




深圳市华浩德电子有限公司

Shenzhen Fahold Electronics CO.,LTd.

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Product Name: 产品名称	FD-320V系列防水电源
Product Model: 产品型号	FD-320V-056*/B/C/D/Z 27-56V 4.0-9.0A FCC <input checked="" type="checkbox"/> UL <input checked="" type="checkbox"/>
	FD-320V-228*/B/C/D/Z 114-228V 0.35-1.75A FCC <input checked="" type="checkbox"/> UL <input checked="" type="checkbox"/>

Customer/客户:		
Products code 产品代码:	Sample NO. 样品编码:	
Customer Model No. 客户型号:	Fahold Model No. 我司型号:FD-320V	
		Customer ID 客户代码: Version 版本: 00

IGNATURE AND SEAL BY US /我司签字盖章		
日期:	2021.1.6	
Prepared By 编制	Checked By 审核	Approved By 批准
覃小玲	薄文钊	

Please confirm and send it back with signature within 7 days. Otherwise we will assume your acceptance. And if any quality dissent, will execute according to this product specification.

请确认后七日内回签，如不回签则视贵公司默认接受，在发生品质异常时按此份产品规格书执行。

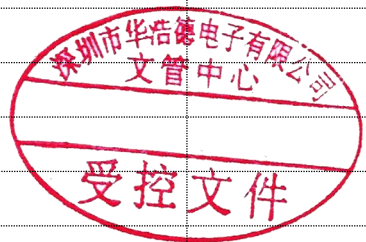
CUSTOMER APPROVED SIGNATURE /客户承认盖章

Customer Model No.客户型号:		
日期:		
ENG./工程	QA/品管	OTHER/其他

Comments 建议:

ECN History ECN 变更

Rev.	Description of Change 修改描述		Changed Date 修改日期	Notes 备注
	Before 修改前	After 改前后		
00	Original Release 首次发行	---	2021.1.6	UL调光隔离



Feature特征:

- ◆ IP65防护等级
- ◆ Max output power 320W.最大输出功率320W
- ◆ Constant current design. 恒流设计
- ◆ 3 in 1 dimming mode:0-10V,PWM,RX. 三合一调光调光模式: 0-10V, PWM,RX
- ◆ Smoothly dimming(0-100%),can dim to off. 从0%-100%平滑调光, 且调光输出可关断
- ◆ TUV CB CE UL FCC Certified.多个国家与机构认证
- ◆ PROTECTION: Short Circuit, Open Circuit 保护: 短路保护, 开路保护
- ◆ Surge protection: 6Kv.Common mode protection:6Kv. 差模6Kv, 共模6Kv
- ◆ Auxiliary Output 12V可带12V辅助源
- ◆ 可提供12V/200mA辅助电源
- ◆ Dimming signal is isolated from LED output;
- ◆ 调光信号与LED输出隔离



Application应用

- ◆ Street lights、High bay lights.路灯、工矿灯

Introduction 介绍

The document detail the electrical, mechanical and environmental specifications of a 320W constant current LED driver with 0(1)-10V Dimming. This LED drive power supply is suitable only for LED load.

此份资料详细描述了一款 320W 系列带 0(1)-10V 调光的 LED 恒流驱动电源的电器性能, 环境要求等。此款电源只适用于 LED 负载。

Model and Key parameters 型号和关键参数 Table 1, 表 1

Model 型号	功率 (W)	Output voltag 输出 电压(V)	Max output voltage (Vdc)最大空载电压	output current 输出电流(A)	Efficiency 效率 (%) @277V	Efficiency 效率 (%) @480V
FD-320V-056*/B/C/D/Z	320	27-56	63	4.0-9.0	90	92
FD-320V-228*/B/C/D/Z	320	114-228	250	0.35-1.75	90	92

Note:

1:带载最大电压测试 Max output voltage test

2: 可选字母 B,C,D,Z, 表示输出增加不同的可选功能。B 字母表示可调光并可调电流, C 字母表示不可调光也不可调电流, D字母表示可调光, 但不可调电流。

2: Optional letters B, C, indicating that the output increases with different optional functions; letter B can be three-in-one dimming and fine-tuning current, letter C indicates that non dimmable and output current unadjustable.

