

## ■ Features

- Wide voltage input 50/60Hz AC85-265V, applicable to all countries
- Flicker free High PF
- Constant current design
- High performance double quasi resonant PFC controller used in large power without stroboscopic lighting LED
- Protections: Short circuit, open circuit, over-load, over-current
- Through EMC, FCC, safety testing, but with the whole lamp safety certification.
- IP20 design
- No load power consumption <0.5W
- High reliability, low cost
- 3 years warranty

## ■ Applications

- External high power constant current LED power supply

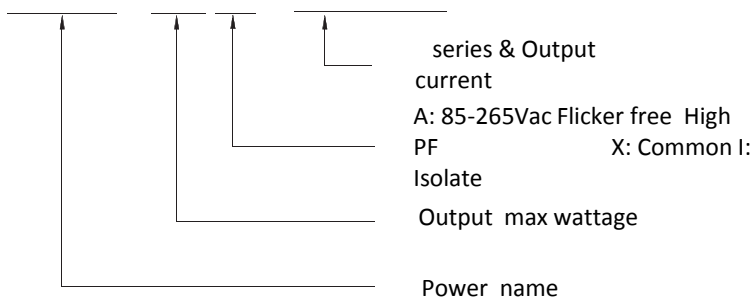
## ■ Description

HZD060AXI series is a 21W-60W economical AC/DC LED power supply series. Incorporating a built-in active PFC design, It provides a high Power Factor value with flickerfree. In addition, with no-load low power consumption be less than 0.5W , High performance double quasi resonant PFC controller used in large power without stroboscopic lighting LED, Wide output voltage 24-80V, and the setup time less than 100ms, According to customer request adjust output current max up to 1200mA

**HZD060AXIseries, which operates from 85~265VAC, both constant current output design, supplying models with the current of 700mA, 900mA, 1200mA, 1500mA and 1800mA, respectively..**

