

产品规格书

PRODUCT SPECIFICATION

LED 驱动电源 (LED DRIVER)

产品名称 /TITEL: UFO 圆形 LED 驱动电源 (LED DRIVER)

产品型号 /MODEL: PG200-048DR

版本 /Rev: A0

PG200-048DR UFO 圆形 LED 驱动电源 (LED DRIVER)

维嘉鑫电源
LED DRIVER



LED DRIVER

PG200-048DR



产品描述 PRODUCT DESCRIPTION

PG200 系列是 200W 圆形 UFO 隔离电源产品，无频闪，专为工矿灯、飞碟灯、高棚灯、天井灯而设计；采用了稳定可靠的隔离方案，内置主动式 PFC 功能、IP65 防护等级，灌封导热硅胶以确保散热，具有高效率，高可靠性，高性价比等优点。

Pg200 series is a 200W UFO circular isolated power supply product without stroboscopic, which is specially designed for industrial and mining lamps, Hb, ceiling lamps and patio lamps; It adopts a stable and reliable isolation scheme, with built-in active PFC function and IP65 protection grade. It is filled with heat conducting silica gel to ensure heat dissipation. It has the advantages of high efficiency, high reliability and

产品特性： PRODUCT DESCRIPTION

※ 符合国际通用交流输入范围 90-305V

International universal AC input range 90-305V

※ 金属外壳设计，带功能性接地

Metal housing design with functional grounding

※ IP65 防护等级，室内户外安装均可

IP65 protection grade, indoor and outdoor installation

※ 具有主动式 PFC 功能，隔离恒流电源，无频闪，效率高达 91%

With active PFC function, isolated constant current power supply, no stroboscopic, efficiency up to 91%

※ 内置电位器调电流（改变输出功率）（可选）

Built in potentiometer to adjust current (change output power) (optional)

※ 保护种类：短路和过温保护

Protection type: short circuit and over temperature protection

※ 雷击 L-N:4KV, L-PE:6KV, N-PE:6KV (线对地仅限驱动，成品灯具取决于铝基板耐压)

Lightning Surge L-N:4KV, L-PE:6KV, N-PE:6KV (only for LED driver. The withstand voltage of aluminum PCB must be enough)

※ 5 年质保

5 years warranty

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产品编码原则 PRODUCT CODING PRINCIPLE

PG	200	-	048	D	R
产品系列代码 Series code	功率 Power		最大输出电压 Max voltage	调光	电阻调节 电流 / 功率

型号列表 MODEL LIST

型号 Model	最大输入功率 Max input power(W)	输出电压范围 Output voltage range(Vdc)	输出电流 Rated current(A)	效率 Typ. Efficiency (Eff)	总谐波失真 (Typ. THD)	功率因数 PF
PG200-048	200	36-48	4.2	≥ 91%	≤ 15%	≥ 0.97

备注 (Remark):

- ① D can be D or blank, D represents models with 0-10V/PWM/resistor 3in1 dimming output DIM+/DIM-, blank represents models without 0-10V/PWM/resistor 3in1 dimming output DIM+/DIM-,
- ② R can be R or blank, R represents models with power adjust by resistor output BM+/BM-, blank represents models without power adjust by resistor output BM+/BM-,

技术特性 TECHNICAL CHARACTERISTICS

输入特性 INPUT CHARACTERISTICS					
项目 Item	单位 Unit	最小值 Min	典型值 Rated	最大值 Max	备注 Remark
输入电压 Input Voltage	Vac	90	100-277V	305	输入电压范围 The range of input voltage.
输入频率 Input Frequency	Hz	47	/	63	/
最大输入电流 Max Input Current	A	/	/	3.0	100Vac, 满载 /Full load.
输入浪涌电流 Input Inrush Current	A	/	/	60	277Vac, 冷启动 /Full load cold start.
待机功耗	W	/	1.0	1.5	/
功率因数 Power Factor	/	0.95	0.97	/	230Vac, 50Hz, 满载 /Full load.
	/	0.90	/	/	100-277Vac, 70-100% 负载 /Full load.
总谐波失真 Total Harmonic Distortion	/	/	15%	20%	100-277Vac, 70-100% 负载 /Full load.