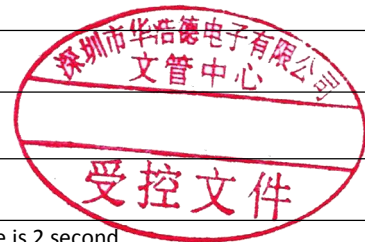
3:型号 C 后面标签上要写 YYY,YYY 代表输出电流, 如FD-240V-050C-3900

The model C on the back of the label to write YYY and YYY for the otputcurrent, such as FD-240V-050C-3900



Technical data 技术参数

Input characteristics 输入特性	
Input Voltage 输入电压	277-480Vac (max 200-520Vac)
Input Frequency 输入频率	50/60Hz
Input Current (Typ.) 输入电流 (典型值)	1.9 A @200-520 Vac , 100% load
No load Voltage 空载功耗	5Wmax
Inrush Current 浪涌电流	75Amax. @ 347Vac, 25°C
Power factor (Typ.) 功率因数 (典型值)	PF>0.9 @ 100% load
THD 总谐波失真	THD<20% @ 277-480 Vac, 100% load
Output characteristics 输出特性	
Current accuracy 电流精度	± 5% IO
No load Voltage 空载电压	Vout 63Vmax @FD-320V-056*/B/C/D/Z, Vout 250Vmax @FD-320V-228*/B/C/D/Z
Efficiency 效率	≥90% @277- 480 Vac
Output Voltage 输出电压	27-56V /114-228v ; Table 1, 见表 1
Ripple and Noise 纹波与噪声	1200mVp-p
Line Regulation 线性调整率	3%Io
Load Regulation 负载调整率	3%Io
Turn On Delay Time 开机延时	Under normal conditions, the maximum delay time is 2 second 最大延迟时间小于 2 秒
内置调节电流	
调节电流输出范围	Table 1, 见表 1, 备注:输出总功率不超过320W (实际输出电压*实际输出电流=功率) 否则不能质保。
请使用配套编程器设置输出电流	
Protection functions 保护功能	
Open circuit 开路保护	When the LED disconnection the product is protected such as hiccup or when it is at the highest point of output voltage, the power supply shall be self-recovery when the fault condition is removed.当 LED 开路时, 产品进入保护状态, 如打嗝或钳在某输出最高电压状态, 产品不会损伤, 当故障排除或重新开机时, 电源恢复工作正常。
Short Circuit 短路保护	The input power shall decrease when the output rail short, the power supply shall be self-recovery when the fault condition is removed.当输出短路时输入功率会相应减小, 短路情况解除后, 电源自动恢复正常。
Environmental conditions 环境条件	
Operating Temperature 工作温度	-40°C to +60°C
Operating Relative Humidity 湿度	10% to 90% RH, non-condensing
Storage Temperature 储存温度	-40°C to +85°C
Storage Relative Humidity 储存湿度	10% to 90%RH, non-condensing (Sea level to 2,000 m)
Vibration 振动	10 to 500HZ Sweep at constant acceleration of 1.0G (depth: 3.5mm)for 1 Hour for each of the perpendicular axes X, Y, Z.

