



## Technical Documentation for Ukraine Technical Regulation on Ecodesign Requirements for Computers and Computer Servers, Resolution No. 737

7/22/2022

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<b>Product Information</b>			
<b>Machine Type(s)</b>	<b>Model(s)</b>	<b>Part Number</b>	<b>Product Type</b>
9105, 9786	22A, 22H	-	Computer server

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

**IBM**  
Marca Registrada  
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International Business Machines Corporation  
New Orchard Road Armonk, New York 10504

Year of manufacture

**2022**

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

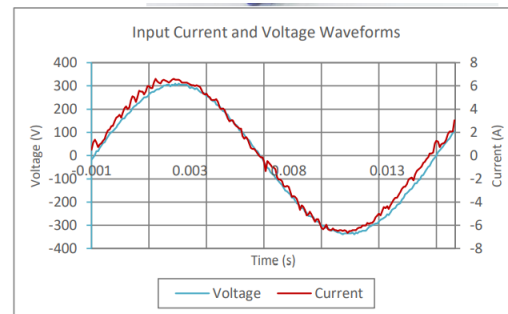
	Operating	Idle
- Typical configuration - Typical workload - 23°C (73.4°F), 500 m (1640 ft) environment	7.4	6.9
- Typical configuration - Typical workload - 23°C (73.4°F), 500 m (1640 ft) environment - Front acoustic door <sup>9</sup>	7.2	6.7
- High power PCIe adapter or adapters - Typical workload - 23°C (73.4°F), 500 m (1640 ft) environment	7.9	7.9
- High power PCIe adapter or adapters - Typical workload - 23°C (73.4°F), 500 m (1640 ft) environment - Front acoustic door <sup>9</sup>	7.6	7.6
- Typical configuration - Typical workload - 25°C (77°F), 500 m (1640 ft) environment	7.4	7.4
- Typical configuration - Typical workload - 25°C (77°F), 500 m (1640 ft) environment - Front acoustic door <sup>9</sup>	7.2	7.2



- High power PCIe adapter or adapters - Typical workload - 25°C (77°F), 500 m (1640 ft) environment	8.4	8.4
- High power PCIe adapter or adapters - Typical workload - 23°C (73.4°F), 500 m (1640 ft) environment - Front acoustic door <sup>9</sup>	8.2	8.2
- Typical configuration - Typical workload - 40°C (104°F), 3050 m (10000 ft) environment	8.5	8.2
- Typical configuration - Typical workload - 40°C (104°F), 3050 m (10000 ft) environment - Front acoustic door <sup>9</sup>	8.3	7.9
- High power PCIe adapter or adapters - Typical workload - 40°C (104°F), 3050 m (10000 ft) environment	8.5	8.5
- High power PCIe adapter or adapters - Typical workload - 40°C (104°F), 3050 m (10000 ft) environment - Front acoustic door <sup>9</sup>	8.3	8.3

### Internal/external power supply efficiency

<b>ID Number</b>	SO-1948
<b>Manufacturer</b>	IBM
<b>Model Number</b>	700-015217
<b>Serial Number</b>	11S03FP379YL30KY1860Z8
<b>Year</b>	2021
<b>Type</b>	1U
<b>Test Date</b>	11/23/21



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

Rated Specifications	Value	Units
Input Voltage	100-127/200-240	Volts
Input Current	12/10	Amps
Input Frequency	50/60	Hz
Rated Output Power	2,000	Watts

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

I <sub>RMS</sub>	PF	I <sub>THD</sub>	Load	Fraction of Load	Input Watts	External Fan (W)*	DC Terminal Voltage (V)/ DC Load Current (A)		Output Watts	Efficiency
							12.3V	12Vsb		
0.98	0.96	9.62%	10%	Low	216	1.17	12.32/15.72	12.3/0.58	201	93.02%
1.86	0.99	3.84%	20%	Light	422	1.17	12.31/31.38	12.29/1.17	401	95.05%
4.55	1.00	3.03%	50%	Typical	1045	1.56	12.3/78.66	12.24/2.92	1003	96.02%
9.21	1.00	4.19%	100%	Full	2108	20.99	12.27/157.32	12.17/5.84	2001	94.94%

\* Fan power is not included in the efficiency calculations

### Maximum power (watts)

**1313 watts**

### Idle State power (watts)

**953 watts**

### Sleep mode power (watts)

**Not applicable for computer servers**

### Off mode power (watts)

**29 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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