

PCS10T-1HMC

Summary

PCS10T-1HMC is a constant voltage mode output LED driver. The output current can be easily set via DIP switch. The driver supports leading edge (Triac) and trailing edge (ELV) dimmer, and can be compatible with the systems of various brands to achieve a smooth dimming effect.

Product Features

- Single channel output, output current level selectable via DIP S.W.
- Support Leading edge (Triac) and Trailing edge (ELV) dimmer
- Dimming range from 40VAC to 240VAC
- Class 2 power supply. Full protective plastic housing
- Dimming effect smooth, no flicker
- Over load protection; Short circuit protection
- Suitable for indoor LED lighting application, such as down light, spotlights, panel light, and so on

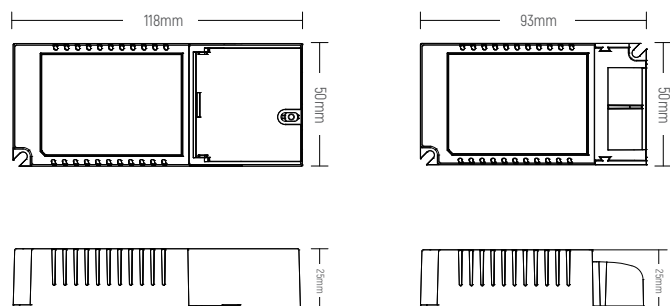


Technical Parameter

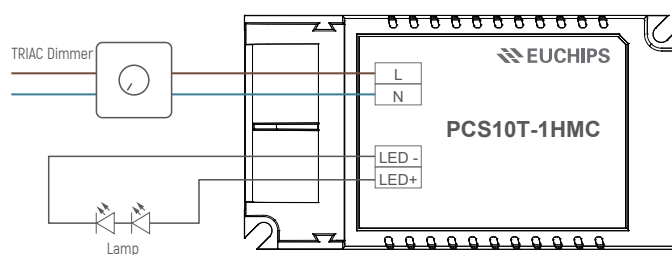
| Model | | PCS10T-1HMC | | |
|------------|--------------------------|--|----------|----------|
| Output | Current | 150mA | 180mA | 210mA |
| | Voltage | 25-45VDC | 25-45VDC | 25-45VDC |
| | Power | 6.75W | 8.1W | 9.45W |
| | Current Accuracy | ±5% | | |
| | No load output voltage | 60VDC | | |
| | Output LF current ripple | < 8% | | |
| Input | Voltage | 220VAC-240VAC | | |
| | Frequency | 50/60Hz | | |
| | Dimming Voltage Range | 40-240VAC | | |
| | Efficiency | 76%@230VAC, Full Load | | |
| | PF | > 0.9@230VAC, Full Load | | |
| | THD | < 25%@230VAC, Full Load | | |
| | Current | 0.063Amax@230VAC, Full Load | | |
| | Inrush current | Cold start,15A(twidth=50us measured at 50% Ipeak)@230VAC | | |
| Protection | Short circuit | Hiccup mode, recovers automatically after fault condition is removed | | |
| | Over Load | Hiccup mode, recovers automatically after fault condition is removed | | |
| Function | Dimming mode | Triac/ELV | | |
| Others | Dimension | 118*50*25mm(L*W*H)/93*50*25mm(L*W*H) | | |
| | G.W | 100g/90g | | |
| | Ip Rating | IP20 | | |
| | Working Temp | -20°C ~ 50°C | | |
| | Tc | 85°C | | |
| | Relative Humidity | 20-90% RH | | |
| | Lifetime | 50000h@tc max | | |
| | Switch Cycle | >100,000 times | | |

*If a single product is connected with the test dimmer, it is recommended to connect three products, and the dimmer effect will be better.

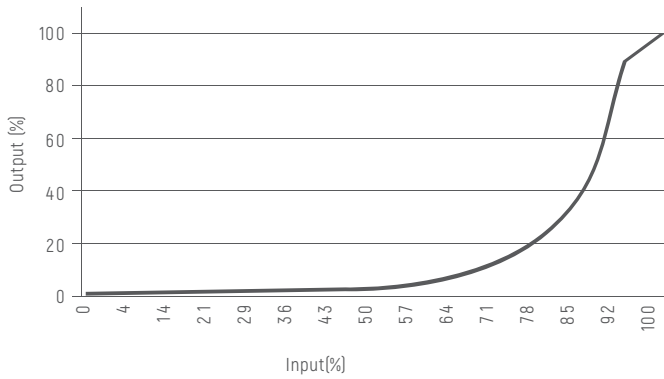
Dimension (mm)



