



深圳市华浩德电子有限公司

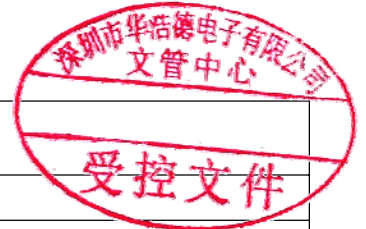
Shenzhen Fahold Electronics Co.,Ltd.

地址：深圳市宝安区石岩街道石龙社区石环路4号星光工业园C栋二、四、五、六楼

Add.:Floor 2,4,5, 6 Building C, Starlight Industrial Park, NO. 4, Shihuan Road,Shilong Community, Shiyan Town, Bao'an District, Shenzhen, China.

Product Name: 产品名称	FD-36H 系列防水电源						
	FD-36H-038/A/B/C/D	24-38V	0.6-1.2A	CE <input checked="" type="checkbox"/>	FCC <input checked="" type="checkbox"/>	UL <input checked="" type="checkbox"/>	
	FD-36H-042/A/B/C/D	30-42V	0.5-1.0A	CE <input checked="" type="checkbox"/>	FCC <input checked="" type="checkbox"/>	UL <input checked="" type="checkbox"/>	
Product Model: 产品型号	FD-36H-054/A/B/C/D	36-54V	0.4-0.9A	CE <input checked="" type="checkbox"/>	FCC <input checked="" type="checkbox"/>	UL <input checked="" type="checkbox"/>	
	FD-36H-076/A/B/C/D	45-76V	0.3-0.65A	CE <input checked="" type="checkbox"/>	FCC <input checked="" type="checkbox"/>	UL <input checked="" type="checkbox"/>	
	FD-36H-115/A/B/C/D	65-115V	0.25-0.5A	CE <input checked="" type="checkbox"/>	FCC <input checked="" type="checkbox"/>	UL <input checked="" type="checkbox"/>	

版本: REV.: 01



SIGNATURE AND SEAL BY US / 我司签字盖章		
日期:	2017-9-29	
Prepared By 编制	Checked By 审核	Approved By 批准

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

Comments 建议:



Feature特征:

- ◆ 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
- ◆ PROTECTION: Short Circuit, Open Circuit
保护: 短路保护, 开路保护
- ◆ Surge protection: 4KV.浪涌保护4KV

Application应用

- ◆ LED Advertising Sign,LED Architectural Lighting,LED Commercial Industrial Lighting,LED General Luminaries,LED广告牌, LED建筑照明, LED商业工业照明, LED灯具

Introduction 介绍

The document detail the electrical, mechanical and environmental specifications of a 36W constant current LED driver with 0-10V Dimming. This LED drive power supply is suitable only for LED load.

此份资料详细描述了一款 36W 系列带 0-10V 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

Model 型号	Power(W) 功率	Output Voltage (Vdc) 输出电压	Max output voltage (Vdc)最大空载电压	Output current (mA) 输出电流	AC230V Efficiency (Typ.) 效率	AC100V Efficiency(Typ.) 效率
FD-36H-038/A/B/C/D	36	24-38	50	600-1200	87%	85%
FD-36H-042/A/B/C/D	36	30-42	52	500-1000	87%	85%
FD-36H-054/A/B/C/D	36	36-54	63	400-900	88%	86%
FD-36H-076/A/B/C/D	36	45-76	90	300-650	88%	86%
FD-36H-115/A/B/C/D	36	65-115	130	250-500	89%	87%

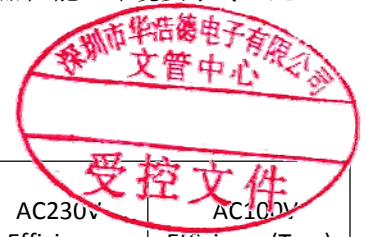
Note:

1:测试条件为满载, 环境温度 25℃ Test conditions are full load, ambient temperature 25 °C

2:可选字母 A,B,C,D 或空位, 表示输出增加不同的可选功能。默认空位表示无其他可选功能 (基础机型);A 字母表示铝壳带三合一调光, B 字母表示铝壳带三合一调光并可微调电流, C 字母表示胶壳带三合一调光,D 字母表示胶壳基础机型 (无调光功能) Optional letters A, B, C, D or empty, indicating that the output increases with different optional functions. The default space indicates no other optional function (basic model); A letter indicates that the aluminum shell with three-in-one dimming, B letters that three-in-one dimmable light and fine-tuning current, C letters that plastic shell with three A dimming, D letters that plastic shell base models (no dimming function)

