

|             |      |                                              |     |      |
|-------------|------|----------------------------------------------|-----|------|
| SUNCOM 新创电源 | 产品类型 | LED 驱动电源    LED INTEGRATED    SPECIAL DRIVER |     |      |
|             | 产品系列 | SCP-150-90X系列                                | REV | V3.0 |

广东新创电源科技有限公司

客户承认书

SPECIFICATION FOR APPROVAL

|                   |               |
|-------------------|---------------|
| CUSTOMER/客户名:     |               |
| MODEL NO. /产品型号:  | SCP-150-90X系列 |
| Rev. /版本号         | V3.0          |
| SAMPLE DATE/送样日期: |               |

客户确认栏

|              |               |                |
|--------------|---------------|----------------|
| TESTED BY 检查 | CHECKED BY 审核 | APPROVED BY 批准 |
|              |               |                |
| 客户备注         |               |                |

Please return to us one copy of “SPECIFICATION FOR APPROVAL” with you approved signature. /客户确认签章后请回传一份承认书给我公司.

新创确认栏

|              |               |                |
|--------------|---------------|----------------|
| TESTED BY 检查 | CHECKED BY 审核 | APPROVED BY 批准 |
|              |               |                |

Guangdong SUNCOM Power Technology Co.,Ltd.

广东新创电源科技有限公司

No.1 of Yongyi 3rd Road Henglan Town Zhongshan Guangdong China Post code528478

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|             |      |                                        |     |      |
|-------------|------|----------------------------------------|-----|------|
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|             | 产品系列 | SCP-150-90X系列                          | REV | V3.0 |

## ◆ Features 产品特性:

- Input Rated voltage : 100-277Vac 50Hz/60Hz

输入额定电压范围:100-277Vac 50Hz/60Hz

- Isolation, Constant current mode output

隔离, 恒流模式输出

- Surge Protection: L-N :6KV; L/N- E:10KV

防雷保护: 火线对零线6KV, 火线/零线对地10KV

- 3 in 1 dimming(dim-to-off) : PWM/0-10V/resistance

三合一调光(调光可关断, 隔离设计): PWM/0-10V/电阻

- AUX Power:12V/0.25A

辅组源: 12V/0.25A

- Over temperature drop current

过温降电流

- Output current is adjustable

输出电流可调

- Input under-voltage protection

输入欠压保护

- THD<15%



## ◆ Applications 产品应用:

Application: Street light、high bay lighting and other lighting lamps

应用于: 路灯、工矿灯等照明灯具

## ◆ Description 产品描述:

This product is a constant current drive power supply, Specially designed for LED, With low harmonic (< 15%), High power factor. Output current can be flexibly adjusted according to the led lamp voltage. 3 in 1 dimming. Built-in Surge protection, Output Open-circuit、Short-circuit Protection, Input under-voltage protection, Greatly improve the safety and reliability of the product.

本产品为恒流驱动电源, 专为LED设计, 具有低谐波(<15%)、高功率因数。输出电流可根据LED灯电压灵活调节。三合一调光功能, 内置防雷保护, 输出开路、短路保护, 输入欠压保护, 极大的提高了产品的安全可靠性能。

|             |      |                                           |     |      |
|-------------|------|-------------------------------------------|-----|------|
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|             | 产品系列 | SCP-150-90X系列                             | REV | V3.0 |

■ MODEL LIST 型号列表

| Model<br>型号 | Rated Power<br>额定输出功率 | Input Voltage<br>输入电压 | Output Voltage<br>输出电压范围 | Output Current<br>输出电流 | Default current<br>默认电流@72V | THD.<br>(Typ) | PF.<br>(Typ) |
|-------------|-----------------------|-----------------------|--------------------------|------------------------|-----------------------------|---------------|--------------|
| SCP-150-56X | 150W                  | 100-277Vac            | 54-90V                   | 1.2A-2.3A              | 1.85A                       | 9.3%          | 0.97         |