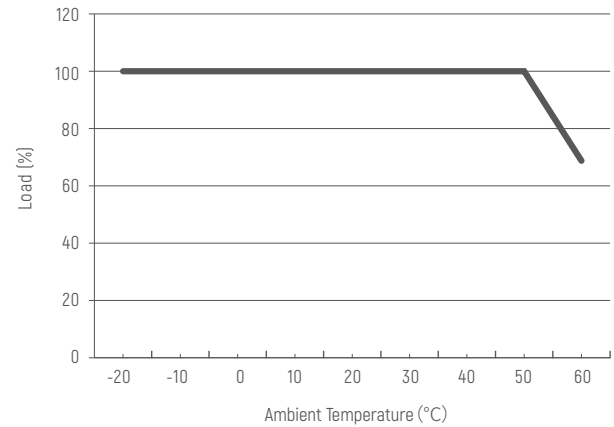
Wiring Diagram



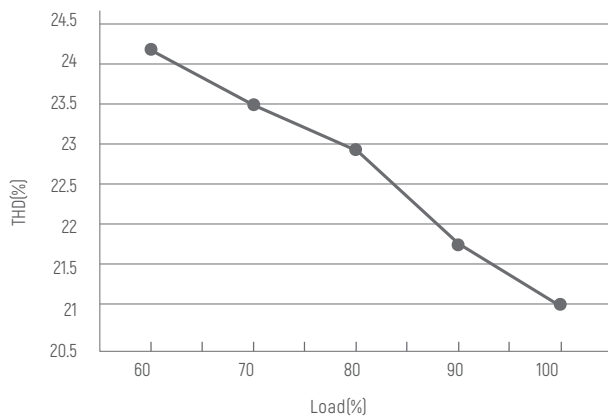
Dimming Curve



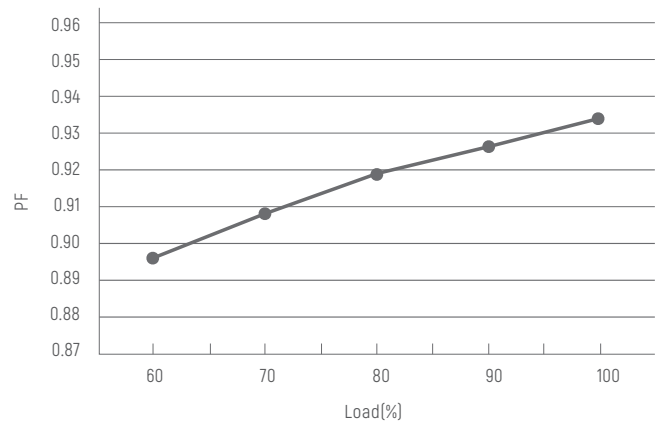
Derating Curve



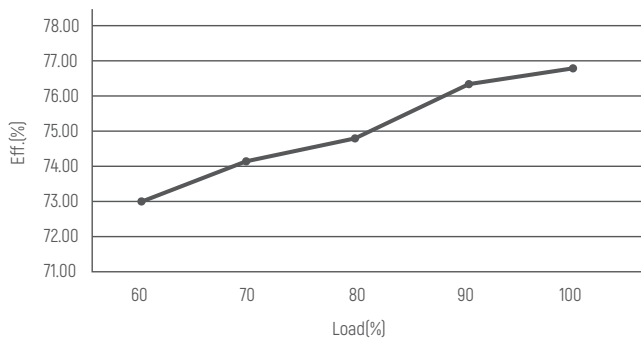
THD vs load



PF vs load



Eff. vs Load



Current Selection Table

| | | | | |
|----|-----|----------------|----------------|----------------|
| ON | OFF | 1 150mA 25-45V | 2 180mA 25-45V | 2 210mA 25-45V |
|----|-----|----------------|----------------|----------------|

Remark: Function default setting is: 150mA (@switch are all OFF state)

Max. quantity of drivers per miniature circuit breaker

| MCB type | B16 | C16 |
|--------------|--------------------|--------------------|
| Installation | 1.5mm ² | 1.5mm ² |
| Quantity | 30 | 38 |

Max. distance between independent use LED driver and LED modules

| Distance | 5m | 10m | 20m | 30m |
|---------------|----------------------------|-------------------------|---------------------------|---------------------------|
| Cable Section | 0.75mm ² /AWG18 | 1mm ² /AWG17 | 1.5mm ² /AWG15 | 2.5mm ² /AWG13 |

※ The contents of this manual are updated without prior notice. If the function of the product you are using is inconsistent with the instructions, the function of the product shall prevail. Please contact us if you have any questions.

Cautions

1. The product shall be installed and serviced by a qualified person.
2. This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
4. Please check if the output voltage and current of any LED power supplies used comply with the requirement of the product.
5. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
6. For safety consideration, PVC or rubber cord of 0.75-1.5mm² is recommended for input and output terminal(s). Flat power cord is not suitable. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
7. If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.