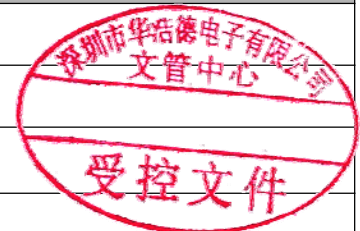
3:型号 A/C/D 后面标签上要写 YYYY,YYYY 代表输出电流, 如 FD-36H-54C-0900

The model A / C / D on the back of the label to write YYY and YYY for the output current, such as FD-36H-54C-0900

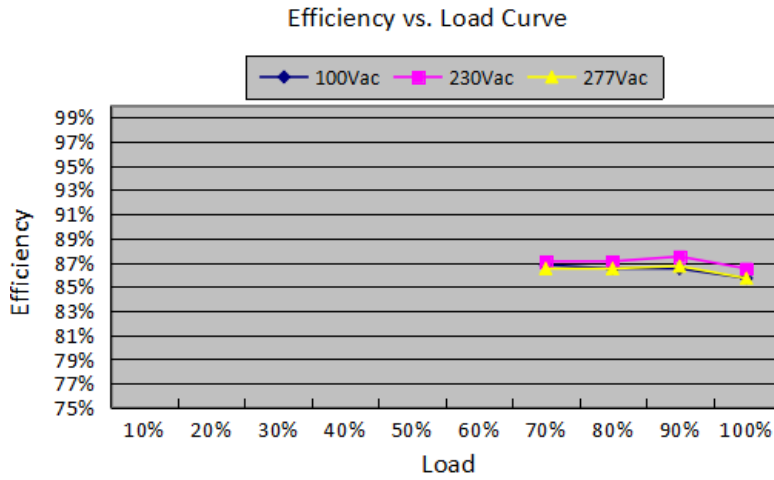


■ Technical data 技术参数

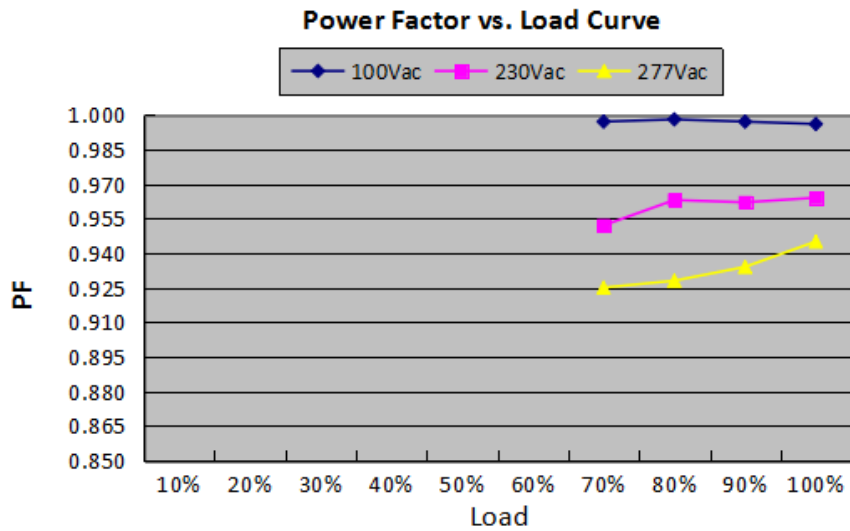
Input characteristics 输入特性	
Input Voltage 输入电压	100-277Vac
Input Frequency 输入频率	50-60Hz
Input Current (Typ.) 输入电流 (典型值)	500mAmax. @ 100-277Vac , 100% load
Inrush Current 浪涌电流	50Amax. @ 100-277Vac , 100% load
Power factor (Typ.) 功率因数 (典型值)	PF>0.9@ 100-277Vac , 100% load
THD 总谐波失真	THD<20%@ 100-277Vac , 100% load
Output characteristics 输出特性	
Current accuracy 电流精度	5%
No load Voltage 空载功耗	2Wmax
Efficiency 效率	85%@ 100-277Vac & 100% load, see efficiency vs. load curve for the details
Ripple and Noise 纹波与噪声	3000mVp-p
Line Regulation 线性调整率	5%
Load Regulation 负载调整率	5%
Turn On Delay Time 开机延时	Under normal conditions, the maximum delay time is 2 second
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	5% to 95%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.
Gluey housing Degrees of Protection 胶壳防水等级	IP65
Aluminium housing Degrees of Protection 铝壳防水等级	IP67
Safety compliance 安全标准	



