

# 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

## Safety

UL cUL 60950 Recognized  
TUV EN60950 Licensed

## 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 393 V typical (Io=0.1A)
Overvoltage Protection	430 max
Power Limit for AC input	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

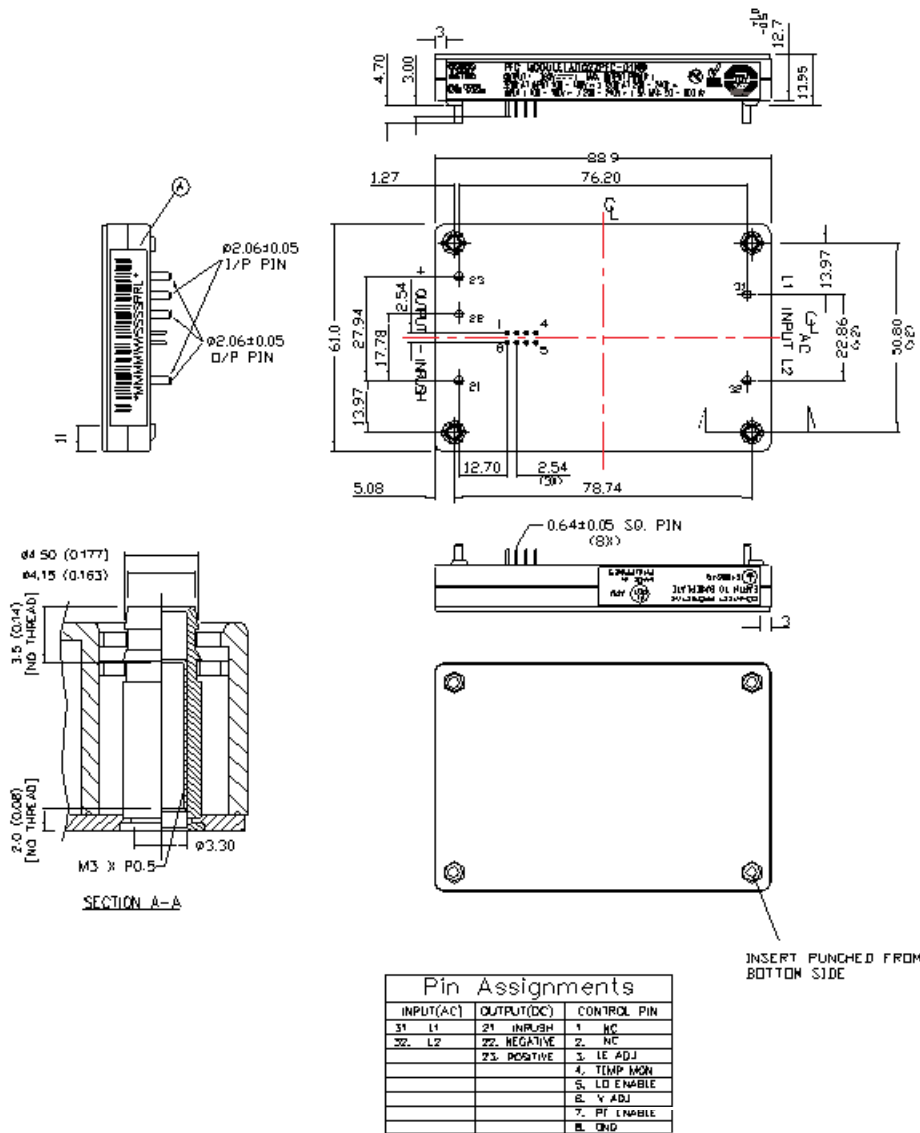
Operating ambient temperature range	-20 °C to +100 °C (baseplate temperature)
Startup temperature	-40 °C to +100 °C (baseplate temperature)
Storage temperature	-40 °C to 120 °C
Overtemperature protection	120 °C Max
Calculated MTBF	>1 Million hours



**Ordering Information**

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

**Mechanical Drawing**



**Astec Power**

5810 Van Allen Way  
Carlsbad, CA 92008  
USA  
Telephone: +1 760 930 4600  
Facsimile: +1 760 930 0698  
Technical Support: +1 888 41 ASTEC  
or +1 407 241 2752

Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX  
United Kingdom  
Telephone: +44 (0) 1384 842 211  
Facsimile: +44 (0) 1384 843 355

16- 17th floor Lu Plaza  
2 Wing Yip Street  
Kwun Tong, Kowloon  
Hong Kong  
Telephone: +852-2176-3333  
Facsimile: +852-2176-3888

For global contact, visit:  
[www.astecpower.com](http://www.astecpower.com)  
[technicalsupport@astec.com](mailto:technicalsupport@astec.com)

While every precaution has been taken to ensure accuracy and completeness in this literature, Astec Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

Printed in USA

**Emerson Network Power.**  
The global leader in enabling  
business-critical continuity.

- AC Power
- Connectivity
- DC Power
- Embedded Power**
- Inbound Power
- Integrated Cabinet Solutions
- Outside Plant
- Precision Cooling
- Site Monitoring and Services

**EmersonNetworkPower.com**

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2006 Emerson Electric Co.

**Notes:**

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