



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

2021-02-19

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 the European Union and other jurisdictions which require this Technical Documentation as of the above date.

Product Information			
Machine Type(s)	Model(s)	Part Number	Product Type
2072	2N2, 2N4, W12, W24, X12, X24	-	Online data storage product

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



Year of manufacture

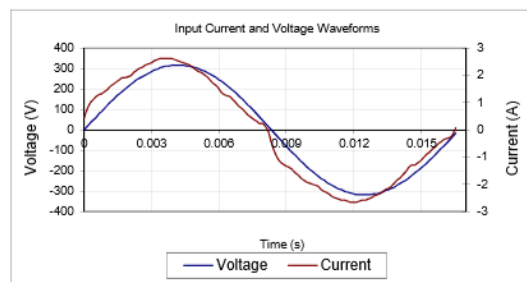
2021

Power Supply Unit (PSU) efficiency and power factor:

Ecos ID #	SO-1003
Manufacturer	IBM
Model Number	TDPS-800FB A
Serial Number	CCQT1538000260
Year	2015
Type	1U
Test Date	9/28/15

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	9.4	Amps
Input Frequency	47-63	Hz
Rated Output Power	800	Watts

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



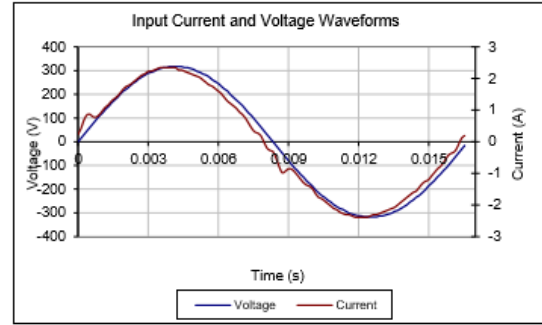
Input AC Current Waveform (ITHD = 6.88%, 50% Load)

I <sub>RMS A</sub>	PF	I <sub>THD</sub> (%)	Load (%)	Input Watts	External Fan (W)*	DC Terminal Voltage (V)/ DC Load Current (A)			Output Watts	Efficiency %
						12V	5V	5Vsb		
0.62	0.65	11.85%	10%	92.45	40.43	12.01/5.21	5.01/3.34	5.01/0.21	80.34	86.91%
0.89	0.86	11.32%	20%	174.24	40.43	12/10.39	5/6.67	5/0.42	160.16	91.92%
1.91	0.97	6.86%	50%	424.30	40.43	11.99/26	4.99/16.64	4.99/1.05	399.93	94.26%
3.78	0.99	6.36%	100%	858.90	40.43	11.96/51.92	4.97/33.18	4.96/2.09	796.36	92.72%

\* Fan power is not included in the efficiency calculations



Ecos ID #	SO-1161
Manufacturer	IBM
Model Number	SGE006-030G, 01AC454, R0850-F0080-01
Serial Number	N/A
Year	2016
Type	1U
Test Date	09/12/16



Input AC Current Waveform (THD = 4.68%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	9.4	Amps
Input Frequency	50/60	Hz
Rated Output Power	800	Watts

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

$I_{RMS}$ A	PF	$I_{THD}$ (%)	Load (%)	Fraction of Load	Input Watts	External Fan (W)*	DC Terminal Voltage (V)/ DC Load Current (A)			Output Watts	Efficiency %
							12V	5V	5Vsb		
0.42	0.94	11.91	10%	Low	90	18.96	12/5.19	4.95/3.36	4.98/0.21	80	88.51%
0.76	0.99	11.09	20%	Light	174	18.84	12/10.4	4.95/6.72	4.97/0.42	160	92.15%
1.86	1.00	4.68	50%	Typical	425	18.84	11.99/26	4.94/16.81	4.96/1.05	400	94.16%
3.76	1.00	3.54	100%	Full	864	18.72	11.97/51.99	4.93/33.59	4.94/2.09	798	92.42%

\* Fan power is not included in the efficiency calculations

## Declared operating condition class A2

This product has been tested in order to verify that it will function within the boundaries of the declared operating condition class.

### Secure data functionality

[https://www.ibm.com/support/knowledgecenter/STHGuj\\_8.3.1/com.ibm.flashsystem.5100.831.doc/svc\\_secure\\_data\\_deletion.html](https://www.ibm.com/support/knowledgecenter/STHGuj_8.3.1/com.ibm.flashsystem.5100.831.doc/svc_secure_data_deletion.html)

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.

© Copyright IBM Corporation 2021.

U.S. Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.