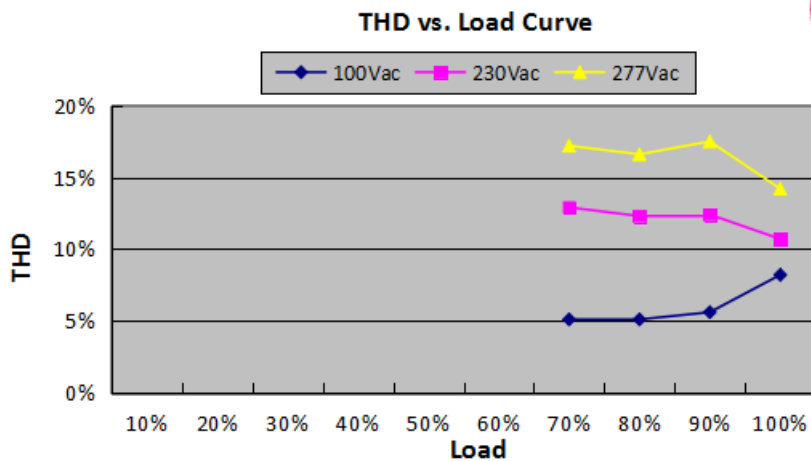
■ Efficiency vs. Load 效率负载



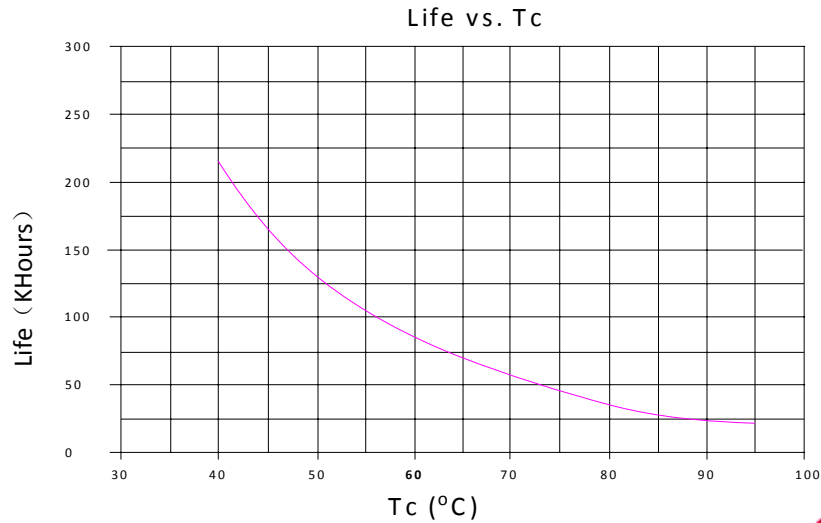
■ Power Factor 功率因素



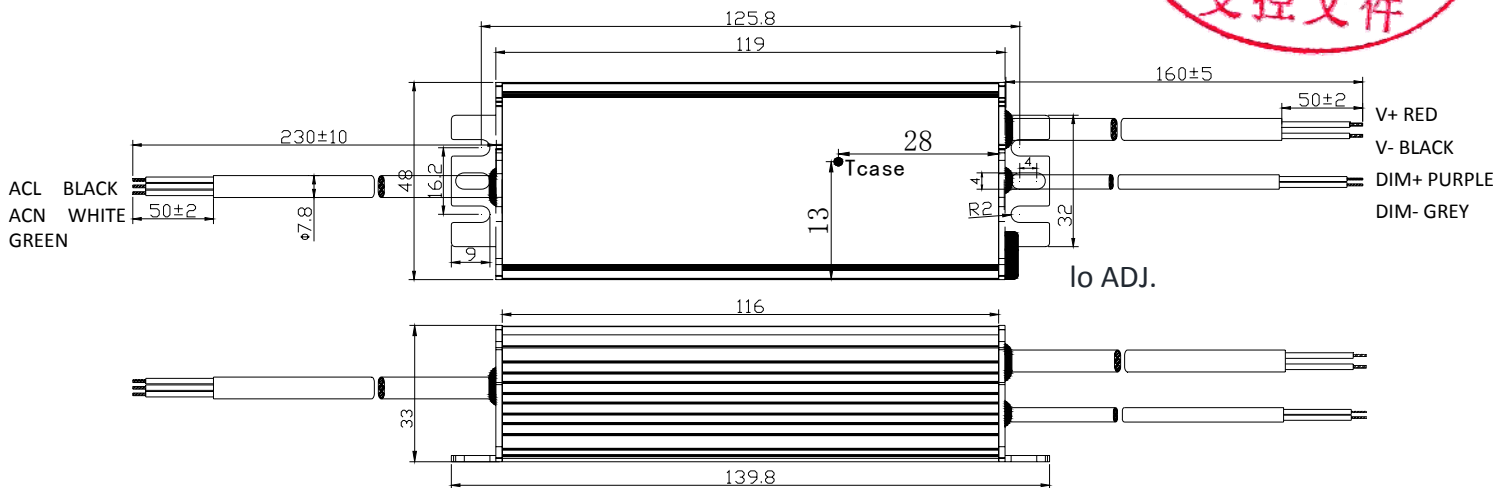
■ THD vs. Load THD 和负载



Life vs. Tc 寿命和温度



Aluminium housing Dimensional Drawing 铝壳尺寸图



1:AC Power wires: UL SJTW18# 3x0.824MM(OD7.8MM) Black PVC Skin; Triaxial cables with Black, White, Green. Black: L, White: N, Green: GND

1:AC 电源线: UL SJTW18# 3x0.824MM(OD7.8MM)黑色 PVC 外皮, 黑白绿三芯线, 黑 L, 白 N, 绿 GND

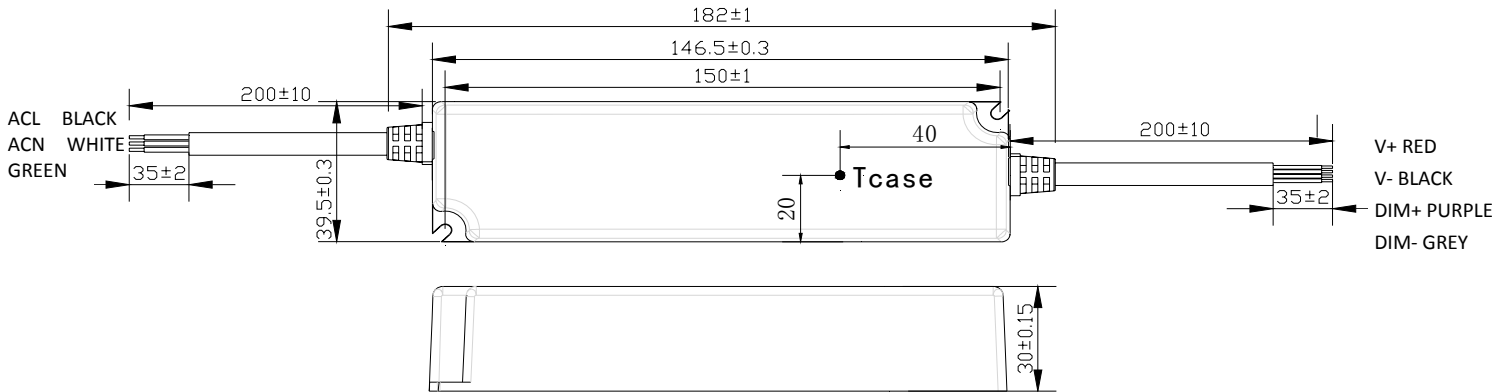
2:DC power wires: UL SJTW18# 2x0.824MM(OD7.8MM) Black PVC Skin; Two cables with black and red, Red LED+, Black LED-.

2:DC 电源线: UL SJTW18# 2x0.824MM(OD7.2MM)黑色 PVC 外皮, 红黑两芯线, 红 LED+, 黑 LED-

3:Dimming Wires: UL2464(OD6.5MM) 20# Black PVC Skin, Two cables with Purple and Grey, Purple DIM+, Grey DIM-.

3:调光线:UL2464(OD6.5MM)20#黑色 PVC 外皮, 紫灰两芯线, 紫 DIM+, 灰 DIM-

Glue housing Dimensional Drawing (unit: mm) 胶壳尺寸图



1:AC Power Wires: UL SJTW 3x0.824MM(OD7.8MM) Black PVC Skin; Triaxial cables with Black, White, Green. Black: L, White: N, Green: GND.