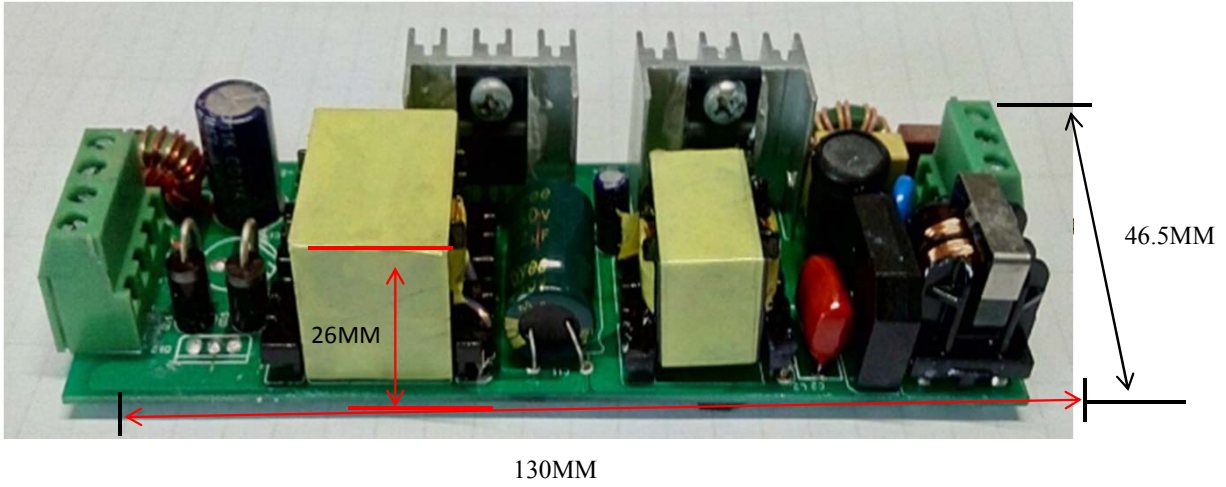
## ■ Model Encoding

**HZD 060 A XI - XXX**



MODEL		HZD060AXI-700	HZD060AXI-900	HZD060AXI-1200	HZD060AXI-1500	HZD060AXI-1800	
OUTPUT	RATED CURRENT	700mA	900mA	1200mA	1500mA	1800mA	
	OPERATING VOLTAGE RANGE Note.5	40~80V	24~66	24~50	24~40	24~36	
	CURRENT ACCURACY Note.3	±5%					
	RATED POWER	56W	59.4W	60W	60W	64.8W	
	RIPPLE & NOISE (max.) Note.2	200mv	200mv	200mv	200mv	200mv	
	NO LOAD OUTPUT VOLTAGE (max.)	100V	80V	70v	60v	55v	
	SETUP TIME	500ms /110VAC, 220VAC at full load					
INPUT	VOLTAGE RANGE Note.4	A: 85-265Vac					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	Blank type PF≥0.99/110VAC,PF≥0.95/220VAC, TOTAL HARMONIC DISTORTION					
	TOTAL HARMONIC DISTORTION	Blank type AC 220V THD<15% when output full loading					
	EFFICIENCY (Typ.)AC220V load by 70%	>88%	>88%	>88%	>87%	>87%	
	AC CURRENT (Typ.)	0.27A/220VAC	0.285A/220VAC	0.3A/220VAC	0.33A/220VAC	0.36A/220VAC	
	INRUSH CURRENT(Typ.)	COLD START 30A (twidh=75µs measured at 50% Ipeak ) at 220VAC					
	MAX. No. of PSUs on 16A CIRCUIT BREAKER						
LEAKAGE CURRENT							
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℃					
	WORKING HUMIDITY	20 ~ 70% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +50℃, 10 ~ 70% RH					
	TEMP. COEFFICIENT	N/A					
	VIBRATION	N/A					
SAFETY & EMC	SAFETY STANDARDS	EN 61347-1:2015,EN 61347-2-13					
	WITHSTAND VOLTAGE	N/A					
	ISOLATION RESISTANCE	N/A					
	EMC EMISSION	Compliance to EN 55015: 2013,EN 61547: 2009,EN 61000-3-2:2014,EN 61000-3-3: 2013,FCC,RoHS					
	EMC IMMUNITY	Compliance toEN 61000-4-2,3,4,5,6,8,11, EN 61547, light industry level, criteria B					
OTHERS	MTBF	N/A					
	DIMENSION	130*46.5*26mm (L*W*H)					
	PACKING						
NOTE	<p>1. All parameters NOT specially mentioned are measured at 220VAC input, rated load and 25℃ 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>						