NOTE: All parameters NOT special mentioned are measured at 230Vac input, rated load and 25℃ of ambient temperature ; 如未特殊注明 , 所有参数均在 230Vac 输入、额定负载、25℃环境温度下测量

■ “X” Means Additional Function 后缀 “X” 功能可选机型表

| “X” | Time control<br>(可调电流+默认6小时降<br>半功率：后缀F) | ADJ Current<br>(可调电流：后缀A) | 0-10V/PWM Dim/Resistor<br>(三合一调光：后缀B ) | 0-10V/PWM Dim/Resistor<br>+AUX 12V<br>(三合一调光+辅组源：后缀C) |
|-----|------------------------------------------|---------------------------|----------------------------------------|-------------------------------------------------------|
| B   |                                          |                           | √                                      |                                                       |

■ ELECTRICAL SPECIFICATION 电气规格

◆ 输入性能 Input performance:

| Parameter<br>参数         | Min.<br>最小值 | Typ.<br>典型值 | Max.<br>最大值 | Notes.<br>备注                                           |
|-------------------------|-------------|-------------|-------------|--------------------------------------------------------|
| Voltage Range<br>电压范围   | 90Vac       | 100-277Vac  | 305Vac      | -                                                      |
| Frequency Range<br>频率范围 | 47Hz        | 50/60Hz     | 63Hz        | -                                                      |
| AC Current<br>交流电流      | -           | -           | 2.0A        | -                                                      |
| Inrush Current<br>浪涌电流  | -           | -           | 70A         | At 230Vac input, 25℃ cold start 环温<br>25℃, 230Vac 冷机启动 |
| PF. 功率因数                | 0.95        | 0.97        | -           | At 230Vac input, full load<br>满载，输入 230Vac 下测量         |
| THD. 总谐波失真              | -           | 9.3%        | 15%         |                                                        |

◆ 输出性能：Output performance

| Parameter<br>参数                         | Min.<br>最小值 | Typ.<br>典型值 | Max.<br>最大值 | Notes.<br>备注         |
|-----------------------------------------|-------------|-------------|-------------|----------------------|
| Voltage Range 电压范围                      | 54VDC       | -           | 90VDC       | -                    |
| Current range Regulation<br>电流调节范围(电位器) | 1.2A        | -           | 2.3A        | -                    |
| Rated Power 额定功率                        | -           | -           | 150W        | Output Voltage > 66V |

|                                  |        |        |                                           |                                                                                                                                                                            |      |
|----------------------------------|--------|--------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>SUNCOM 新创电源</b>               |        | 产品类型   | LED 驱动电源    LED INTEGRATED SPECIAL DRIVER |                                                                                                                                                                            |      |
|                                  |        | 产品系列   | SCP-150-90X系列                             | REV                                                                                                                                                                        | V3.0 |
| Over Voltage 空载电压                | 100V   |        | 110V                                      | —                                                                                                                                                                          |      |
| Efficiency 效率                    | ≥90%   | 90.8%  | —                                         | Measured at full load and 230Vac input                                                                                                                                     |      |
| Current Tolerance 电流精度           | -5%    | —      | +5%                                       | —                                                                                                                                                                          |      |
| Line Regulation 线性调整率            | -5%    | —      | +5%                                       | —                                                                                                                                                                          |      |
| Load Regulation 负载调整率            | -3%    | —      | +3%                                       | —                                                                                                                                                                          |      |
| Current Ripple 纹波电流              | —      | ±45%   | <±50%                                     | —                                                                                                                                                                          |      |
| Turn-on Delay Time 启动时间          | —      | 600mS  | <1S                                       | Measured at full load and 230Vac input                                                                                                                                     |      |
| Short Circuit Protection 短路保护    | —      | —      | 2W                                        | Hiccup mode, recovers automatically after fault condition is removed 打嗝模式, 故障排除后自动恢复                                                                                       |      |
| Over-temperature protection 过温保护 | —      | 90℃    | -                                         | Shell Tc point temperature, Drop current mode, the current automatically recovers after over temperature release, 外壳TC点温度, 降电流模式, 过温解除后, 电流自动恢复                            |      |
| Under Voltage Protection 欠压保护    | 100Vac | 105Vac | 108Vac                                    | After the input voltage is reduced to the under voltage point, Reduce output current by 50%, resume work after the AC voltage is normal 输入电压降低到欠压点后, 降低一半输出电流, 交流电压正常后恢复工作 |      |