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输出特性 OUTPUT CHARACTERISTICS					
项目 Item	单位 Unit	最小值 Min	典型值 Rated	最大值 Max	备注 Remark
输出电压范围 Output voltage range	V	36	45	48	
输出最大空载电压 Max output voltage of no load	V	50	55	60	空载 /No load
输出电流范围 Output adjustable current range	A	2.8	4.2	5.0	
输出电流精度 Output current precision	/	-5%	/	+5%	满载 /Full load
开机启动时间 Start time	S	/	1	2	230Vac, 满载 /Full load
线性调整率 Line regulation	/	-1%	/	+1%	满载 /Full load
负载调整率 Load regulation	/	-2%	/	+2%	
效率 @230Vac Efficiency	/	88%	91%	/	
输出纹波电流 Ripple current(PK-AV)	/	/	5%	10%	满载 /Full load.
电流过冲响应 Overshoot & undershoot Response	/	/	/	10%	

备注 (Remark):

※ 所有性能参数均在温度 25℃情况下所量测的典型值，特别注明除外；纹波电流以 LED 负载为准。
All technical parameters are rated under the condition of 25℃, in addition to special note;
Ripple current subject to LED load.

其他特性 OTHER CHARACTERISTICS

项目 Item	最小值 Min	典型值 Rated	最大值 Max	备注 Remark
寿命时间 /Life time	50,000 Hours			Tc ≤ 75℃
质量保证 /Warranty	5Year			Tc ≤ 75℃

备注 (Remark):

※ 以上均在温度 25℃情况下所量测的典型值，特别注明除外。
All specifications are typical at 25℃ unless otherwise stated.
※ 驱动电源作为灯具系统的一个部件，需要最终配合灯具确认 EMI
EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

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环境要求 ENVIRONMENT REQUIREMENT

项目 Item	单位 Unit	最小值 Min	典型值 Rated	最大值 Max	备注 Remark
工作温度 Tc Temperature	℃	-40	25	60	Tc 为外壳温度 Temperature of Case
储存温度 Storage Temperature	℃	-40	25	85	
相对湿度 Humidity	RH	20%-90% RH non-condensing			工作湿度 Operation Humidity
		20%-90% RH non-condensing			储存湿度 Storage Humidity
海拔高度	m	-65	/	4000	
冷却方式 Cooling Mode	空气自然冷却 Air Cooling				

绝缘性能 ISOLATION FUNCTION

项目 Item	测试方法 Test Method	测试条件 Test Conditions
绝缘耐压 Dielectric strength	输入 - 输出 Input To Output	3200Vac/5mA Max/60s
绝缘耐压 Dielectric strength	初级 - 大地 primary To PE	1600Vac/5mA Max/60s
绝缘耐压 Dielectric strength	次级 - 大地 secondary To PE	1000Vac/5mA Max/60s
接地电阻 Grounding resistance		≤ 0.1Ω@25A,1min
漏电流 Leakage current		≤ 0.75mA,277Vac

防水等级 WATERPROOF GRADE

IP65 ■ IP66 □ IP67 □ IP68 □ IP00 □ (裸板)

安规要求 SAFETY REQUIREMENT

电源符合以下国际安规标准

The led driver shall be certified under the following international regulatory standards:

Approval	Country	Certified Stats	Standard	Option
CCC	China/ 中国	MEET	GB 19510	■
CE	Europe/ 欧洲	MEET	EN 61347	■
FCC	America/ 美国	MEET	PART 15	■
UL/CUL	America/Canada 美国 / 加拿大	MEET	UL8750	■
TUV	Germany/ 德国	MEETEN	EN 61347-2-13:2014 EN61347-1:2008+A1:2001+A2:2013 EN62493:2015	■
SAA	Australia/ 澳洲	MEET	AS/NZS61347.2.13	■