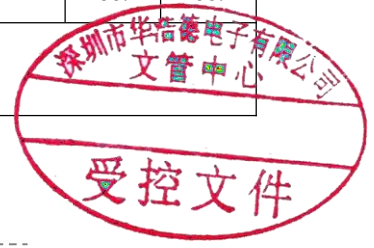


Dimmable 调光范围

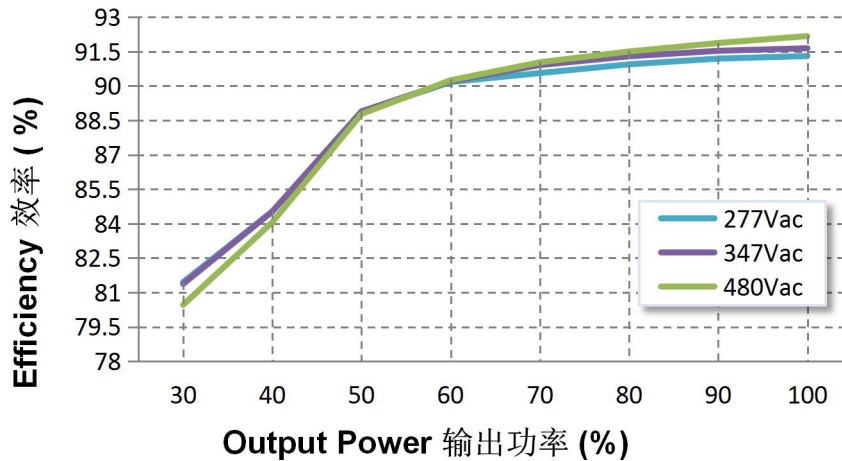
Function			0-10V			PWM			RX			
Yes Or No			Y			Y			Y			
0-10V	0	1	2	3	4	5	6	7	8	9	10	open
Ir	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	100%
PWM	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	open
Ir	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	100%
RX	0Ω	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	open
Ir	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	100%

Note:

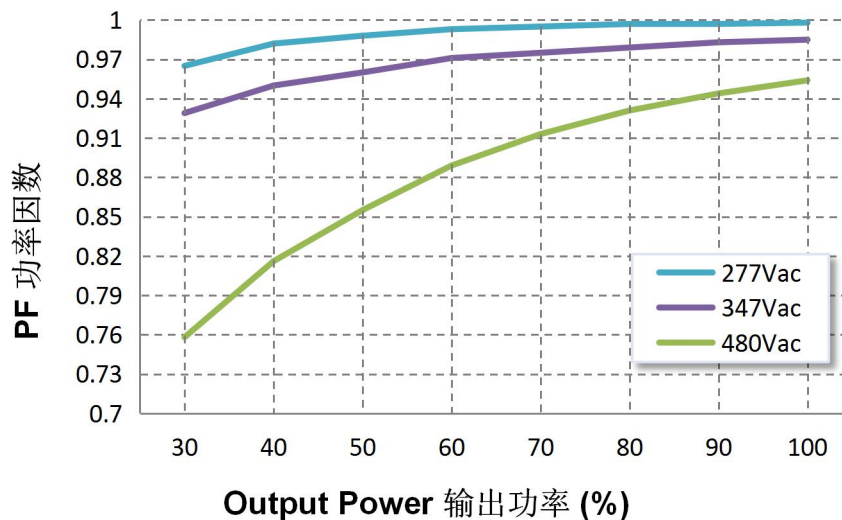
1. Ir is the output current percentages. Ir 为输出电流百分比
2. Ir above is typical values. 以上 Ir 均为典型值