■ 环境：Environment

| Parameter 参数            | Min. 最小值 | Typ. 典型值 | Max. 最大值 | Notes. 备注 |
|-------------------------|----------|----------|----------|-----------|
| Working TEMP 工作温度       | -40℃     | +25℃     | +60℃     | —         |
| Storage TEMP 储存温度       | -40℃     | +25℃     | +85℃     | —         |
| Working Humidity 工作湿度   | 20% RH   | —        | 90% RH   | —         |
| Storage Humidity 储存湿度   | 10% RH   | —        | 90% RH   | —         |
| Maximum shell TEMP 最大壳温 | —        | —        | +90℃     | —         |

■ 安规和电磁兼容：

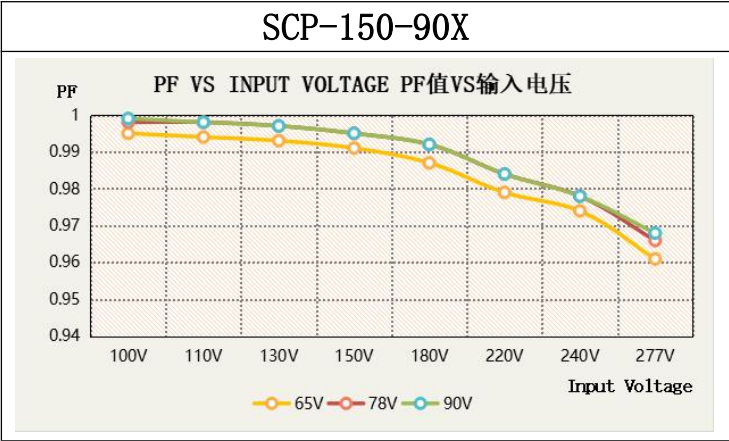
|                           |                                                                        |
|---------------------------|------------------------------------------------------------------------|
| Withstand voltage 耐压      | I/P - FG:1.75KVAC, I/P-O/P:3.75KVAC, I/P-调光: 3.75KVAC, O/P-调光: 0.5KVAC |
| isolation resistance 绝缘阻抗 | ≥10MΩ at I/P - FG 500VDC Test                                          |
| leakage current 漏电流       | <0.75mA/277Vac                                                         |
| Earthing resistance 接地电阻  | <0.1Ω / 25A 1 min                                                      |
| Surge 浪涌                  | 差模 L-N +/- 6KV ( 2 ohm ), 共模 L, N-E +/- 10KV ( 12 ohm )                |

|                                           |      |                                        |     |      |
|-------------------------------------------|------|----------------------------------------|-----|------|
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|                                           | 产品系列 | SCP-150-90X系列                          | REV | V3.0 |
| conducted electromagnetic interference 传导 |      | —                                      |     |      |
| Radiated electromagnetic interference 辐射  |      | —                                      |     |      |