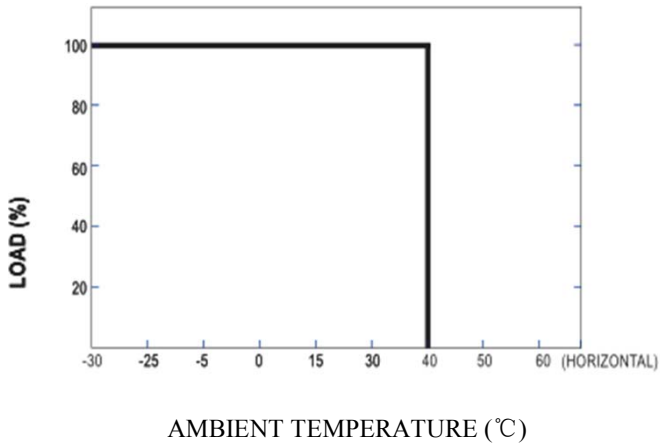
■ Mechanical Specification



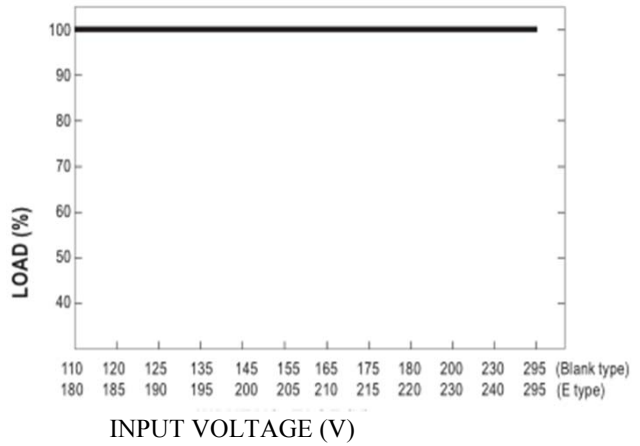
■ Block Diagram



■ Derating Curve

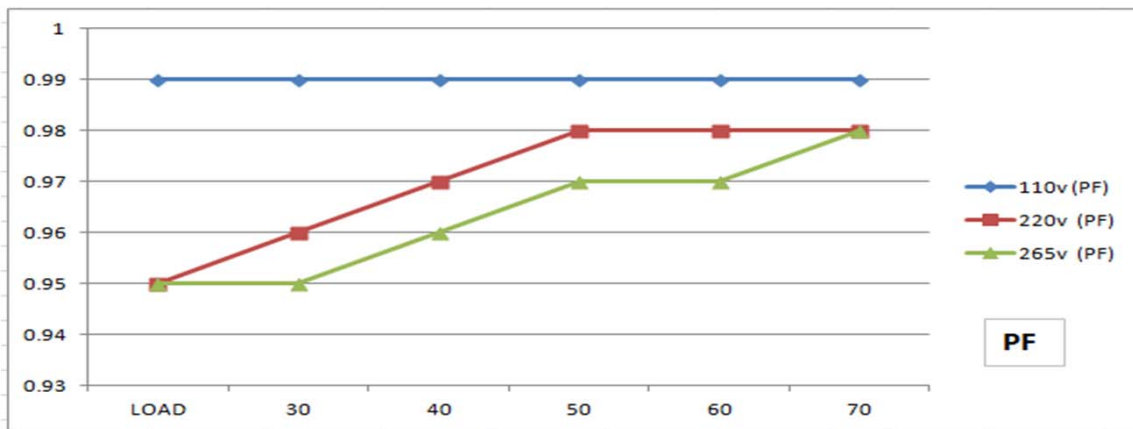


■ Static Characteristics



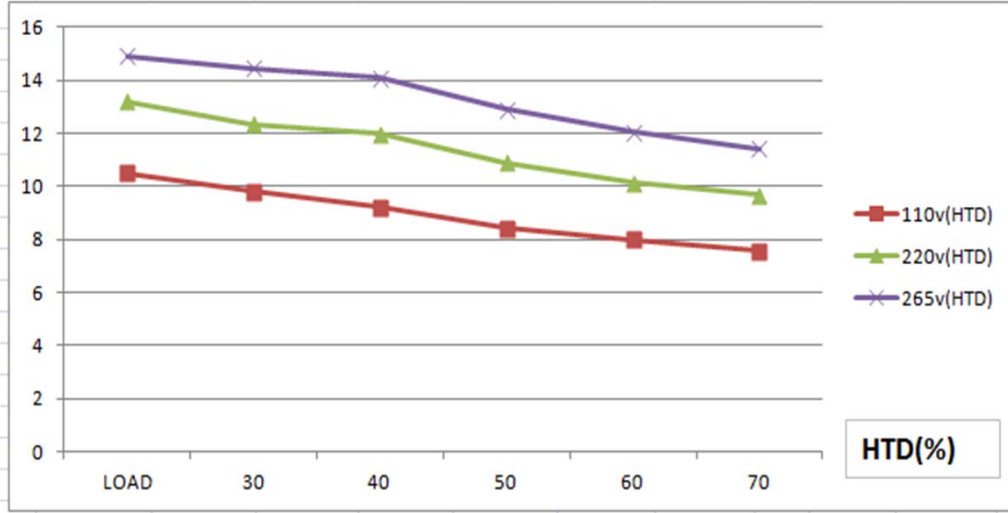
■ Power Factor Characteristic

LOAD



■ Total harmonic distortion vs LOAD(THD)

LOAD



■ EFFICIENCY vs LOAD

LOAD