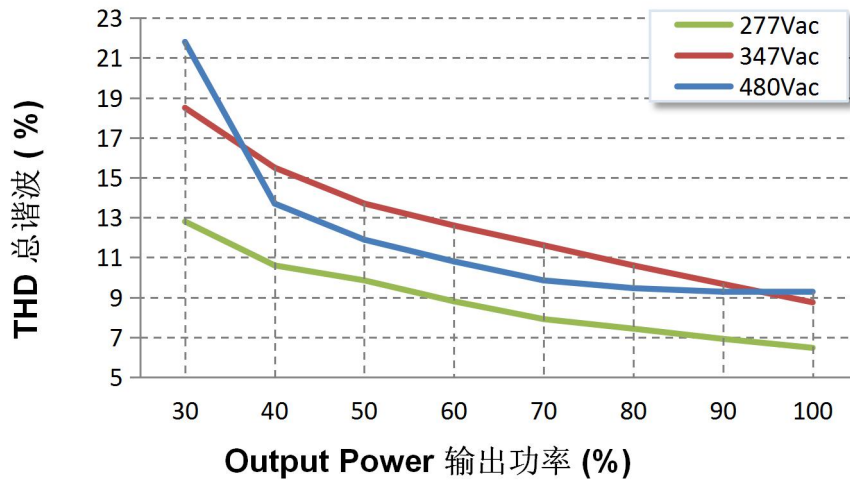
Efficiency vs. Load 效率负载



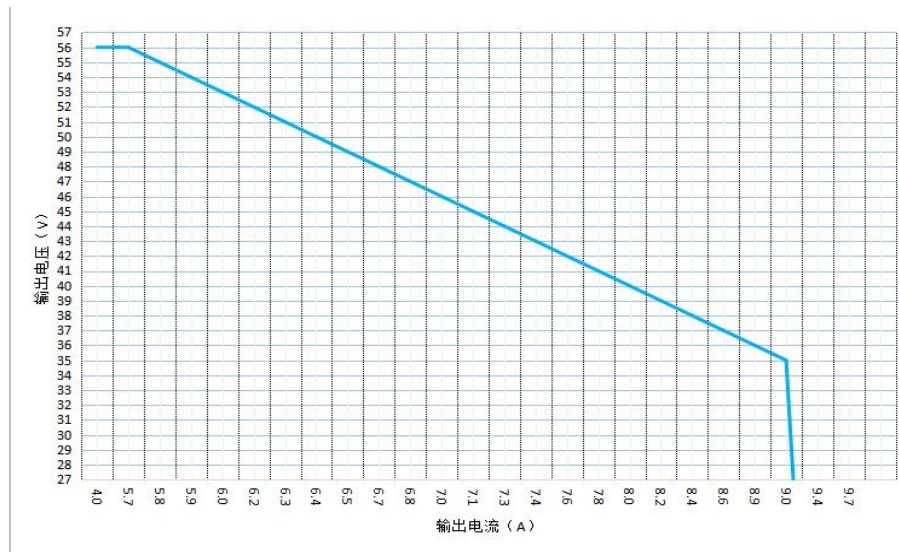
Power Factor 功率因素



THD vs. Load THD和负载

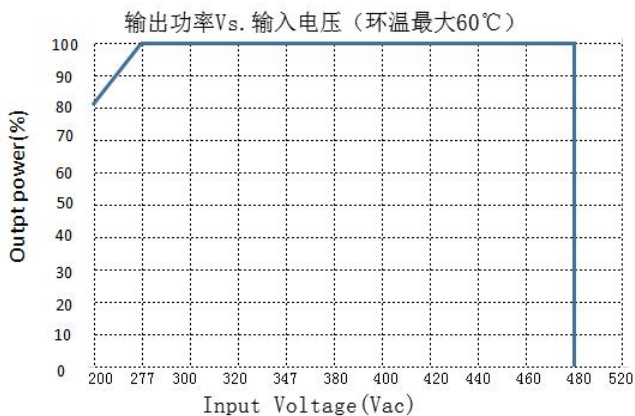


产品功率曲线图



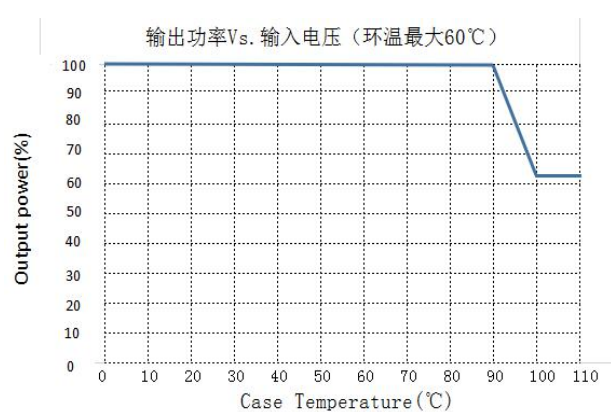
输出功率Vs.输入电压(环温最大60°C)