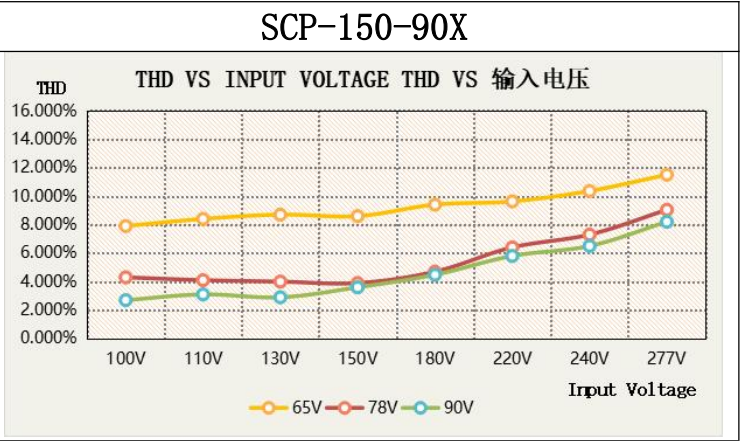
NOTE:

- 1) All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25℃ of ambient temperature.  
如未特别说明，所有规格参数均在 230Vac (50Hz) 输入，额定负载，环境温度 25℃ 的条件下进行测量
- 2) Tolerance : includes set up tolerance, line regulation and load regulation.  
误差：包含设定误差、线性调整率和负载调整率。

