	n/a	n/a	n/a	n/a	n/a

- a Measured idle state power, expressed in Watts and rounded to the first decimal place
- b Calculated idle state power, expressed in Watts and rounded to the first decimal place
- c Maximum power, expressed in Watts and rounded to the first decimal place
- d Declared operating condition class
- e Idle state power (Watts) at the higher boundary temperature of the declared operating condition class
- f Active state efficiency and the performance in active state of the server
- g CPU Performance: quantity
- h Additional PSU installed explicitly for power redundancy: quantity
- i HDD installed: quantity
- j SSD installed: quantity



k Installed memory greater than 4 GB: quantity

I Installed buffered DDR channels greater than 8 channels: quantity

m = 1 Gb/s: quantity

n > 1 Gb/s and < 10 Gb/s: quantity

o >= 10 Gb/s and < 25Gb/s: quantity

p >= 25 Gb/s and < 50Gb/s: quantity

q >= 50 Gb/s: quantity

Secure data functionality:

Secure data deletion for devices by using stand-alone diagnostics - IBM Documentation

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