

Embedded Power for  
Business-Critical Continuity



Rev. 01 09.30.07  
AIT02ZPFC-01NL Series  
1 of 2



# AIT02ZPFC-01NL

720 Watts

Total Power: 720 Watts  
Input Voltage: 85 - 264 VAC  
# of Outputs: Single

## Special Features

- Unity power factor
- High efficiency - up to 93%
- Universal input voltage and frequency range
- Up to 720 W output power
- Negative enable function
- TRCA-DO-160D harmonic compliant at 115Vac input full load
- IEC1000-3-2 compliance at 50Hz and 800Hz input
- 100°C baseplate operating temperature
- Enable output to control DC-DC Converter
- Internal active switch bypassing external inrush current

## Electrical Specifications

Input	
Input range	85 - 264 VAC (Configurable)
Input Surge	290 VAC / 500 ms
Input Frequency	50/60 Hz / 360-800 Hz
Efficiency <sup>2</sup>	93% @ 230 VAC, 720W (Typical)
Total Harmonic	Less than 10%
Power Factor	0.99 typical (115 Vac; 50 Hz to 360 Hz; 320 W); 0.99 typical (230 Vac; 720 W); 0.98 typical (115 Vac; 800Hz; 320 W)
Control	
LD Enable	Direct drive output to opto-isolator
PFC Enable	Neg TTL compatible
Voltage Adjust	79% to 100% Vo
Output	
Output voltage	393 V typical (Io = 2.08 A / Vi > 180 Vac)
Overvoltage Protection	393 V typical (Io=0.1A)
Power Limit for AC input	430 max Vin = 100 Vac, Pmax = 320 W Vin = 230 Vac, Pmax = 720 W Vin = 85 Vac, Pmax = 320 W
Isolation	
I/O isolation	None
Input to base-plate	2700 Vdc
Output to base-plate	2700 Vdc
Leakage current	< 3 mA at 800 Hz input frequency

## Environmental Specifications

Operating ambient temperature range	-20 °C to +100 °C (baseplate temperature)
Startup temperature	-40 °C to +100 °C (baseplate temperature)
Storage temperature	-40 °C to 120 °C
Overtemperature protection	120 °C Max
Calculated MTBF	>1 Million hours

## Safety

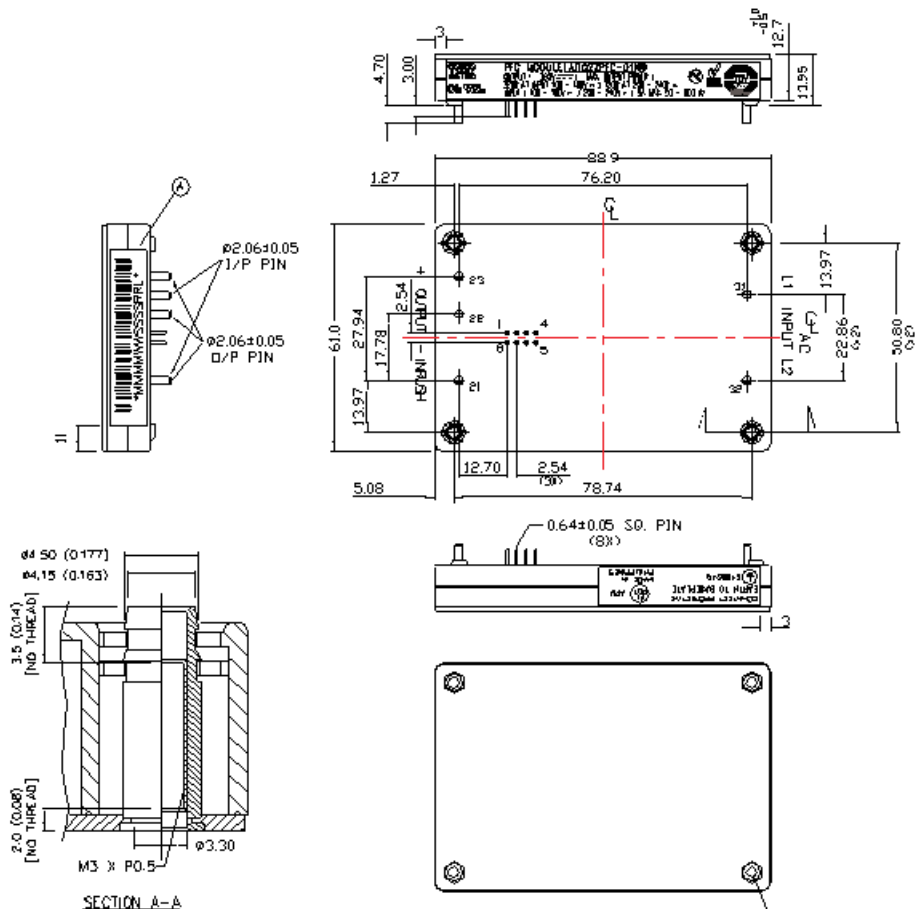
UL cUL 60950 Recognized  
TUV EN60950 Licensed



**Ordering Information**

Model Number	Description	Notes
AIT02ZPFC-01NL	720W Low Profile PFC Module	Negative Enabled

**Mechanical Drawing**



**Pin Assignments**

INPUT(AC)	OUTPUT(DC)	CONTROL PIN
31 L1	21 INRUSH	1 NC
32 L2	22 NEGATIVE	2 NC
	23 POSITIVE	3 LE ADJ
		4 TEMP MON
		5 LO ENABLE
		6 V ADJ
		7 PF ENABLE
		8 GND

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**Notes:**

1. All specifications subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 1 yr
3. Label and logo appearance may vary from what is shown on mechanical drawings.