



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

January 19, 2024

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Product Information			
Machine Type(s)	Model(s)	Part Number	Product Type
4680	2P2, 2P4, 12H, 24H, 92H	-	Online data storage product

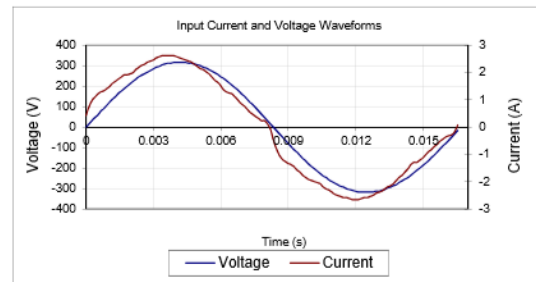
Manufacturer's name, registered trade name and registered trade address:



Year of manufacture
2023

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)

$I_{RMS A}$	PF	I_{THD} (%)	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%

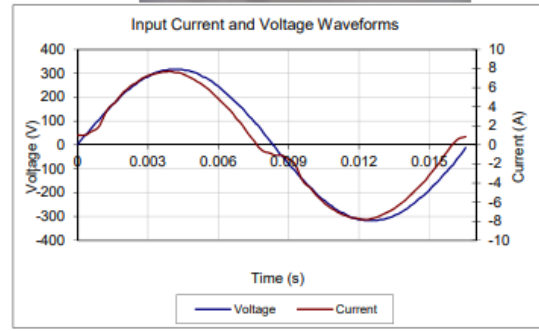
* Fan power is not included in the efficiency calculations



Ecos ID #	SO-1054
Manufacturer	Delta Electronics (Thailand) PCL
Model Number	TDPS-2400AB A
Serial Number	CCTT15520121
Year	2016
Type	1U
Test Date	01/26/16

Rated Specifications		Value	Units
Input Voltage		200-240	Volts
Input Current		14.4	Amps
Input Frequency		50/60	Hz
Rated Output Power		2,400	Watts

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



Input AC Current Waveform (ITHD = 10.62%, 50% Load)

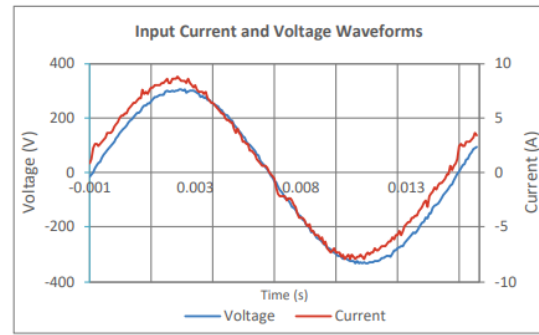
I _{RMS} A	PF	I _{THD} (%)	Load (%)	Fraction of Load	Input Watts	External Fan (W)*	DC Terminal Voltage (V)/ DC Load Current (A)				Output Watts	Efficiency %
							12V	5Vsb	5Vsb	5Vsb		
1.36	0.89	22.00	10%	Low	278	17.67	12.08/16.5	5.02/4.13	5.03/0.23	5.02/4.14	242	87.10%
2.40	0.95	17.42	20%	Light	526	17.67	11.86/33.04	5.01/8.28	5.03/0.46	5.01/8.27	477	90.74%
5.67	0.99	10.62	50%	Typical	1289	17.67	12.01/82.64	5.01/20.7	5.01/1.15	5.01/20.68	1206	93.51%
11.53	1.00	4.07	100%	Full	2647	17.67	11.95/165.65	5.01/41.42	4.97/2.29	5.01/41.3	2405	90.87%

* Fan power is not included in the efficiency calculations

ID Number	SO-2135
Manufacturer	Delta Electronics, Inc.
Model Number	TDPS-2400PB A
Serial Number	XXXT2234000009
Year	2022
Type	1U
Test Date	10/11/22

Rated Specifications		Value	Units
Input Voltage		200-240	Volts
Input Current		14.4	Amps
Input Frequency		50/60	Hz
Rated Output Power		2,400	Watts

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



Input AC Current Waveform (ITHD = 3.675%, 50% Load)

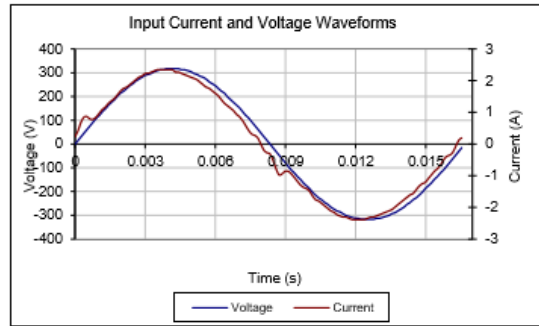
I _{RMS} A	PF	I _{THD}	Load	Fraction of Load	Input Watts	External Fan (W)*	DC Terminal Voltage (V)/ DC Load Current (A)			Output Watts	Efficiency
							12V	5V	5Vsb		
1.360	0.8728	16.21%	10%	Low	272.98	106.42	12.1/16.53	5.01/8.28	5.03/0.23	242.55	88.85%
2.426	0.9343	8.79%	20%	Light	521.38	106.67	12.08/33.05	5.01/16.56	5.02/0.46	484.40	92.91%
5.584	0.9930	3.68%	50%	Typical	1275.38	106.75	12.02/82.52	5/41.37	5.01/1.15	1205.90	94.55%
11.349	0.9990	2.75%	100%	Full	2608.16	106.31	11.93/165.22	5/82.62	4.98/2.3	2395.76	91.86%

* 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

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.



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

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

A3

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/docs/en/flashsystem-5x00/8.6.x?topic=overview-secure-data-deletion>

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