Output power VS Input voltage

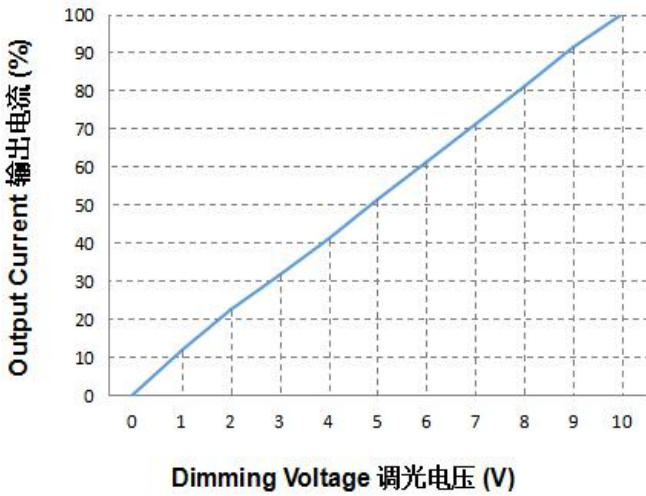


输出功率Vs.壳温

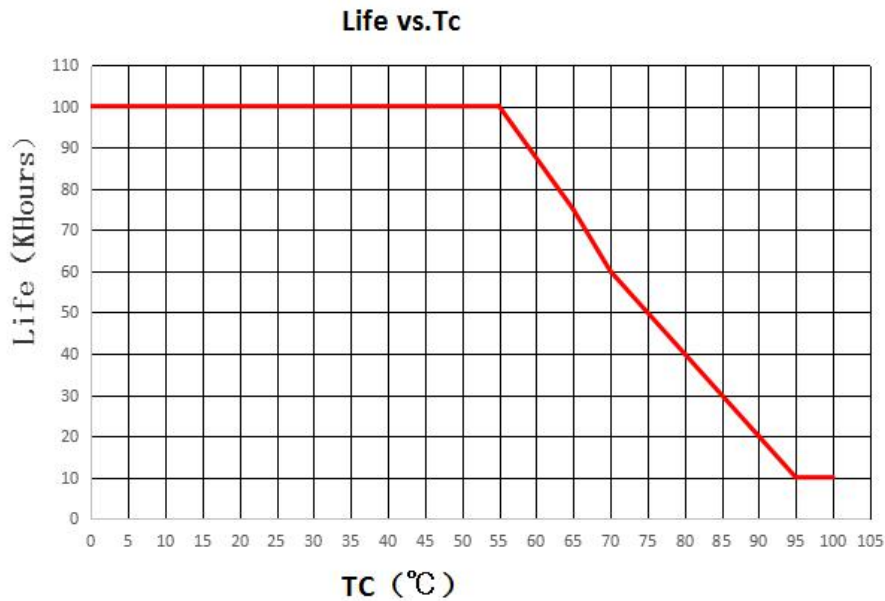
Output power VS Shell temperature



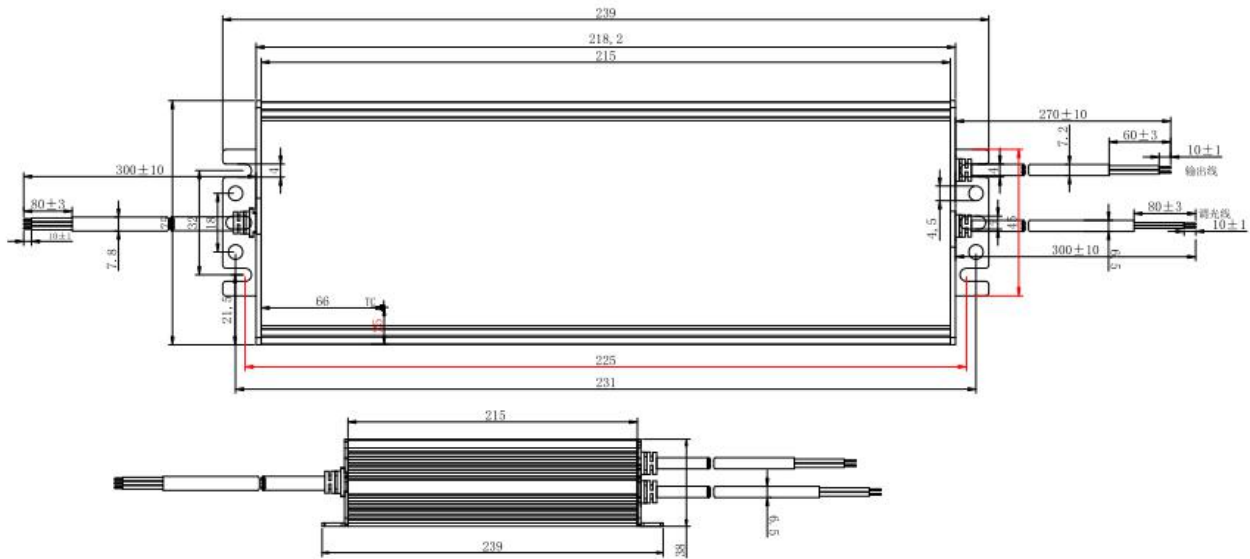
Dimming 调光曲线 P4, 图 4



Life vs. Tc 寿命和温度 P5, 图 5



Dimensional Drawing (unit: mm)尺寸



- Input Wire UL 600V 18#, Black-L, White-N, Green-PG
- Output Wire UL 300V 18#, Red_LED+, Black_LED-
- Dimming Wire UL 300V 20#, Purple_DIM+, Grey_DIM-
- Auxiliary Wire UL 300V 20#, Black_ +12V
- 输入线 美规 600V 18#, 黑L, 白N, 绿色PG
- 输出线 美规 300V 18#, 红LED+, 黑色LED-
- 调光线 美规 300V 20#, 紫色DIM+, 灰色DIM-
- 辅助源 美规 300V 20#, 黑色 +12V

LABEL 标签示例

备注: YYY 为订单实际电流

安装注意事项 Installation considerations

1. 电源的防雷等级满足 IEC61000-4-5 等各国的标准要求, 如果使用在雷电多发地区或电网环境相对复杂的地区, 建议在电源的AC 输入端加装专业的防雷模块。

Lightning protection level to meeting IEC61000-4-5 standard requirement, if you use the lightning occurs or the area of power grid environment is relatively complex, suggest in the power supply of the AC input terminal equipped with professional lightning protection module.

