



■ Features

- Constant Current mode output
- Circular shape PCB type design with class II design
- Built-in active PFC function
- Class 2 power unit
- Typical lifetime>50000 hours
- 5 years warranty

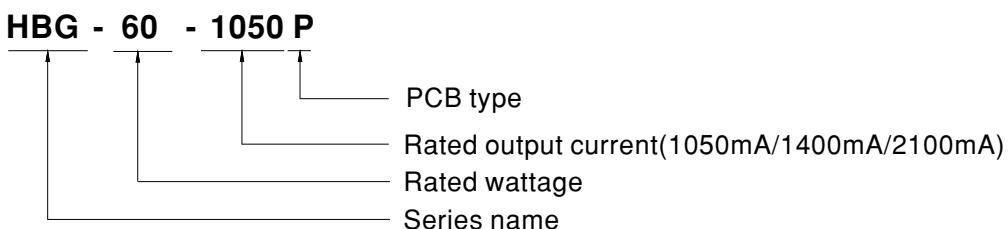
■ Applications

- LED bay lighting
- LED stage lighting
- LED spot lighting
- LED down lighting

■ Description

HBG-60-P series is a 60W AC/DC PCB type LED driver featuring the circular shape design. It operates from 90~295VAC and offers the constant current output models with different rated current between 1050mA and 2100mA. Thanks to the high efficiency up to 90%, with the fanless design, the entire series is able to operate for -40°C ~ +70°C ambient temperature under free air convection.

