



## ■ Features

- Over international AC input voltage available (90-265Vac)
- Built-in active PFC function
- Constant current design
- Protections: Short circuit, open circuit, over-load, over-current
- IP30 design
- No-flicker
- No load power consumption <0.5W
- High reliability, low cost
- 3 years warranty

## ■ Applications

- Indoor LED lighting
- LED office lighting
- LED commercial lighting
- LED decorative lighting

## ■ Description

HZD048AXI series is a 24W-48W economical AC/DC LED power supply series. Incorporating a built-in active PFC design, It provides a high Power Factor value . In addition, with no-load low power consumption be less than 0.5W ,and the setup time less than 500ms. According to customer request adjust output current max up to 1000mA .

## SPECIFICATION SHEET

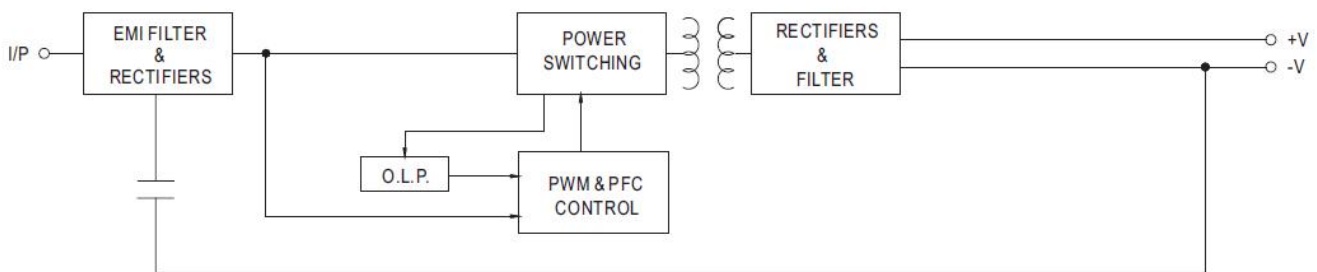
MODEL		HZD048AXI-A				
OUTPUT	RATED CURRENT	1000mA				
	OPERATING VOLTAGE RANGE Note.5	21~36V				
	CURRENT ACCURACY Note.3	3.00%				
	RATED POWER	48W				
	RIPPLE & NOISE (max.) Note.2	<10%				
	NO LOAD OUTPUT VOLTAGE (max.)	72V				
	SETUP TIME	500ms / 220VAC at full load;				
INPUT	VOLTAGE RANGE Note.4	90~ 265VAC				
	FREQUENCY RANGE	50/60Hz				
	POWER FACTOR	PF $\geq$ 0.95/220VAC, PF>0.95/265VAC(at full load)(Please refer to "Power Factor Characteristic" curve)				
	TOTAL HARMONIC DISTORTION	THD< 15% when output loading $\leq$ 70% ;THD< 11% when full output loading				
	EFFICIENCY (Typ.)	85%				
	AC CURRENT (Typ.)	0.24A/220VAC				
	INRUSH CURRENT(Typ.)	Max 27A (twidh=75 $\mu$ s measured at full load ) at 220VAC				
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.				
	OVER TEMPERATURE	Hiccup mode, recovers automatically after temperature goes down.				
ENVIRONMENT	WORKING TEMP.	-30 ~ +40 $^{\circ}$ C				
	WORKING HUMIDITY	20 ~ 70% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +80 $^{\circ}$ C, 10 ~ 95% RH				

<b>SAFETY &amp; EMC</b>	<b>SAFETY STANDARDS</b>	EN61347-1: 2008+A1:2011+A2: 2013 EN61347-2-13:2006
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3.75KVAC
	<b>ISOLATION RESISTANCE</b>	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH
	<b>EMC EMISSION</b>	EN55015, EN61000-3-2 Class C ( $\geq 75\%$ load) ; EN61000-3-3: 2003
	<b>EMC IMMUNITY</b>	EN61547: 2009 light industry level, criteria B (Surge 2KV)
<b>OTHERS</b>	<b>DIMENSION</b>	150*43*33MM (L*W*H)
	<b>PACKING</b>	0.12Kg;100pcs/14.2kg/0.041m <sup>3</sup>
<b>NOTE</b>	<p>1. All parameters NOT specially mentioned are measured at 220VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Please see AC input voltage drop vs. output current characteristics table.</p> <p>4. Derating may be needed under low input voltage, please check the static characteristic for more details.</p> <p>5. Constant current operation region is within 50%~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</p> <p>6. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.</p> <p>7. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.</p>	

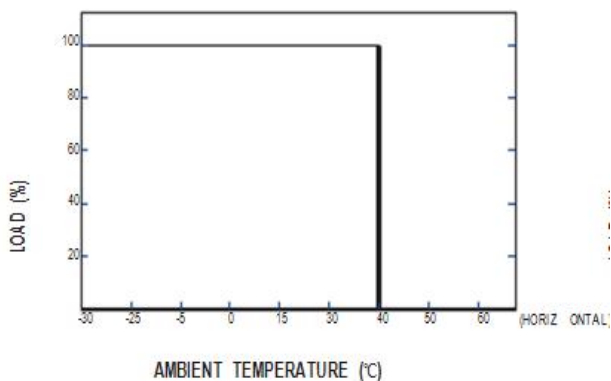
### ■ Mechanical Specification



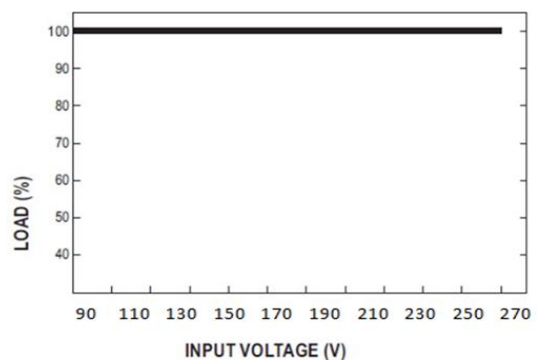
### ■ Block Diagram



### ■ Derating Curve



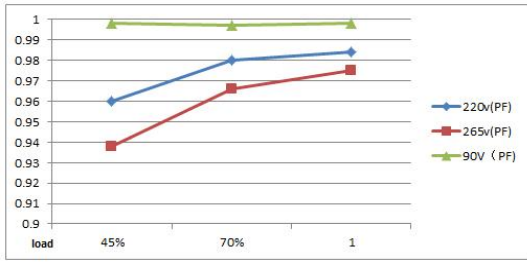
### ■ Static Characteristics



■ Power Factor Characteristic

■ EFFICIENCY vs LOAD

700MA LOAD



700MA LOAD