1:AC 电源线: UL SJTW 3x0.824MM(OD7.8MM)黑色 PVC 外皮, 黑白绿三芯线, 黑 L, 白 N, 绿 GND

2:DC Power two core wires(without dimming wire): UL SJTW18# 2x0.824MM(OD6.5MM) Black PVC Skin, Red LED+, Black LED-

2:DC 电源线两芯线(不含调光线): UL SJTW18# 2x0.824MM(OD6.5MM)黑色 PVC 外皮, 红 LED+, 黑 LED-

3:DC Four-core Power wires(Red,Black,Purple,Grey including dimming wires): UL 2464 (OD6.5MM) Black PVC Skin, the inner wires black and red are #18 wires, Red LED+, Black LED-, the inner wires purple and grey are #22 wires, Purple DIM+, Grey DIM-

3:DC 电源四芯线(红黑紫灰含调光线): UL 2464 (OD6.5MM)黑色 PVC 外皮, 内芯红黑两芯为 18#线 红 LED+, 黑 LED-, 内芯紫灰为 22# , 紫色 DIM+, 灰色 DIM-



Aluminium housing LABEL 铝壳标签

A 系列标签

 www.fahold.com	Constant Current LED Driver Model: FD-36H-042A-YYYY		tc:90°C ta:60°C	V+ RED ○ V- BLACK ○ DIM+ PURPLE ○ DIM- GREY ○
	INPUT:100-240V~ 0.5A 50/60Hz 277V~ 0.16A 50/60Hz (277VAC for North America only)	OUTPUT:30V-42V= 0.5-1.0A Max.36W	•tc	
○ ACL BLACK ○ ACN WHITE ○ ⊕ GREEN	INPUT	Suitable for use in Dry,Damp and Wet Locations	○ ⊕ GREEN	
			RoHS SELV	
			MADE IN CHINA	

B 系列标签

Fahold www.fahold.com <input type="radio"/> ACL BLACK <input type="radio"/> ACN WHITE <input checked="" type="radio"/> GREEN	Constant Current LED Driver Model: FD-36H-042B INPUT:100-240V~ 0.5A 50/60Hz OUTPUT:30V-42V=0.5-1.0A Max.36W 277V~ 0.16A 50/60Hz (277VAC for North America only)	tc:90°C ta:60°C	V+ RED ○ V- BLACK ○ DIM+ PURPLE ○ DIM- GREY ○ Io ADJ. ●
cUL _{us} E479229 FC CE RoHS SELV 110 F IP67 MADE IN CHINA			

■ Gluey housing LABEL 胶壳标签

C 系列标签

Fahold www.fahold.com <input type="radio"/> ACL BLACK <input type="radio"/> ACN WHITE <input checked="" type="radio"/> GREEN	Constant Current LED Driver Model: FD-36H-042C-YYYY INPUT:100-240V~ 0.5A 50/60Hz OUTPUT:30V-42V=0.5-1.0A Max.36W 277V~ 0.16A 50/60Hz (277VAC for North America only)	tc:90°C ta:60°C	V+ RED ○ V- BLACK ○ DIM+ PURPLE ○ DIM- GREY ○
cUL _{us} E479229 FC CE RoHS SELV 110 F IP65 MADE IN CHINA XXYY			

D 系列标签

Fahold www.fahold.com <input type="radio"/> ACL BLACK <input type="radio"/> ACN WHITE <input checked="" type="radio"/> GREEN	Constant Current LED Driver Model: FD-36H-042D-YYYY INPUT:100-240V~ 0.5A 50/60Hz OUTPUT:30V-42V=0.5-1.0A Max.36W 277V~ 0.16A 50/60Hz (277VAC for North America only)	tc:90°C ta:60°C	V+ RED ○ V- BLACK ○
cUL _{us} E479229 FC CE RoHS SELV 110 F IP65 MADE IN CHINA XXYY			

C 和 D 系列 XXYY 代表
生产周期



安装注意事项 Installation considerations

1.若产品有外部可调电位器，请在调整好电流之后，建议用 704 硅胶将调整电流的孔密封好，将防水胶塞盖好。↓

If the power supply has adjustable external potentiometer, after adjust output current, suggest using 704 silicone sealing good the hole and plug waterproof rubber.

2.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 = 370 X 202 X 208;

package box outside dimension: L×W×H = 370×202×208 (unit: mm);

b. 每箱产品的包装数量为 30 台;

product number in each box: 30PCS;

c. 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.