

Compliant with ErP directive Lot6, high efficiency and low standby power consumption Fanless computer power supply

HPCFL-400P-X2S

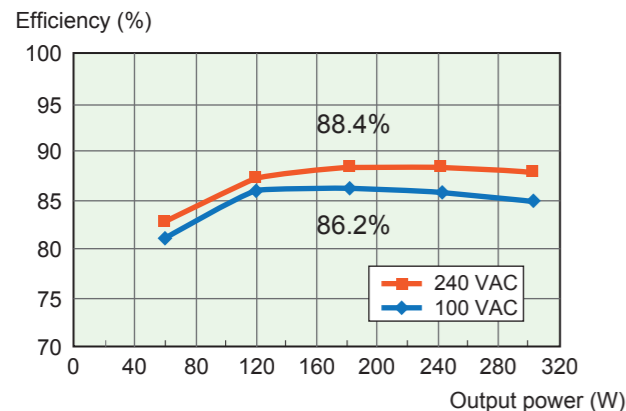
Continuous (max.) 170W / 305W
(Natural air cooling) (Forced air cooling)
Peak (max.) 400W

The sixth model of "H series" high efficiency power supply, HPCFL-400P-X2S is released. This series has various types such as large capacity, Nonstop, Compact type, and now fanless type is added to them. Although it is fanless, it achieves large capacity continuous 170W (305W at forced air cooling), and peak 400W output. ErP lot6 compliant with the low standby power consumption, normal / instantaneous blackout backup functionality, medical standard compliant, etc. These various features are useful for many applications.

High efficiency

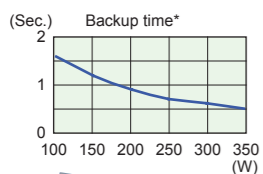
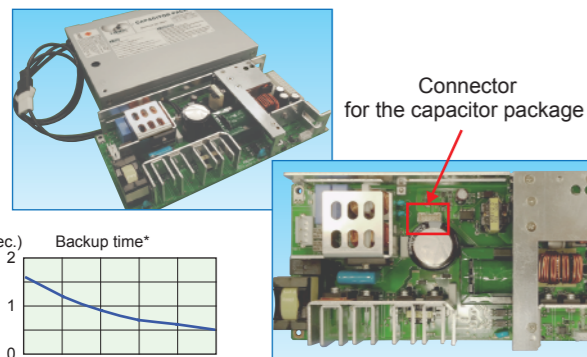
The actual measurement value of efficiency
At 100VAC input: **86.2%** At 240VAC input: **88.4%**

*At forced air cooling, 60% load



Capacitor package available for instantaneous power failure measure

Capacitor package connecting example

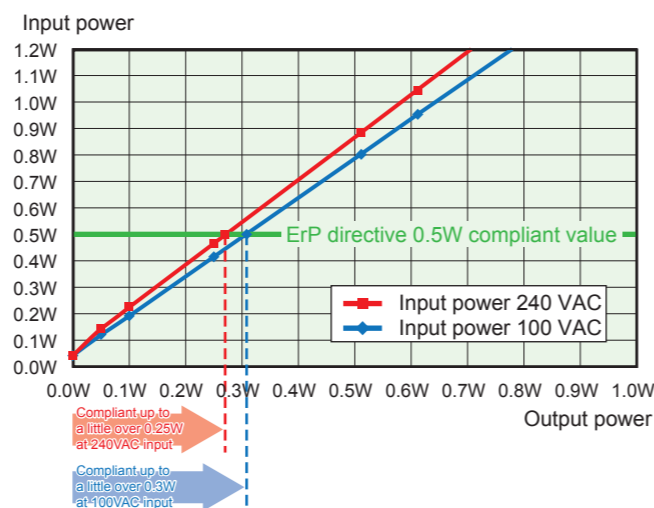


Capacitor package BS13A-EC400/422F

*The backup time is a reference value at initial use; it is not guaranteed value.

Dedicated battery package will be also added to the line-up!
(Scheduled to be released in the spring of 2014)

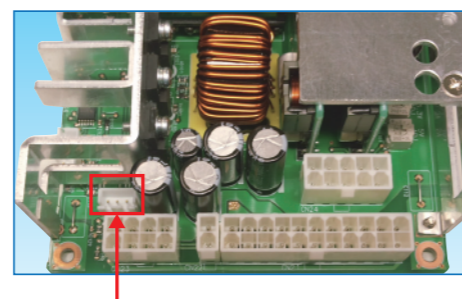
The 5VSB output is complied with ErP directive Lot6 by reducing the standby power consumption.



Continuous rated 305W max. is available at forced air cooling

(Power connector for fan is mounted as standard)

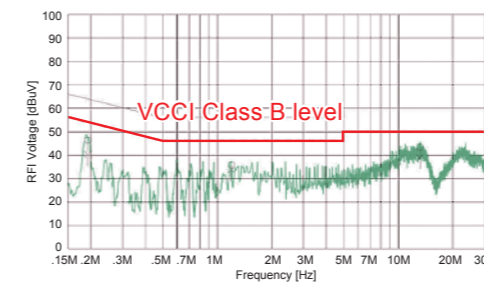
In the case of forced air cooling, 12V output can be used as the fan power supply. In addition, FAN_C signal is equipped and PWM signal is delivered according to the internal temperature of power supply. Only by using a FAN_C signal equipped FAN, the speed can be adjusted based on the temperature of power supply. Flexible usage is achieved with the various options of fan.



