

HBG-120 SERIES

HBG-120 High Bay Light LED Driver



- Wide Input Voltage 90 to 277VAC, 47 to 63Hz
- Over Voltage / Short Circuit / Over Temperature Protection
- High Efficiency (up to 91%), Active Power Factor Correction (PFC)
- IP67 Waterproof Rating, Fully isolated
- Comply to worldwide safety regulations for lighting
- Cooling by free air convection
- Suitable for LED lighting & moving sign applications, for dry / damp / wet locations

5 Year Warranty

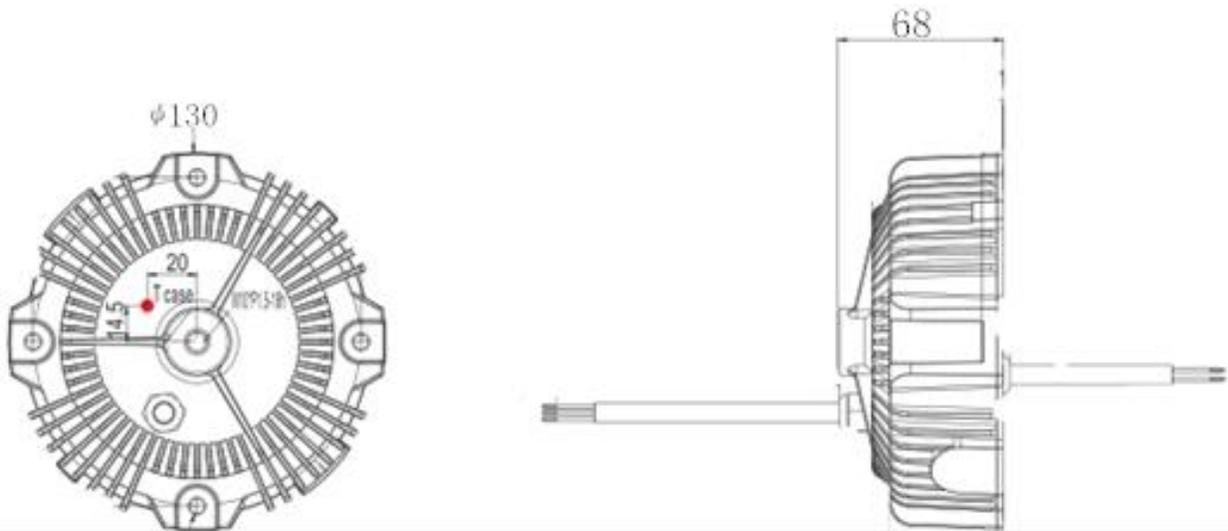
Approvals: IP67  

SPECIFICATION

Part Number	HBG-120-36	HBG-120-48	HBG-120-60	HBG-120-72	
OUTPUT	DC VOLTAGE	27~36Vdc	36~48Vdc	48~60Vdc	60~72Vdc
	CONSTANT CURRENT REGION Note.4	4.5~3.3A	3.3~2.5A	2.5~2.0A	2.0~1.6A
	RATED POWER	120W			
	RIPPLE & NOISE(max.) Note.2	500mA Max	400mA Max	300mA Max	200mA Max
	CURRENT TOLERANCE Note.3	±3.0%			
	LINE REGULATION	±1.0%			
	LOAD REGULATION	±1.0%			
SETUP, RISE TIME(Typ.) Note.7	300ms 230VAC at full load				
INPUT	VOLTAGE RANGE Note.5	90 ~277VAC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR(Typ.)	>0.99 at 100Vac&full load; >0.97 at 230Vac&full load			
	EFFICIENCY(Typ.)	88%	89%	90%	91%
	AC CURRENT(Typ.)	1.2A/115VAC	0.6A/230VAC		
	INRUSH CURRENT(Typ.)	COLD START 100A (Twidth=270us measured at 50% Ipeak) at 230VAC			
LEAKAGE CURRENT	<0.75mA/265VAC				
PROTECTION	OVER CURRENT Note.4	95 ~ 108% Protection type: Constant current limiting, recovers automatically after fault condition is removed			
	SHORT CURRENT	Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	>42V	>56V	>68v	>80V
	OVER TEMP.	Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	-35 ~ +70℃ (Refer to "Derating Curve")			
	WORKING HUMIDITY	10 ~ 100% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 5 ~ 100% RH			
	TEMP. COEFFICIENT	±0.03%℃ (0~50℃)			
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	SATETY STANDARDS Note.6	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13			
	WITHSTAND VOLTAGE	I/P – O/P: 3.75kVAC,I/P-FG: 2KVAC			
	ISOLTATION RESISTANCE	I/P – O/P: 100M Ohms / 500VDC /25℃ / 70% RH			
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 2kV), criteria A			
OTHERS	MTBF	200khrs min.	MIL-HDBK-217F (25℃)		
	DIMENSIION	130*68MM(L*W*H)			
	PACKING	450±10g			

NOTE	<ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance: includes set up tolerance, line regulation & load regulation. 4. Please refer to "DRIVING METHODS OF LED MODULE". 5. Derating may be needed under low input voltages. Please check the static characteristics for details. 6. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes. 7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. 8. 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 manufactures must re-qualify EMC DIRECTIVE on the complete installation again. 9. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. 10. To fulfill requirements of the latest ERP regulation for lighting fixtures, this LED power supply can only be used behind switch without permanently connected to the mains.
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Mechanical Specification



Derating Curve

