ARTESYN AIT00ZPFC-01NL

150 Watts

The AIT00ZPFC series of three-quarter-brick power factor correction modules accept a 100–122 Vac input and present a unity power factor. They accommodate AC supply frequencies of 50 Hz, 60 Hz or 360–800 Hz, and a DC input version is also available. Rated at 150 watts, the modules have a high conversion efficiency of 91% and provide a typical output voltage of 393 Vdc.

DATA SHEET

Total Power:

150 Watts

Input Voltage:

100 - 122 Vac

# of Outputs:

Single

RoHS 6/6 COMPLIANT

SPECIAL FEATURES

- Unity power factor
- High efficiency - up to 92%
- Civil / Aviation supply frequency range (50 / 60 / 360 - 800 Hz)
- Up to 150 W output power
- Negative enable function
- RTCA-DO 160 compliant
- IEC1000-3-2 compliance at 50 Hz to 800 Hz input
- 100 °C baseplate operating temperature
- DC Input option
- Enable output to control DC-DC Converter
- Internal active switch bypassing external inrush current components

SAFETY

- UL cUL 60950 Recognized
- TUV EN60950 Licensed

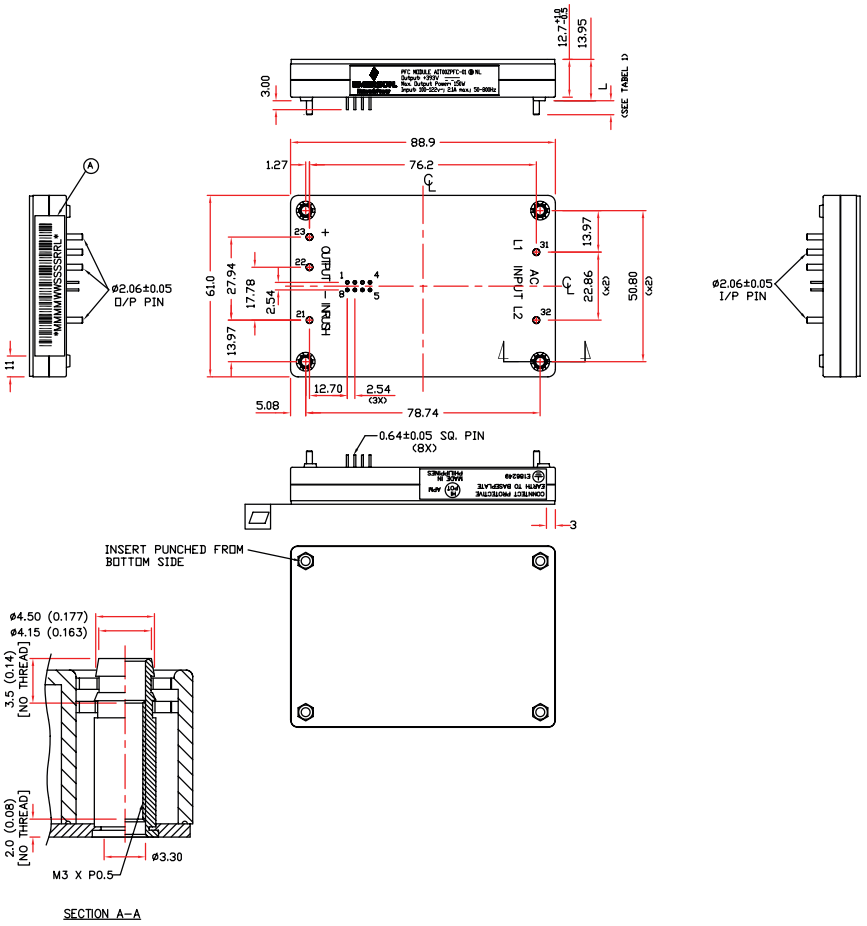
ELECTRICAL SPECIFICATIONS

Input	
Input range	100 - 122 Vac
Input Surge	170 Vac / 500 ms
Input Frequency	50 Hz/60 Hz / 360 - 800 Hz
Efficiency	91% @ 115 Vac, 400 Hz 150 W (typical)
Total harmonic	RTCA-DO 160 Compliant
Power factor	0.99 typical (115 Vac; 50 Hz to 360 Hz; 150 W) 0.98 typical (115 Vac; 800 Hz; 150 W)
Control	
LD enable	Direct drive output to opto-isolator
PFC enable	Neg TTL compatible
Voltage adjust	78% to 100% Vo
Output	
Output voltage	393 V typical
Overvoltage Protection	430 V max
Power Limit for AC input	Vin = 115 Vac, Pmax = 180 W Vin = 95 Vac, Pmax = 120 W
Isolation	
I/O isolation	None
Input to baseplate	2700 Vdc
Output to baseplate	2700 Vdc
Leakage current	< 3 mA at 800 Hz input frequency

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-20 °C to +100 °C (baseplate temperature)
Start-up temperature	-40 °C
Storage temperature	-40 °C to +120 °C
Overtemperature protection	120 °C max
MTBF	> 1 million hours

MECHANICAL DRAWINGS



PIN ASSIGNMENTS

Input (AC)	Output (DC)	Control Pins
31. L1	21. Inrush	1. NC
32. L1	22. Negative	2. NC
	23. Positive	3. LE Adj
		4. Temp Mon
		5. LD Enable
		6. V Adj
		7.PF Enable
		8. GND

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

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