■ Model Encoding





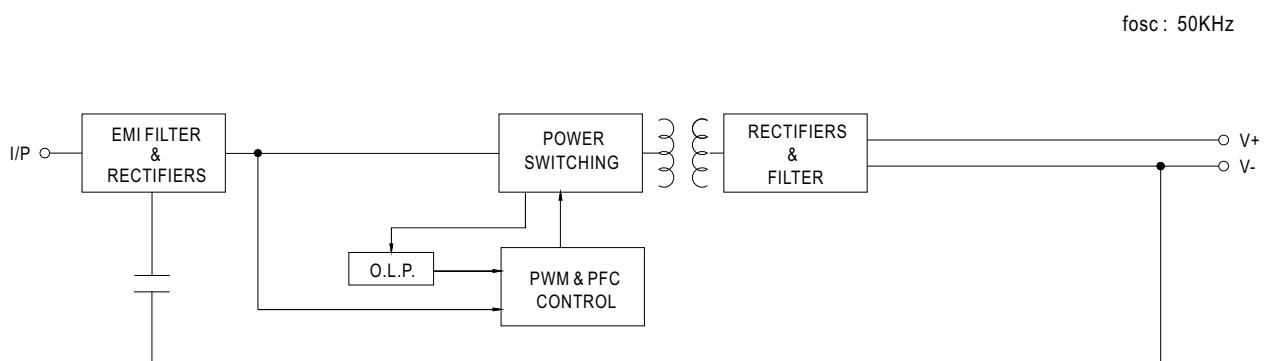
60W Constant Current Mode LED Driver

HBG-60-P series

SPECIFICATION

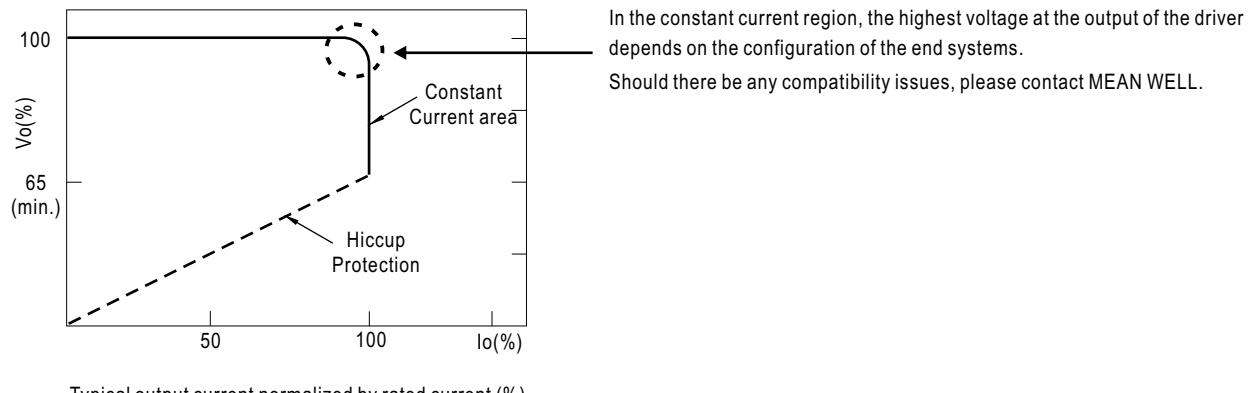
MODEL	HBG-60-1050P	HBG-60-1400P	HBG-60-2100P
OUTPUT	RATED CURRENT	1050mA	1400mA
	RATED POWER	57.75W	60.2W
	CONSTANT CURRENT REGION Note.2	37 ~ 55V	28 ~ 43V
	OPEN CIRCUIT VOLTAGE(max.)	60V	50V
	CURRENT ADJ. RANGE	680 ~ 1050mA	910 ~ 1400mA
	CURRENT RIPPLE	25% max. @rated current	
	CURRENT TOLERANCE	±5.0%	
INPUT	SET UP TIME Note.4	500ms / 230VAC 1200ms / 115VAC	
	VOLTAGE RANGE Note.3	90 ~ 295VAC 127 ~ 417VDC (Please refer to "STATIC CHARACTERISTIC" section)	
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR	PF>0.97/115VAC, PF>0.95/230VAC, PF>0.9/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)	
	TOTAL HARMONIC DISTORTION	THD< 20%(@load≥65%/115VAC,230VAC; @load≥75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)	
	EFFICIENCY (Typ.)	90%	89%
	AC CURRENT (Typ.)	0.7A/115VAC 0.4A/230VAC 0.3A/277VAC	
	INRUSH CURRENT (Typ.)	COLD START 45A(twidth=100μs measured at 50% Ipeak) at 230VAC; Per NEMA 410	
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	28 units (circuit breaker of type B) / 32 units (circuit breaker of type C) at 230VAC	
	LEAKAGE CURRENT	<0.75mA / 277VAC	
PROTECTION	OVER CURRENT	Hiccup mode, recovers automatically after fault condition is removed	
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover	
ENVIRONMENT	WORKING TEMP.	Ta=-40 ~ +70°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)	
	WORKING HUMIDITY	20 ~ 95% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)	
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes	
SAFETY & EMC	SAFETY STANDARDS	UI8750, CSA C22.2 No. 250.13-12, ENEC EN61347-1 & EN61347-2-13, EN62384, GB19510.14, GB19510.1 independent, EAC TP TC 004 approved	
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC	
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH	
	EMC EMISSION Note.8	Compliance to EN55015, GB17743, GB17625.1, EN61000-3-2 Class C (@load≥65%) ; EN61000-3-3, EAC TP TC 020	
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level(surge immunity:Line-Line:2KV), EAC TP TC 020	
OTHERS	MTBF	1504.1K hrs min. Telcordia SR-332 (Bellcore) ; 452Khrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	φ 99mm *26mm (D * H)	
	PACKING	0.21Kg; 32pcs/ 7.7Kg/ 0.68CUFT	
NOTE	<ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature. 2. Please refer to "DRIVING METHODS OF LED MODULE". 3. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. 4. Length of set up time is measured at cold first start. Turning ON/OFF the driver may lead to increase of the set up time. 5. The driver 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. 6. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains. 7. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com 		

