

# ARTESYN AIT02ZPFC-01NL

720 Watts



The AIT02ZPFC series three-quarter-brick power factor correction module accepts a wide 85–264 Vac input and presents a unity power factor. It accommodates AC supply frequencies of 50 Hz, 60 Hz or 360–800 Hz. Rated at 720 watts, the module offers a conversion efficiency of up to 93% and provides a typical output voltage of 393 Vdc.

## 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
- RTCA-D0 160 compliant
- IEC1000-3-2 compliance at 50 Hz and 800 Hz input
- 100 °C baseplate operating temperature

- Enable output to control DC-DC Converter
- Internal active switch bypassing external inrush current components

## SAFETY

- UL cUL 60950 Recognized
- TUV EN60950 Licensed

## DATA SHEET

### Total Power:

720 Watts

### Input Voltage:

85 - 264 Vac

### # of Outputs:

Single



## 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, 720 W (Typical)
Total Harmonic Distortion	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 = 1.83 A / Vi > 180 Vac) 393 V typical (Io=0.1A)
Oversvoltage 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

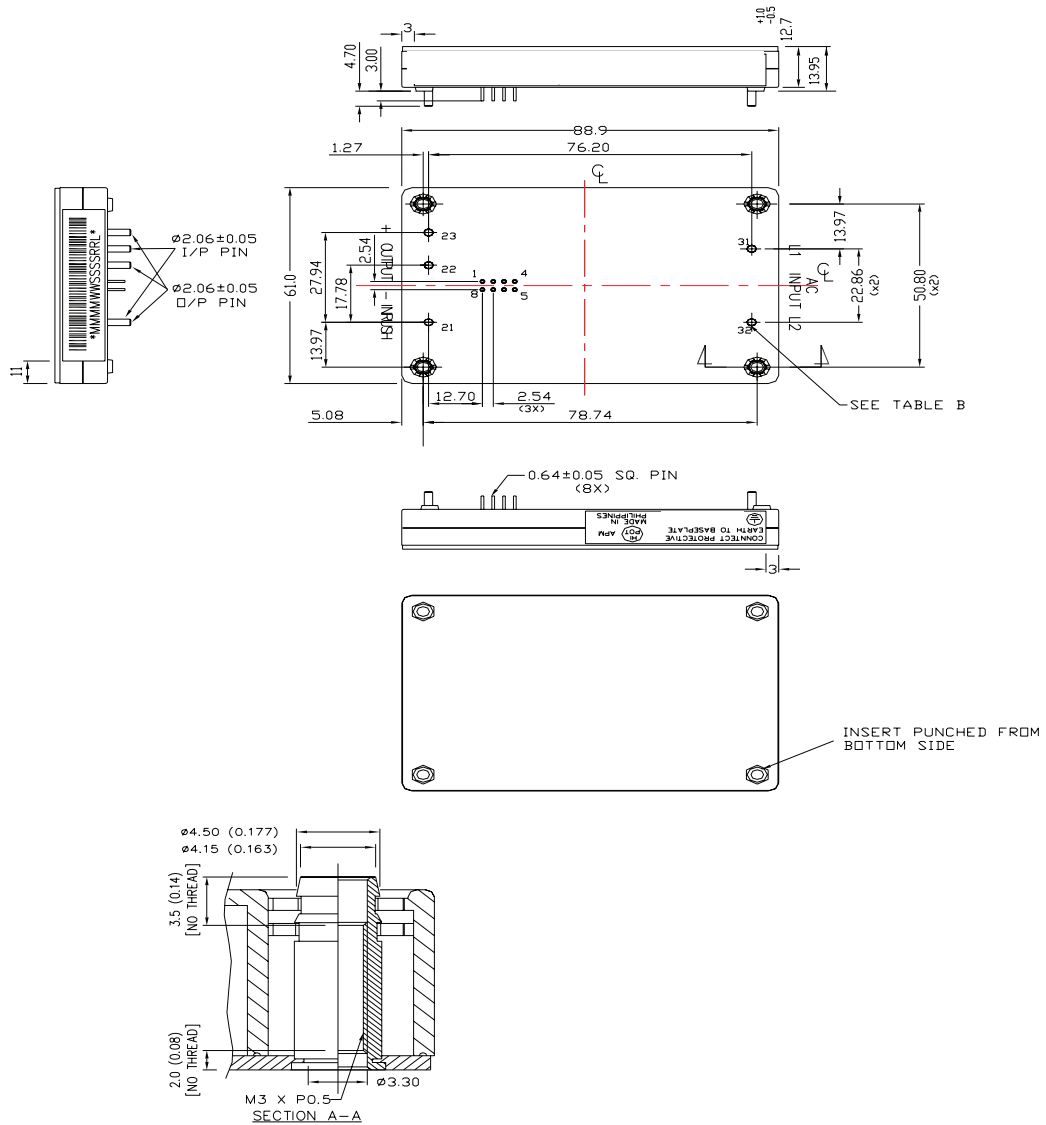
## ENVIRONMENTAL SPECIFICATIONS

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-01NLL	720 W Low Profile PFC Module	Negative Enabled

MECHANICAL DRAWINGS



- 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.



For international contact information,  
visit [advancedenergy.com](http://advancedenergy.com).

[powersales@aei.com](mailto:powersales@aei.com) (Sales Support)  
[productsupport.ep@aei.com](mailto:productsupport.ep@aei.com) (Technical Support)  
+1 888 412 7832

## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

**PRECISION | POWER | PERFORMANCE**

---

Specifications are subject to change without notice. Not responsible for errors or omissions. ©2020 Advanced Energy Industries, Inc. All rights reserved. Advanced Energy®, AE® and Artesyn™ are U.S. trademarks of Advanced Energy Industries, Inc.