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可靠性 RELIABILITY

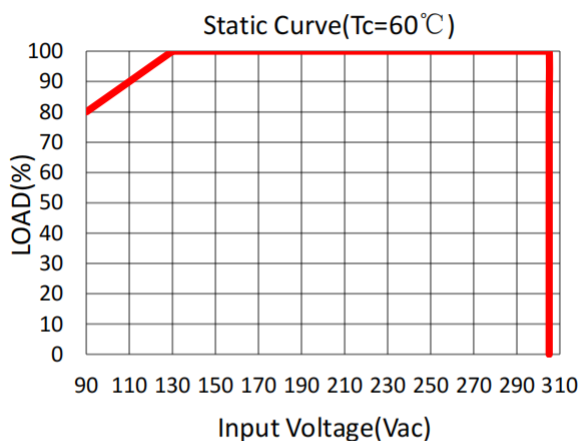
- 电源老化 / BURN-IN TEST

电源在输入 100 和 277Vac(60Hz)，输出满载，温度 $40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 条件下，各老化 4 小时测试。

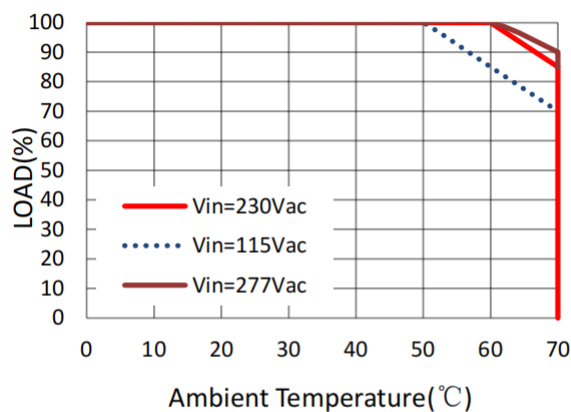
Input voltage applied to the led driver with 100 and 277 Vac(60Hz), Output full load; $40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ environment; Burn-in-test 4 hours respectively.

