



## ■ 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-flicking
- 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

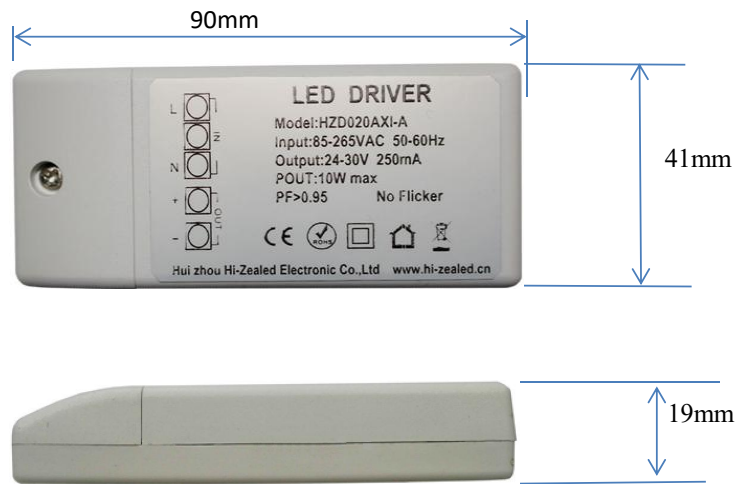
HZD020AXI-A series is a 6W-20W economical AC/DC LED power supply series. Incorporating a built-in active PFC design, It provides a high Power Factor value . In addition, with no-load low power consumption be less than 0.5W ,and the setup time less than 500ms.

## SPECIFICATION SHEET

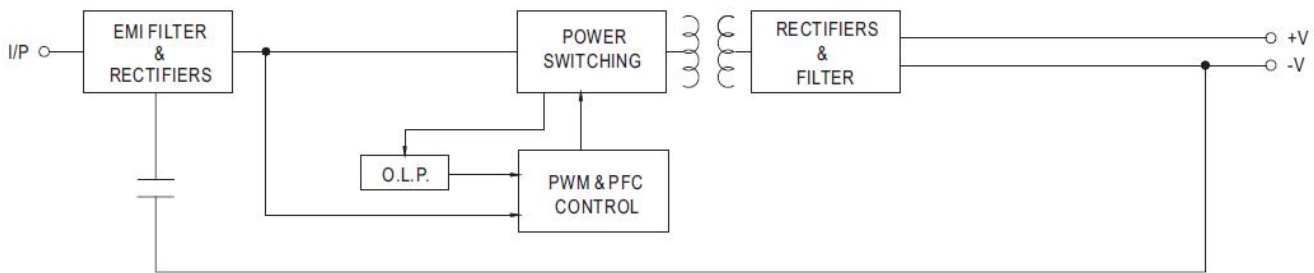
MODEL		HZD020AXI-A						
OUTPUT	RATED CURRENT		300mA					
	OPERATING VOLTAGE RANGE Note.5		18-27V					
	CURRENT ACCURACY Note.3				3.00%			
	RATED POWER		6-20W					
	RIPPLE & NOISE (max.) Note.2		<10%					
	NO LOAD OUTPUT VOLTAGE		54V					
	SETUP TIME		500ms / 220VAC at full load;					
INPUT	VOLTAGE RANGE Note.4		90~ 265VAC					
	FREQUENCY RANGE		50/60Hz					
	POWER FACTOR	Blank type	PF ≥ 0.95/220VAC, PF > 0.95/265VAC (at full load) (Please refer to "Power Factor Characteristic" curve)					
	TOTAL HARMONIC DISTORTION	Blank type	THD < 15% when output loading ≤ 70% ; THD < 10% when full output loading					
	EFFICIENCY (Typ.)		83%					
	AC CURRENT (Typ.)		0.086A/220VAC					
INRUSH CURRENT (Typ.)		Max 15A (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					

	<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>	90*41*19MM (L*W*H)
	<b>PACKING</b>	0.05Kg;250pcs/16.2kg/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>	

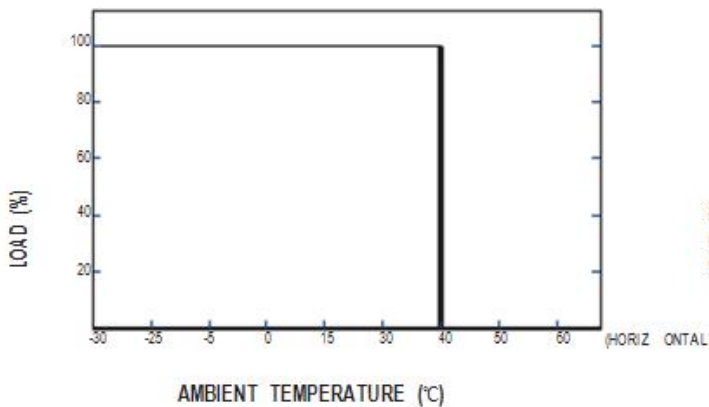
### ■ Mechanical Specification



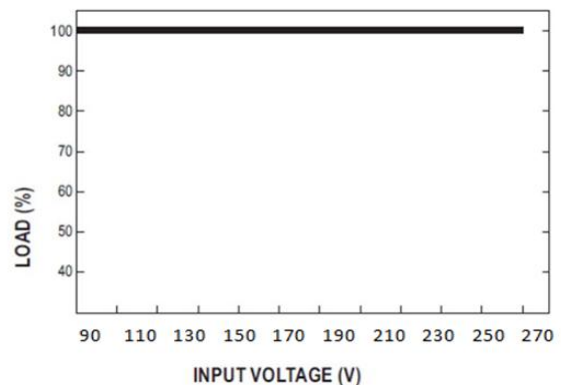
### ■ Block Diagram



### ■ Derating Curve

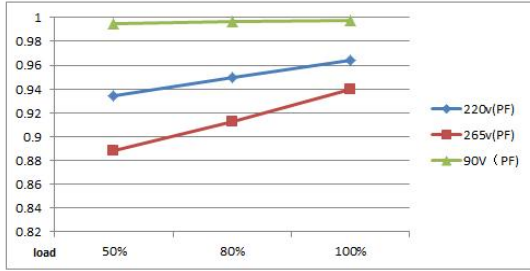


### ■ Static Characteristics



## Power Factor Characteristic

### 300MA LOAD



## EFFICIENCY vs LOAD

### 300MA LOAD

