



■ Features

- Over international AC input voltage available (90-265Vac)
- Built-in active PFC function
- Constant Voltage design
- Protections: Short circuit, open circuit, over-load, over-current
- IP30 design
- No-flicker
- No load power consumption <0.1W
- High reliability, low cost
- 3 years warranty

■ Applications

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

■ Description

HZD048BYI series is an 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 0.1W ,and the setup time less than 500ms. **According to customer request adjust output current max up to 1000mA** .

SPECIFICATION SHEET

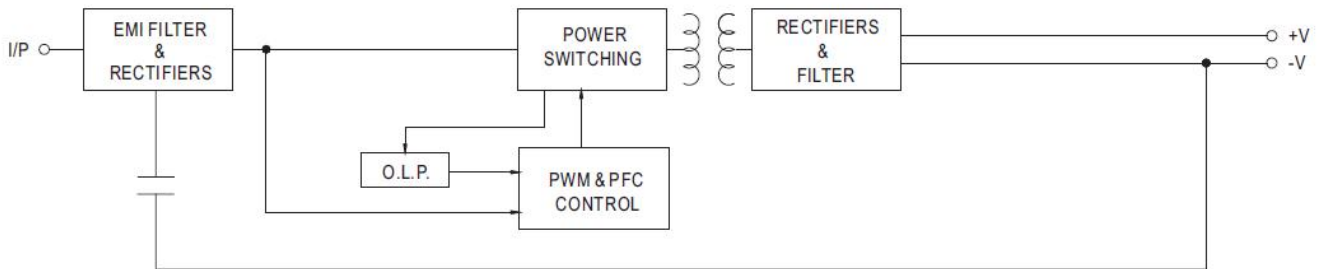
MODEL		HZD048BYI				
OUTPUT	RATED CURRENT	4000mA	2000mA			
	OPERATING VOLTAGE RANGE Note.5	12V	24V			
	CURRENT ACCURACY Note.3	3.00%				
	RATED POWER	48W	48W			
	RIPPLE & NOISE (max.) Note.2	<10%	<10%			
	NO LOAD OUTPUT VOLTAGE (max.)	72V	72V			
	SETUP TIME	500ms / 220VAC at full load;				
INPUT	VOLTAGE RANGE Note.4	90~ 265VAC				
	FREQUENCY RANGE	50/60Hz				
	POWER FACTOR	PF≥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≤70% ;THD< 11% when full output loading				
	EFFICIENCY (Typ.)	87%-90%				
	AC CURRENT (Typ.)	0.24A/220VAC				
	INRUSH CURRENT(Typ.)	Max 27A (twidh=75μs 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°C				
	WORKING HUMIDITY	20 ~ 70% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH				
SAFETY & EMC	SAFETY STANDARDS	EN61347-1: 2008+A1:2011+A2: 2013 EN61347-2-13:2006				
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH				
	EMC EMISSION	EN55015, EN61000-3-2 Class C (≧75% load) ; EN61000-3-3: 2003				

	EMC IMMUNITY	EN61547: 2009 light industry level, criteria B (Surge 2KV)
OTHERS	DIMENSION	160*50*33MM (L*W*H)
	PACKING	0.12Kg;100pcs/14.2kg/0.041m ³
NOTE	<p>1. All parameters NOT specially mentioned are measured at 220VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 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>	

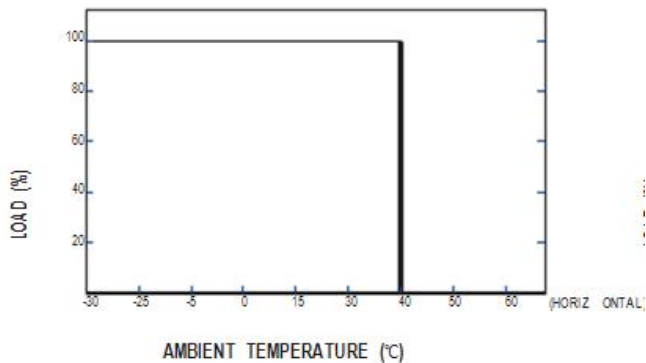
■ Mechanical Specification



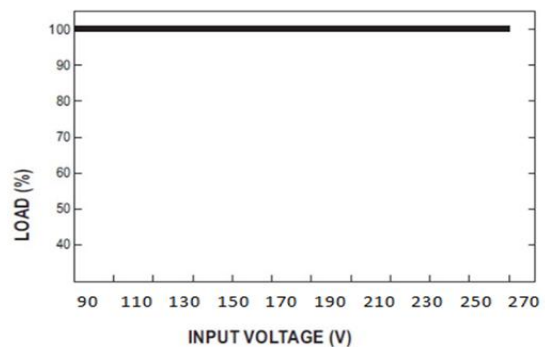
■ Block Diagram



■ Derating Curve

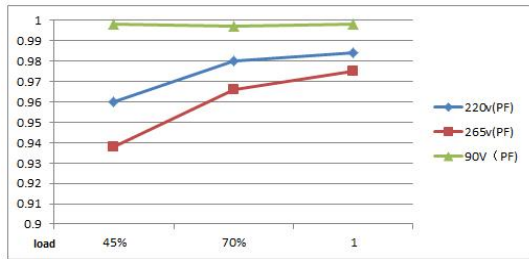


■ Static Characteristics



Power Factor Characteristic

700MA LOAD



EFFICIENCY vs LOAD

700 MA LOAD