特性曲线 CHARACTERISTIC CURVE

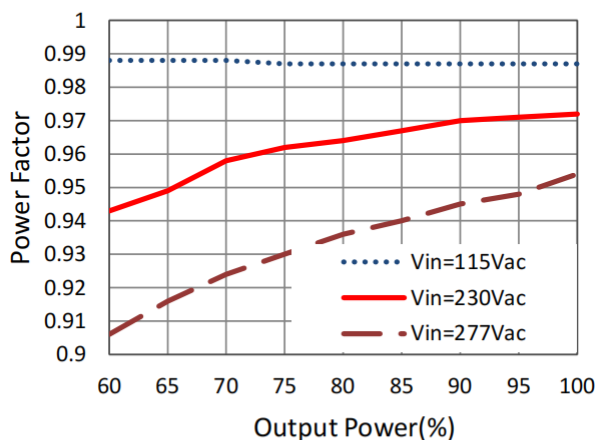
输入功率-输入电压曲线



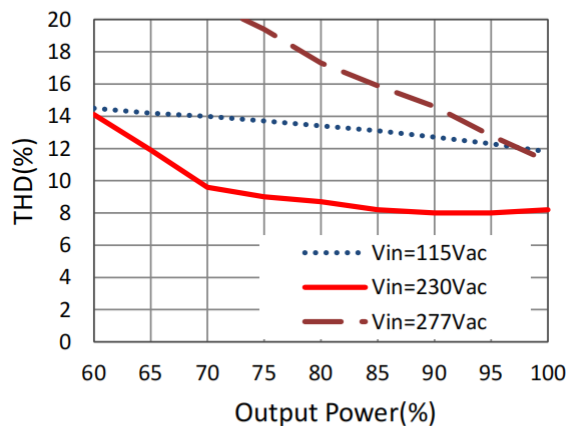
输出功率-环境温度曲线



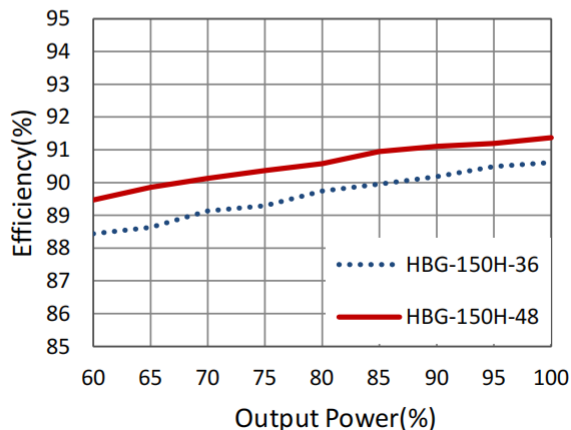
功率因数-输出功率曲线



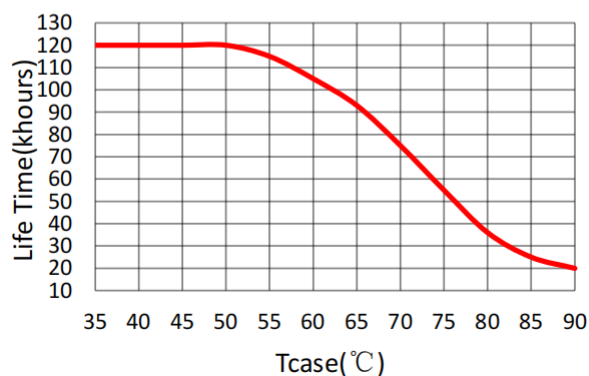
总谐波失真-输出功率曲线



电源效率-输出功率曲线



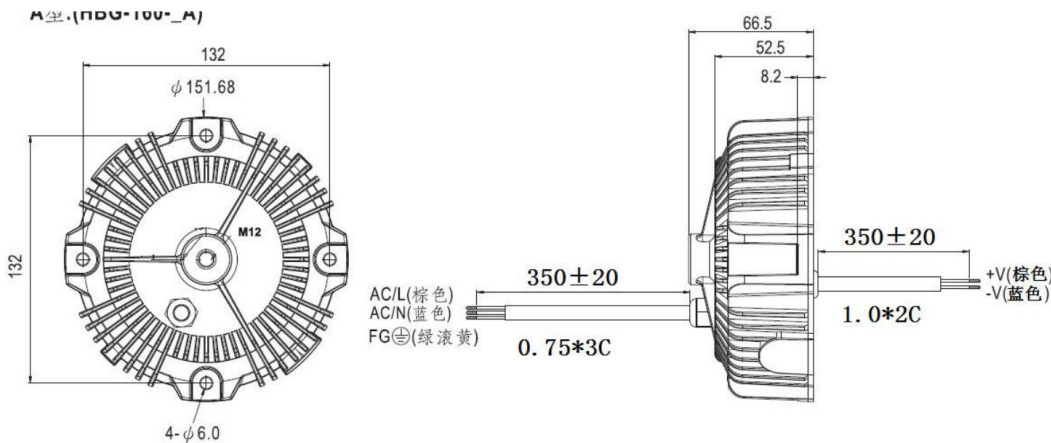
寿命-壳温



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结构尺寸图 Structure size chart

名称 Item	外壳直径	安装直径	安装孔直径	外壳高度	吊环孔径
代号 marking	D	A	4-B	H	R
mm(In.)	151.68(5.97)	132(5.20)	6.0(0.24)	66.5(2.62)	M12



包装 Packing

- 包装箱的外形尺寸为 (单位: mm) : 长 × 宽 × 高 = Y*Y*Y
The size of the package is (mm) : L×W×H = Y*Y*Y
- 每箱产品的包装数量为 * 台
The number of packages per box of products is * sets
- 单机净重: kg; 整箱毛重: kg
Net weight : kg; gross weight of whole case: kg
- 包装箱上有产品名称、型号、厂家标识、数量、制造日期等
The packing box has the product name, model, factory marking, quantity, date, and so on.

运输 Transportation

适应于车、船、飞机运输, 运输中应遮蓬、防晒、文明装卸
Suitable for car, ship, aircraft transport, transport should be awning, civilized loading and unloading.

储存 Store

产品贮存应符合 GB 3873 - 83 的规定
The storage of products shall conform to the regulations of GB 3873-83.
贮存期限超过 1 年的产品要重新检验, 合格后方可使用。
Products Storage period exceeding 1 year shall be re-inspected and qualified before use.

RoHS

产品符合欧洲指令 2011/65/EC
Products comply with European directive 2011/65/EC.