包装, 运输, 贮存 Package, Transportation & Storage

1. 包装 Package

- a. 包装箱的外形尺寸为 (单位: mm): 长 X 宽 X 高;
- b. package box outside dimension: L×W×H (unit: mm);
- c. 每箱产品的包装数量为 *台;
product number in each box: *PCS;
- d. 整箱毛重 KG
whole box gross weight: kg;

2. 运输 Transportation

适用于车, 船, 飞机运输, 运输中应遮蓬, 防晒, 文明装卸。

Packaging is designed suitable for transportation by truck, ship, and plane. The products should be shielded from sunshine, and loaded and unloaded carefully.

3. 贮存 Storage

产品贮存应符合GB3873-83 的规定。

贮存期限超过一年的产品要重新检验, 合格后方可使用。

The product storage meet the standard of the GB 3873-83.

Product should be rechecked over 1 year.

免责声明:

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产品安装与使用注意事项

- 请勿将 AC 供电接入 DC 输出端口及调光端口。
- 请勿超过电源标称功率 320W 使用。
- 请勿将电源并联使用在同一灯具上。
- 本产品为恒流 LED 电源, 仅适用于 LED 灯具。

安全及注意事项

为了减少对人身伤害、电击、火的危险, 以及电源的损坏, 请仔细阅读以下规格, 并遵守这些规则, 以防危险。

- 请勿将电源安装在有易燃易爆物区域, 以免引起爆炸及火灾。
- 请勿私自拆装电源、更换器件, 以免触电。