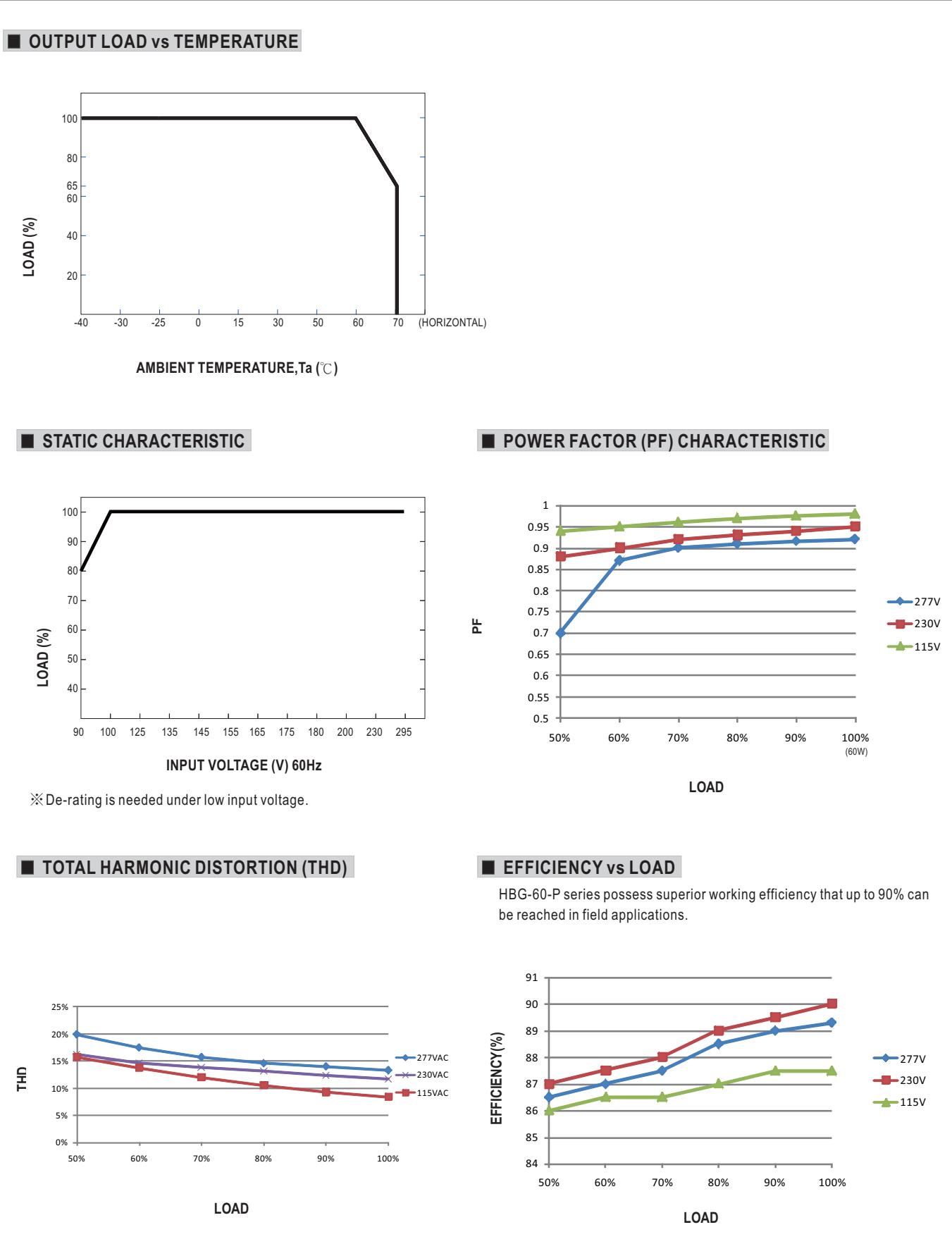
■ BLOCK DIAGRAM



■ DRIVING METHODS OF LED MODULE

※ This series works in constant current mode to directly drive the LEDs.





■ MECHANICAL SPECIFICATION

Unit:mm

