

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 ²	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

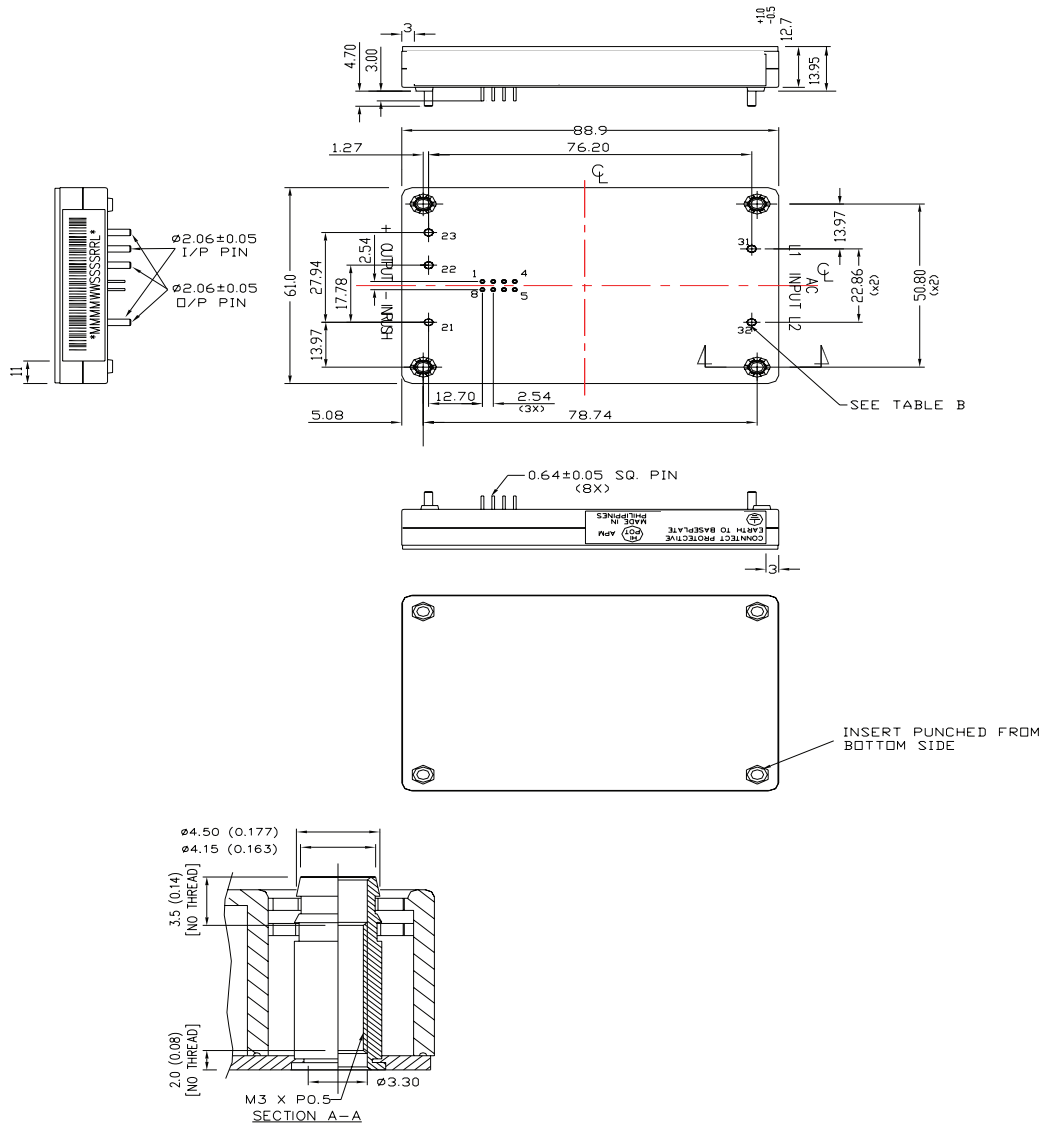
ENVIRONMENTAL SPECIFICATIONS

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
Overttemperature 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.



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ABOUT ADVANCED ENERGY

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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

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