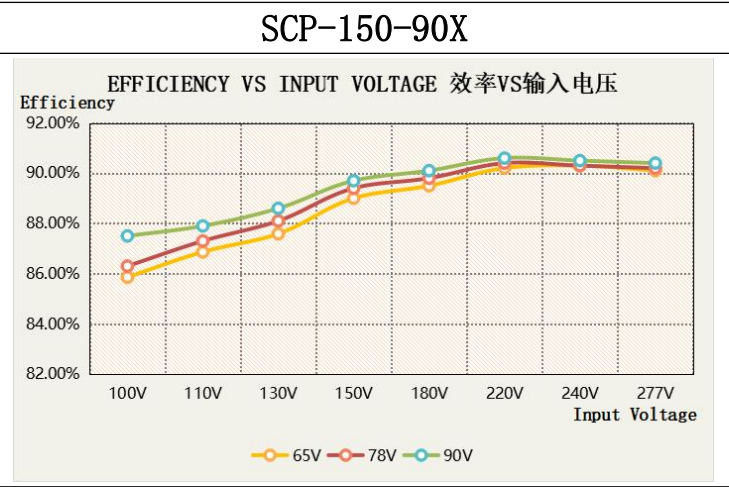
THD VS INPUT VOLTAGE  
THD VS 输入电压



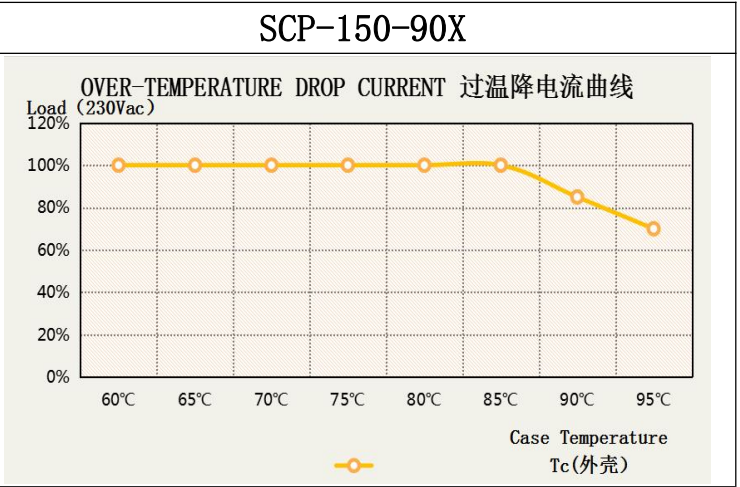
PF VS INPUT VOLTAGE  
PF 值 VS 输入电压



EFFICIENCY VS INPUT VOLTAGE  
效率 VS 输入电压



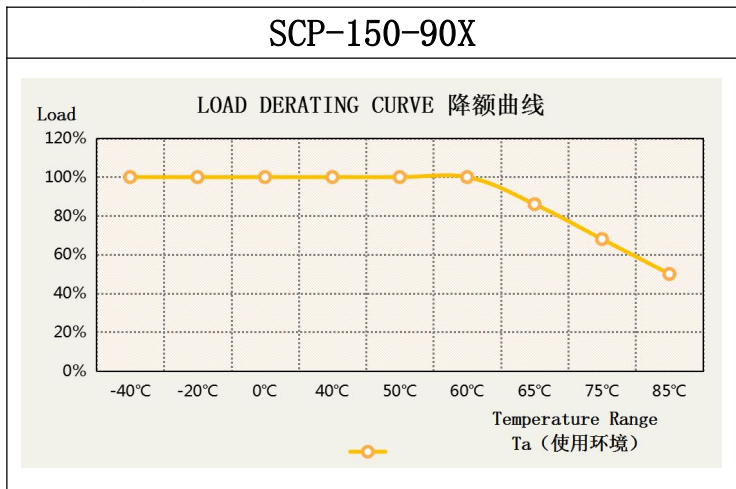
OVER-TEMPERATURE DROP CURRENT  
过温降电流曲线



|                    |      |                                           |     |      |
|--------------------|------|-------------------------------------------|-----|------|
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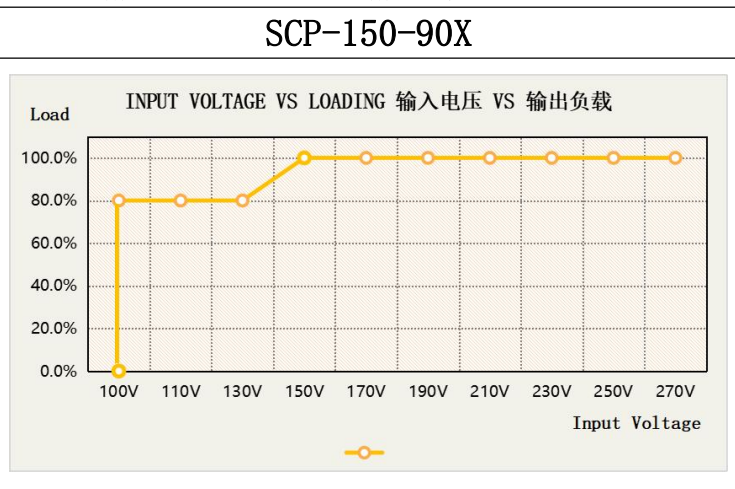
## ■ LOAD DERATING CURVE

