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

07/25/2025

The following information is based on IBM's knowledge as of the date of this document, which may be based on its records and information from third parties. This documentation applies to finished products that IBM newly puts on the market in Ukraine and other jurisdictions which require this Technical Documentation as of the above date.

Product Information			
Machine Type(s)	**Model(s)**	**Part Number**	**Product Type**
9043	MRU	-	Computer server

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

Year of manufacture
2025

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

Table 5. Noise emissions for the 9043-MRU

Declared noise emission values in accordance with ISO 9296(1-8)		
Model 9043-MRU	Mean A-weighted sound power level, $L_{WA,m}$ (B)	
	Operating	Idling
– Maximum configuration: 4x30 core processors, 16 TB memory, low-powered PCIe cards – Typical workload – 25°C (77°F), 500 m (1640 ft) environment	9.5	7.8

– Maximum configuration: 4x30 core processors, 16 TB memory, low-powered PCIe cards – Typical workload – Acoustical front door[9] – 25°C (77°F), 500 m (1640 ft) environment – Front acoustic door[9]	8.9	7.4
– Maximum configuration: 4x30 core processors, 16 TB memory, low-powered PCIe cards – Typical workload – 40°C (104°F), 500 m (1640 ft) environment	9.6	8.5
– Maximum configuration: 4x30 core processors, 16 TB memory, low-powered PCIe cards – Heavy workload – 40°C (104°F), 500 m (1640 ft) environment – Front acoustic door[9]	9.0	8.1

Notes:

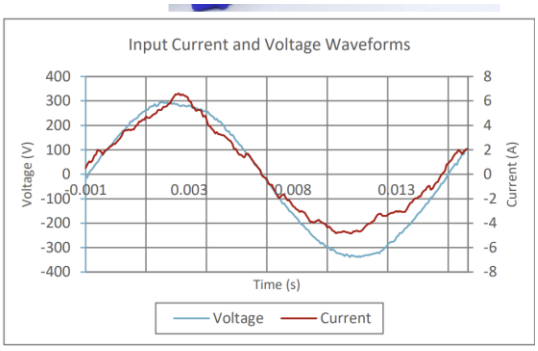
1. Declared level $L_{WA,m}$ is the mean A-weighted sound power level.
2. Declared level $L_{pA,m}$ is the mean A-weighted sound pressure level that is computed as the arithmetic average of the measurements made at the 1-meter bystander positions, or it is measured as the maximum 0.5-meter operator position at the front or rear face with the doors opened.
3. The statistical adder for verification, K_v, is a quantity to be added to the declared mean A-weighted sound power level, $L_{WA,m}$, such that there is a 95% probability of acceptance, when using the verification procedures of ISO 9296, if no more than 6.5% of the batch of new equipment has A-weighted sound power levels greater than ($L_{WA,m}$ + K_v).
4. The quantity $L_{WA,c}$ (formerly called L_{WAd}), can be computed from the sum of $L_{WA,m}$ and K_v.
5. Measurements are made in conformance with ISO 7779 and declared in conformance with ISO 9296 except for the inclusion of some modeled results that are derived from ISO 7779 measurements and system performance assessments.
6. B and dB stand for bels and decibels. 1 B equals 10 dB.
7. Under certain environments, configurations, system settings, or workloads, there is an increase in fan speeds that results in higher noise levels.
8. Notice: Government regulations (such as those prescribed by OSHA or European Community Directives) might govern noise level exposure in the workplace and might apply to you and your server installation. The actual sound pressure levels in your installation depend upon various factors, including the number of racks in the installation; the size, materials, and configuration of the room where you designate the racks to be installed; the noise levels from other equipment; the room ambient temperature, and employees' location in relation to the equipment. Further, compliance with such government regulations also depends upon various extra factors, including the duration of employees' exposure and whether employees wear hearing protection. IBM recommends that you consult with qualified experts in this field to determine whether you are in compliance with the applicable regulations.
9. Acoustical doors for IBM Enterprise Slim Rack (Model 7965-S42).

Internal/external power supply efficiency

ID Number	SO-1799
Manufacturer	IBM CORPORATION
Model Number	AWF2DC1500W
Serial Number	02YJ111YS30NH09G076
Year	2020
Type	1U
Test Date	11/19/20

Rated Specifications	Value	Units
Input Voltage	**200-240**	Volts
Input Current	**9**	Amps
Input Frequency	**50/60**	Hz
Rated Output Power	**1,500**	**Watts**

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



Input AC Current Waveform (ITHD = 4.91%, 50% Load)

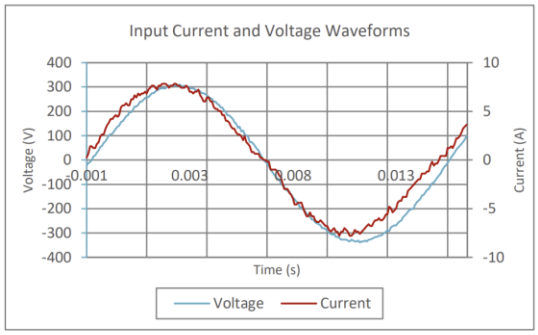
I_{RMS}	PF	I_{THD}	Load	Fraction of Load	Input Watts	External Fan (W)*	DC Terminal Voltage (V)/ DC Load Current (A) 12.1V	3.3Vsb	Output Watts	Efficiency
0.77	0.93	7.09%	10%	**Low**	165	19.08	12.28/12.37	3.33/0.2	153	**92.28%**
1.43	0.98	6.78%	20%	**Light**	321	19.08	12.26/24.75	3.31/0.4	305	**94.96%**
3.48	0.99	4.91%	50%	**Typical**	789	19.08	12.2/61.86	3.27/1	758	**96.08%**
7.23	0.95	4.48%	100%	**Full**	1582	18.60	12.1/123.71	3.19/2	1503	**94.99%**