Power connector for fan

Low noise and low leakage current complying with medical standard

Conducted emission



Leakage current (Based on the medical standard condition)

Input voltage	110 VAC	220 VAC	264 VAC
Measured value At rated load	0.12mA	0.25mA	0.30mA
Measured value At min. load	0.12mA	0.25mA	0.30mA
Standard value	0.5mA max.		

Product summary

Product specification

Input	85-264 VAC (Worldwide range)				
Output voltage	+3.3V	+5V	+12V	-12V	+5VSB
Continuous max. current/power (Natural air cooling)	10A	10A	14A	0.2A	1A
		Total 83W		Total 170W	
Continuous max. current/power (Forced air cooling)	16A	16A	25A	0.5A	1.5A
		Total 90W		Total 305W	
Peak current/power (5 sec. max.)	20A	20A	30A	0.5A	2A
		Total 120W		Total 400W	
Min. current	0A	0A	0A	0A	0A
Dimensions	106(W)×37(H)×225(D)				

Min. load current 0A for all outputs (Haswell compliant)

Selectable input terminals

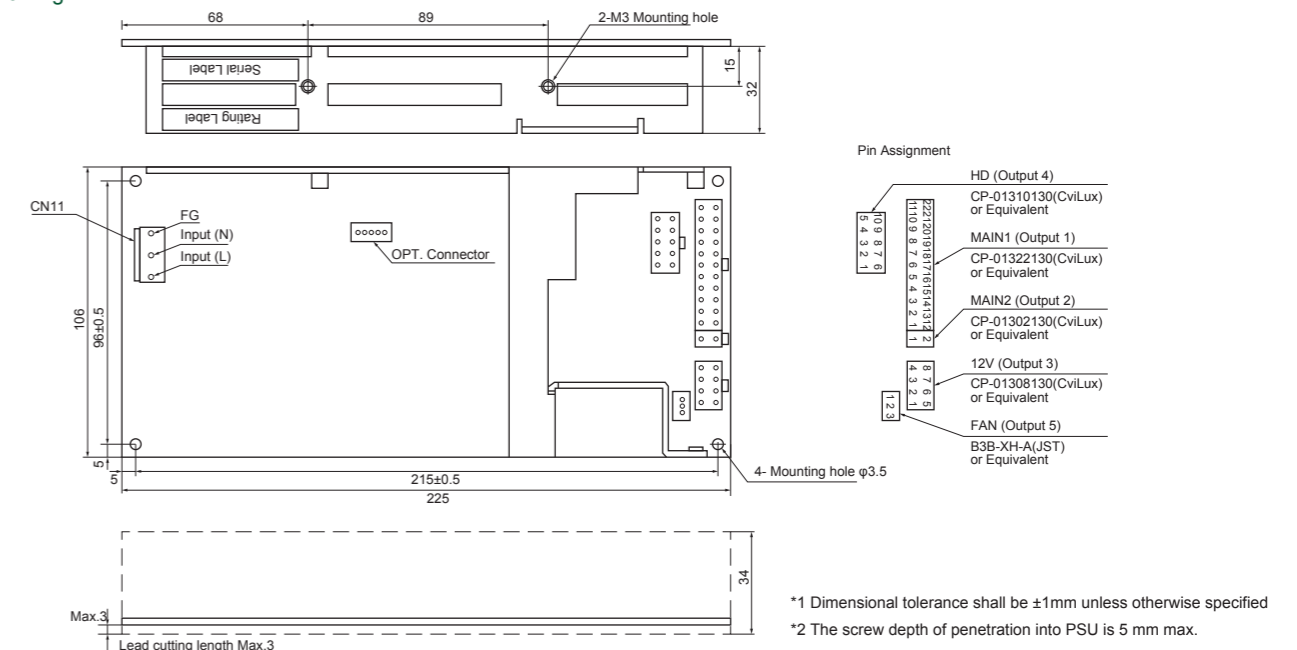


Nylon connector

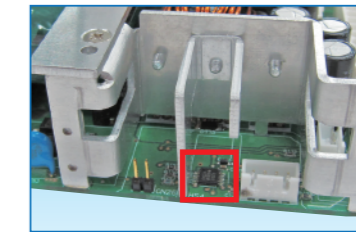
Terminal block

European terminal

Outline drawing



Digitalized sequence circuit



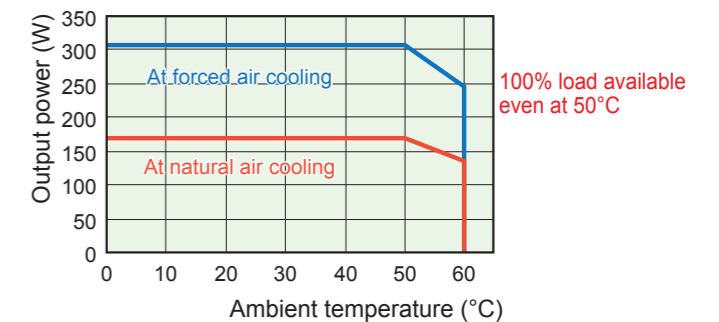
The microcomputer for sequence circuits

Sequence circuits are integrated into a microcomputer for digitalizing so that the downsizing of power supply and reducing the number of components are achieved.

Compared to the case without the microcomputer...
In the sequence circuit part, mounted area **60% reduced** components number **50% reduced**

Also, stable signal processing and high quality are achieved by reducing the variation of analog components with the digitalization.

Temperature derating curve



Dedicated chassis and cover (optional)