PCS10T-1HMC

概述

PCS10T-1HMC 是一款恒流输出LED 调光驱动器，输出电流可以通过DIP 拨码开关简易设置。这款驱动器支持前沿切相和后沿切相调光器，可以与多品牌系统配合使用，实现平滑调光的效果。

产品特点

- 单通道恒流输出，多级电流可选
- 支持前沿/后沿切相调光
- 调光电压范围：40-240VAC
- Class 2 电源, 全防护塑胶外壳
- 调光曲线平滑，无闪烁
- 过载保护；短路保护
- 适用于LED 室内灯具,比如筒灯，面板灯，射灯等

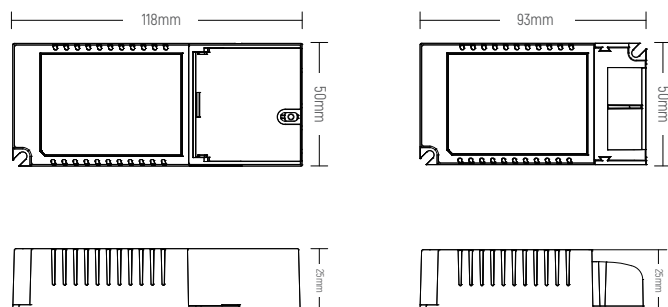


技术参数

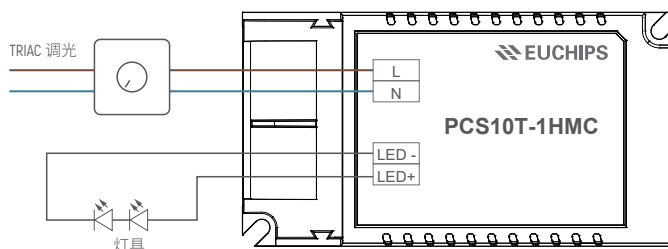
| 型号 | | PCS10T-1HMC | | |
|----|--------|--|----------|----------|
| 输出 | 电流 | 150mA | 180mA | 210mA |
| | 电压 | 25-45VDC | 25-45VDC | 25-45VDC |
| | 功率 | 6.75W | 8.1W | 9.45W |
| | 电流精度 | ±5% | | |
| | 空载电压 | 60VDC | | |
| | 低频纹波电流 | < 8% | | |
| 输入 | 电压 | 220VAC-240VAC | | |
| | 频率 | 50/60Hz | | |
| | 调光电压范围 | 40-240VAC | | |
| | 效率 | 76%@230VAC,满载 | | |
| | 功率因数 | >0.9@230VAC,满载 | | |
| | THD | <25%@230VAC,满载 | | |
| | 电流 | 0.063Amax@230VAC, 满载 | | |
| | 浪涌电流 | 冷启动15A(在50%Ipeak 下测试,twidth=50us)@230VAC | | |
| 保护 | 短路 | 打嗝，去除故障后自恢复 | | |
| | 过载 | 打嗝，去除故障后自恢复 | | |
| 功能 | 调光方式 | 前沿 | 后沿切相 | |
| 其它 | 尺寸 | 118*50*25mm (长*宽*高) / 93*50*25mm (长*宽*高) | | |
| | 重量 | 100g/90g | | |
| | 防护等级 | IP20 | | |
| | 工作温度 | -20°C ~ 50°C | | |
| | Tc | 85°C | | |
| | 相对湿度 | 20-90% RH | | |
| | 寿命 | 50000h@tc max | | |
| | 开关机次数 | >100,000 次 | | |

