

# ARTESYN AIQ00ZPFC-01NL

75 Watts



The AIQ00ZPFC series quarter-brick power factor correction module accepts a 100–122 Vac input and presents a unity power factor. It accommodates AC supply frequencies in the range 360 to 800 Hz. Rated at 75 watts, the module offers a power conversion efficiency of up to 90% and provides a typical output voltage of 393 Vdc.

## DATA SHEET

### Total Power:

75 Watts

### Input Voltage:

100 - 122 Vac

### # of Outputs:

Single

### SPECIAL FEATURES

- Unity power factor
- High efficiency - up to 90%
- Civil/Aviation supply frequency range 360 - 800 Hz
- Up to 75 W output power
- Negative enable function
- RTCA-DO 160 compliant
- 100 °C baseplate operating temperature
- Enable output to control DC-DC converter
- Internal active switch bypassing external inrush current components
- RoHS compliant

### SAFETY

- UL cUL 60950 Recognized
- TUV EN60950 Licensed



## ELECTRICAL SPECIFICATIONS

Input	
Input range	100 - 122 Vac
Input surge	180 Vac / 1s
Input frequency	360 - 800 Hz
Efficiency <sup>2</sup>	90% @ 115 Vac, 75 W (Typical)
Total harmonic	RTCA-DO 160 compliant
Power factor	Up to 800 Hz @ > 25 W 0.99 typical (115 Vac; 50-360 Hz; 75 W) 0.98 typical (115 Vac; 800 Hz; 75 W)
Control	
LD enable	Direct drive output to opto-isolator
PFC enable	Neg TTL compatible
Voltage adjust	-0% + 30% max.
Output	
Output voltage	393 Vdc typical
Overvoltage protection	430 Vdc
Output power limit	90 W at Vin = 95 Vac
Isolation	
I/O isolation	None
Input to baseplate	2700 Vdc
Output to baseplate	2700 Vdc
Leakage current	< 1 mA at 800 Hz input frequency

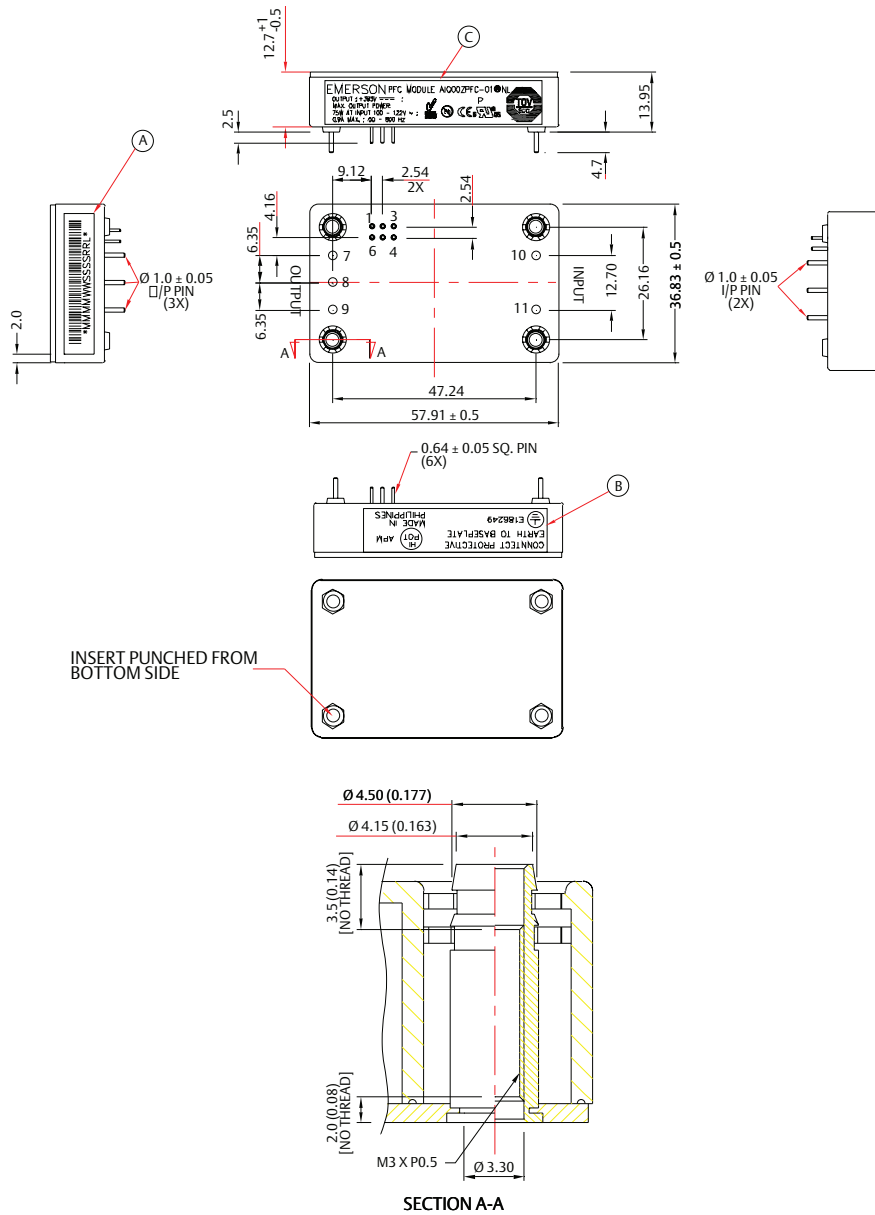
## ENVIRONMENTAL SPECIFICATIONS

Operating ambient temperature range	-20 °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
AIQ00ZPFC-01NL	75 W Low Profile PFC Module	Negative Enabled

MECHANICAL DRAWINGS



**PIN ASSIGNMENTS**

Input (AC)	Output (DC)	Control Pins
10. L1	7.0 Positive	1. PF Enable
11. L2	8.0 Negative	2. Voltage Adj.
	9.0 Inrush	3. Temp Mon.
		4. LD Enable
		5. PFW
		6. GND

**Notes:**

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



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## 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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