* Fan power is not included in the efficiency calculations

ID Number	SO-1946
Manufacturer	IBM
Model Number	700-015218
Serial Number	11S00E5464YL30KY1750UM
Year	2021
Type	1U
Test Date	11/23/21

Rated Specifications	Value	Units
Input Voltage	**200-240**	Volts
Input Current	**10**	Amps
Input Frequency	**50/60**	Hz
Rated Output Power	**2,300**	**Watts**

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



Input AC Current Waveform (ITHD = 4.69%, 50% Load)

I_{RMS}	PF	I_{THD}	Load	Fraction of Load	Input Watts	External Fan (W)*	DC Terminal Voltage (V)/ DC Load Current (A) 12.3V	12Vsb	Output Watts	Efficiency
1.11	0.96	7.33%	10%	**Low**	247	1.17	12.32/18.2	12.3/0.59	231	**93.71%**
2.13	0.99	2.93%	20%	**Light**	484	1.17	12.31/36.34	12.29/1.18	462	**95.42%**
5.28	0.99	4.69%	50%	**Typical**	1204	4.17	12.32/90.86	12.27/2.95	1156	**96.01%**
10.72	1.00	2.51%	100%	**Full**	2462	11.34	12.36/181.67	12.25/5.91	2317	**94.14%**

* Fan power is not included in the efficiency calculations

Maximum power (watts)
4643.4 watts

Idle State power (watts)
2180.5 watts

Sleep mode power (watts)
Not applicable for computer servers

Off mode power (watts)
93.8 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

IBM maintains a product environmental specification, IBM Engineering Specification 46G3772 - Baseline Environmental Requirements for Supplier Deliverables to IBM which mandates part and product compliance to relevant worldwide regulations, including EU Regulation 2019/424. The specifications are located for supplier access at: http://www.ibm.com/ibm/environment/products/ and http://www-03.ibm.com/procurement/proweb.nsf/ContentDocsByTitle/United+States~Information+for+suppliers.

Suppliers are required to certify compliance to IBM product environmental specifications by completing the IBM Product Content Declaration (PCD), located at: http://www.ibm.com/ibm/environment/products/. Once completed, the PCD form is submitted to IBM, loaded into product management databases and accessed for compliance review by product. IBM’s Product Environmental Profile process and tool documents and reviews product compliance prior to release to the market. The documentation presented here is a result of this review and process.

In 1997, IBM became the world's first major multinational corporation to have earned a single worldwide registration to the ISO 14001 Environmental Management System (EMS) standard. The registration covers IBM's manufacturing, product design and hardware development operations across its business units worldwide. IBM was able to earn its single worldwide registration to ISO 14001 because of its longstanding global EMS. ISO 14001 EMS standard is a voluntary international standard that identifies the elements of an EMS needed for an organization to effectively manage its impact on the environment. Its objective is to integrate the EMS with overall business management processes so that environmental considerations are a standard part of business decisions. Applied to all its manufacturing and hardware development operations globally, IBM's EMS fosters common solutions, continual improvement and worldwide consistency. The result is a more effective and efficient EMS. The single registration also ensures that IBM executes the same EMS no matter where in the world it does business. Under IBM's single global registration, approximately 20 sites or registered entities are audited annually on a sampling or rolling basis by Bureau Veritas Certification North America, IBM's ISO 14001 registrar. These audits of IBM's EMS include sampling and verification of the implementation of IBM's internal requirements, monitoring and measurement as reported through the self assessment program, energy master plans, and in the Environmental Performance Database, and other tools used to provide the information for IBM's annual environmental and corporate responsibility reporting and for management review. The IBM ISO 14001 certification is located at http://www.ibm.com/ibm/environment/iso14001/.

More information on IBM’s product stewardship program and / or environmental policies is located at: http://www.ibm.com/ibm/environment/

Limitations for Customers: The Product information provided in this Technical Documentation (“Documentation”) is provided “AS IS”, without any express or implied warranty of any kind. This information is subject to change without notice; provided, however, that IBM reserves the right, in its discretion, to issue an update or modification to this Documentation if it believes it is appropriate to do so. The contents of this Documentation do not constitute either: (1) legal advice; (2) a legal opinion; or (3) any representation, warranty, or guarantee regarding a person's ability to comply with applicable legal requirements. This Documentation in no way modifies any agreements entered into by IBM. The information here is based on IBM’s knowledge as of the date of this document, which may be based on its records and information from third parties. This documentation applies to finished products that IBM newly puts on the market in the European Union and other jurisdictions which require this Declaration of Conformity as of the date above. CE Mark applies only to those new products put on the market in the EU and the European Free Trade Association jurisdictions by IBM.

The following are trademarks of International Business Machines Corporation in the United States, or other countries, or both: IBM IBM Logo.