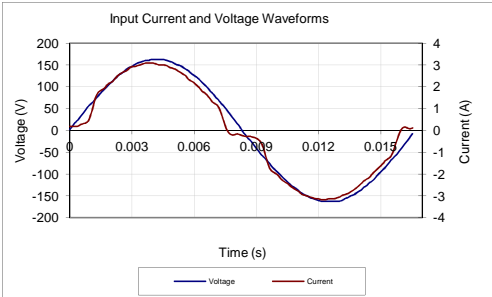


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	86.48%
AVERAGE EFFICIENCY :	84.77%
80 PLUS COMPLIANT:	YES



Ecos ID #	3280
Manufacturer	Inter-Tech Elektronik Handels GmbH
Model Number	Coba CS-450 IT 82+
Serial Number	4260133124769
Year	2012
Type	ATX12V
Test Date	05-Sep-12

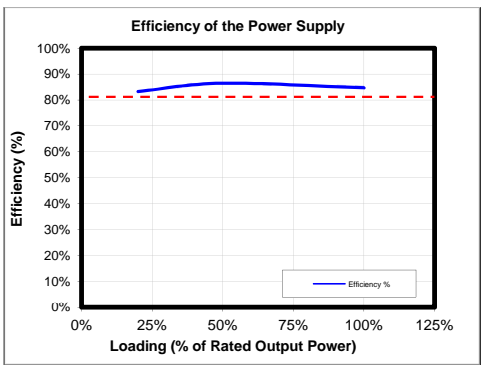
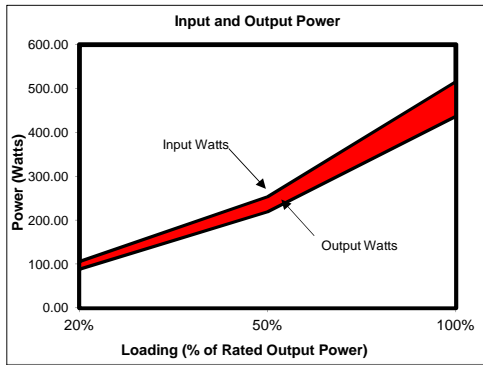


Input AC Current Waveform (ITHD = 11.07%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	115-230	Volts
Input Current	8-4	Amps
Input Frequency	50-60	Hz
Rated Output Power	450	Watts

Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.

I _{RMS} A	PF	I _{THD} (%)	Load (%)	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)				Output Watts	Efficiency %	
					12V (cumulative of 12V1, 12V2, etc.)						
0.53	0.94	29.23%	10%	56.97	11.6/2.8	-12V	3.3V	5V	5Vsb	43.85	76.98%
0.93	0.99	14.25%	20%	105.94	11.6/5.6	11.5/0.1	3.4/2.8	5/2.1	5.1/0.4	88.12	83.18%
2.22	0.99	11.07%	50%	253.70	11.6/14	11.5/0.2	3.4/7.1	4.9/5.3	5.1/1	219.41	86.48%
4.50	1.00	6.87%	100%	516.10	11.6/27.9	11.5/0.4	3.3/14.1	4.9/10.6	5/2.1	436.81	84.64%



These tests were conducted by a third party independent testing firm on behalf of the 80 PLUS Program. 80 PLUS is a certification program to promote highly-efficient power supplies (greater than 80% efficiency in the active mode) in technology applications. <http://www.80plus.org/>