### 降额曲线



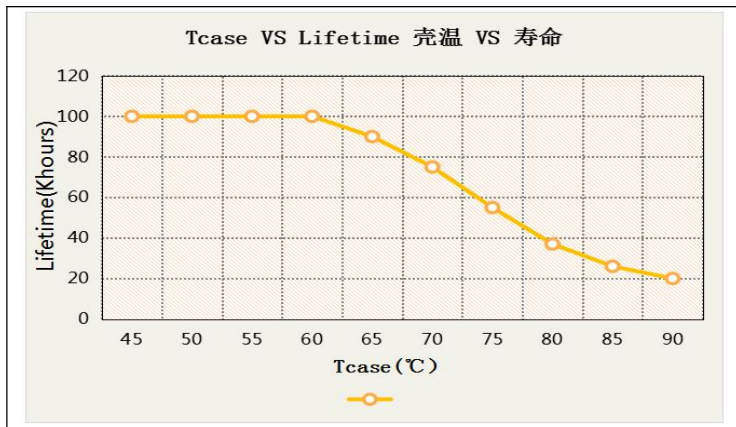
## ■ INPUT VOLTAGE VS LOADING

### 输入 电压 VS 输出负载



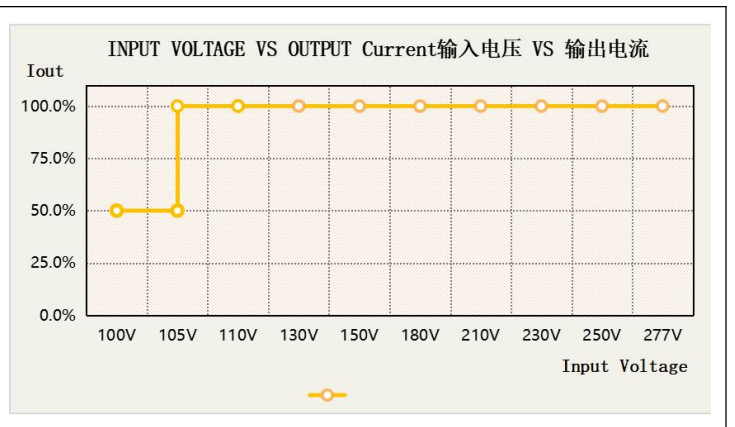
## ■ TCASE VS LIFETIME

### 壳温VS寿命



## ■ Under-voltage DROP CURRENT

### 欠压掉电流曲线



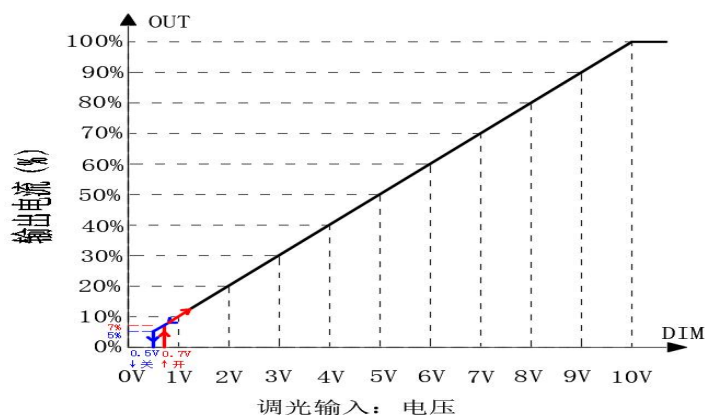
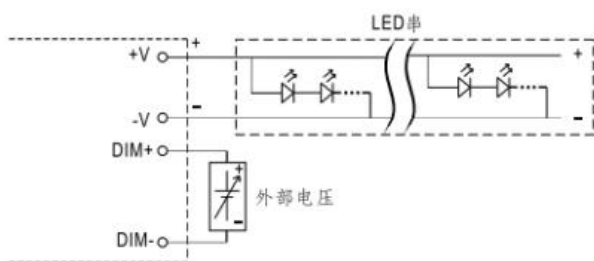
## ■ THE DIMMING CURVE 调光曲线

三合一调光功能 (B型/C型) :

- 在DIM+ (兰色线) 和DIM- (白色线) 间连接一个100K电阻或0-10V直流电压或PWM信号, 即可调整输出恒电流的数值
- 调光端口输出电流: 100uA (典型值)
- 辅助源功能 (C型): 12V辅组电源输出, 输出最大电流250mA

### 0-10V调光

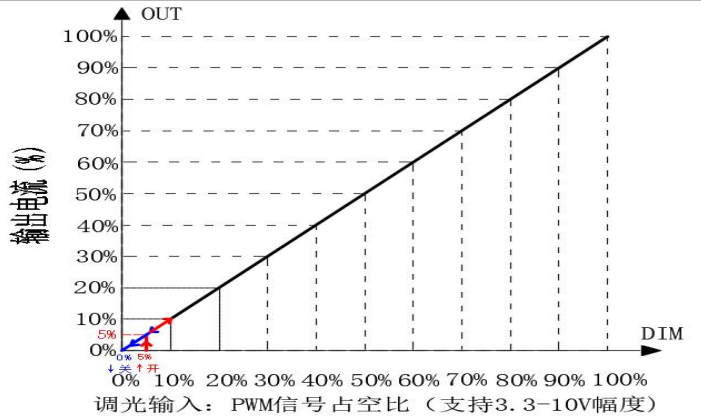
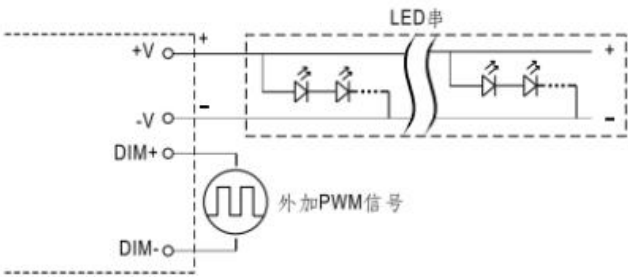
#### ■ 用外加0-10VDC电压