*单个产品接测试调光器有闪，建议接三台产品，调光器效果会更好

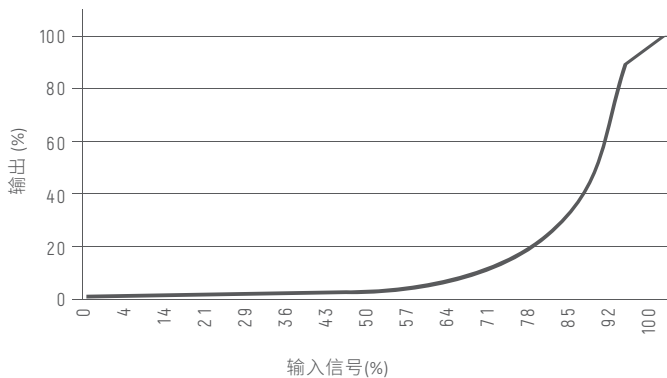
产品尺寸



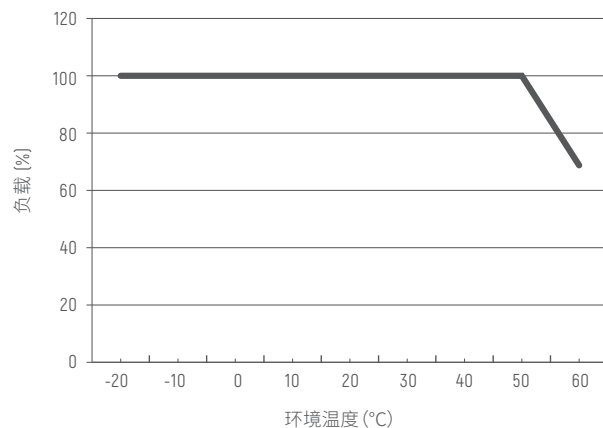
应用接线图



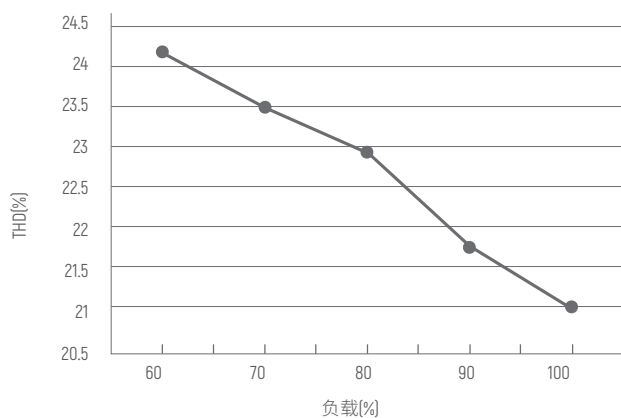
调光曲线



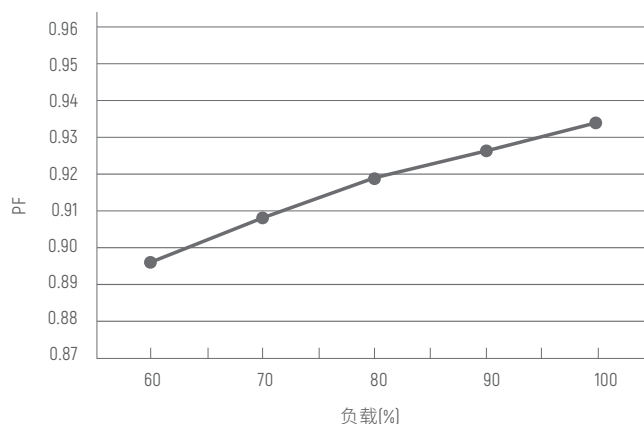
降额曲线



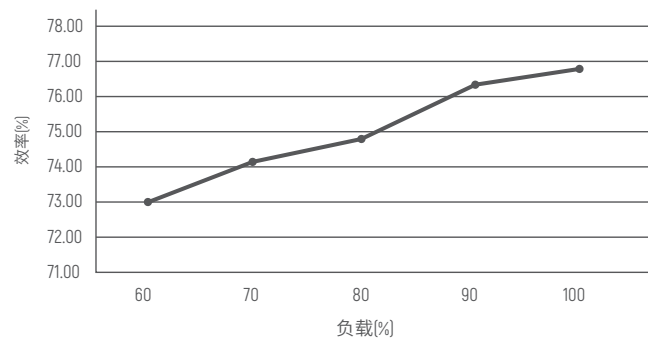
THD vs 负载



PF vs 负载



效率 vs 负载



电流选择表

| | | | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ON | OFF | 150mA | 180mA | 210mA | |
| | | 25-45V | 25-45V | 25-45V | |

备注：出厂默认设置电流为150mA(1,2在OFF状态)

断路器的带载说明

| 断路器类型 | B16 | C16 |
|--------|--------------------|--------------------|
| 安装线径 | 1.5mm ² | 1.5mm ² |
| 最大允许数量 | 30 | 38 |

驱动与灯具的安装距离

| 距离 | 5m | 10m | 20m | 30m |
|----|----------------------------|-------------------------|---------------------------|---------------------------|
| 线径 | 0.75mm ² /AWG18 | 1mm ² /AWG17 | 1.5mm ² /AWG15 | 2.5mm ² /AWG13 |

注意事项

- 1、本产品请由具有专业资格的人员进行调试安装。
- 2、本产品不能防水，需避免日晒雨淋，如安装在户外，请用防水箱。
- 3、良好的散热条件会延长产品的使用寿命，请把产品安装在通风良好的环境。
- 4、请检查使用的LED电源输出电压电流，是否符合产品要求。
- 5、出于安全考虑，推荐输入和输出用0.75-1.5mm²PVC或橡胶线缆，并确保接线牢固，以免电线过热或接触不良触发事故。扁平电源线不适用。
- 6、通电调试前，应确保所有接线正确，以避免因接线错误而导致灯具损坏。
- 7、如果发生故障，请勿私自维修；如有疑问，请联系供应商。

※ 本说明书内容如有更新，恕不另行通知。若您使用的产品功能与说明书不一致时，请以产品为准。如有疑问请与我们联系。