|             |      |                                        |     |      |
|-------------|------|----------------------------------------|-----|------|
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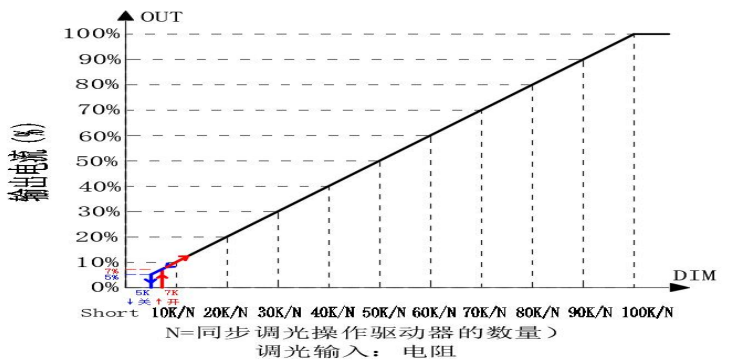
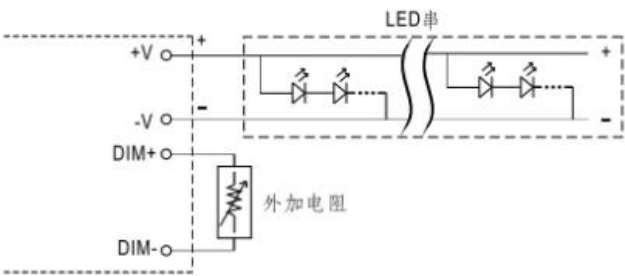
PWM调光 (PWM频率 10V 1KHZ)

用外加10V PWM信号 (频率0.2K-10K)



电阻调光 (100K)

用外加电阻 (0-100K)

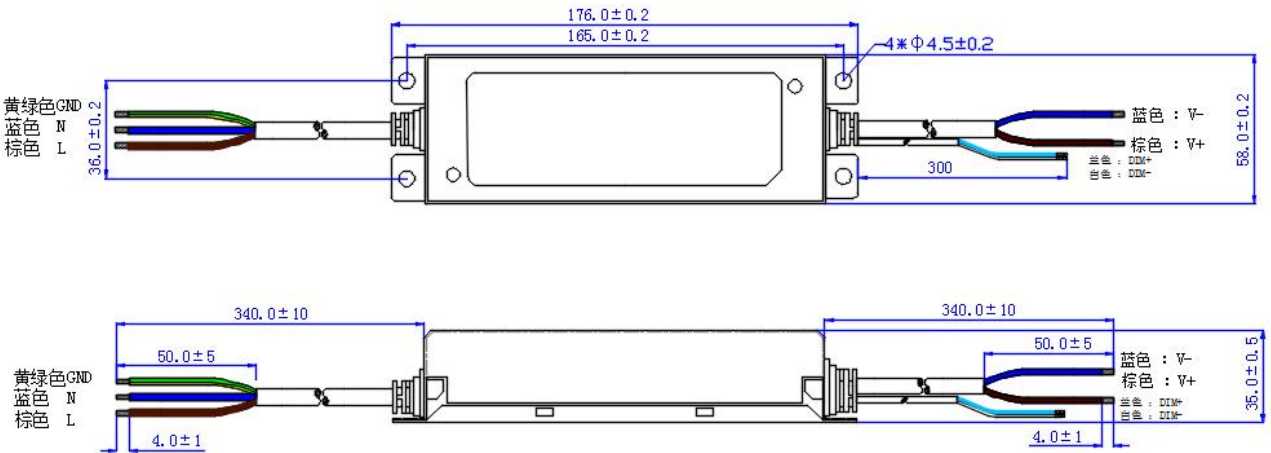


MECHANICAL SPECIFICATION & PACKING 机械尺寸图 & 包装:

|                           |                       |
|---------------------------|-----------------------|
| Bare plate dimension 裸板尺寸 | 141.4*52*27mm (L*W*H) |
| final dimension 成品尺寸      | 176*58*35mm (L*W*H)   |
| Product Weight 产品重量       | 650g                  |

Case No. 机壳型号: 150W

Unit 单位:mm



|             |      |                                              |     |      |
|-------------|------|----------------------------------------------|-----|------|
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Nameplate 铭牌

尺寸：118\*38mm 样式：贴纸

SCP-150-90A

SUNCOM SCP-150-90A (型号)LED控制装置

INPUT 输入端

○ ACN(BU蓝)

○ ACL(BN棕)

⊕ (GN绿/YL黄)

MADE IN CHINA  
(中国制造)

Vin(输入):100-277V~2.0A 50/60Hz

η:≥90% PF:≥0.95

ta:60℃ tc:90℃

•tc

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GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD

Vout(输出):54-90V = 1200-2300mA

Max.Uout(最大电压): 110V =

Rated Power(额定功率):150W

tc:90℃

ta:50℃@Vin100-200V~  
ta:60℃@Vin200-277V~

(BU蓝)Vo - ○  
(BN棕)Vo + ○  
(GN绿/YL黄)

OUTPUT 输出端

(BU蓝)Vo - ○  
(BN棕)Vo + ○  
(BU蓝)DIM + ○  
(WH白)DIM - ○

IP65

SELV

SCP-150-90B

SUNCOM SCP-150-90B (型号)LED控制装置

INPUT 输入端

○ ACN(BU蓝)

○ ACL(BN棕)

⊕ (GN绿/YL黄)

MADE IN CHINA  
(中国制造)

Vin(输入):100-277V~2.0A 50/60Hz

η:≥90% PF:≥0.95

ta:60℃ tc:90℃

•tc

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Vout(输出):54-90V = 1200-2300mA

Max.Uout(最大电压): 110V =

Rated Power(额定功率):150W

tc:90℃

ta:50℃@Vin100-200V~  
ta:60℃@Vin200-277V~

(BU蓝)Vo - ○  
(BN棕)Vo + ○  
(BU蓝)DIM + ○  
(WH白)DIM - ○

OUTPUT 输出端

(BU蓝)Vo - ○  
(BN棕)Vo + ○  
(BU蓝)DIM + ○  
(WH白)DIM - ○

IP65

SELV

SCP-150-90C

SUNCOM SCP-150-90C (型号)LED控制装置

INPUT 输入端

○ ACN(BU蓝)

○ ACL(BN棕)

⊕ (GN绿/YL黄)

MADE IN CHINA  
(中国制造)

Vin(输入):100-277V~2.0A 50/60Hz

η:≥90% PF:≥0.95

ta:60℃ tc:90℃

•tc

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Vout(输出):54-90V = 1200-2300mA

Max.Uout(最大电压): 110V =

Rated Power(额定功率):150W

tc:90℃

ta:50℃@Vin100-200V~  
ta:60℃@Vin200-277V~

(BU蓝)Vo - ○  
(BN棕)Vo + ○  
(VT紫)DIM + ○  
(GY灰)DIM - /12V - ○  
(PK粉)12V + ○

OUTPUT 输出端

(BU蓝)Vo - ○  
(BN棕)Vo + ○  
(VT紫)DIM + ○  
(GY灰)DIM - /12V - ○  
(PK粉)12V + ○

IP65

SELV