

|             |      |                                              |     |      |
|-------------|------|----------------------------------------------|-----|------|
| SUNCOM 新创电源 | 产品类型 | LED 驱动电源    LED INTEGRATED    SPECIAL DRIVER |     |      |
|             | 产品系列 | HVC-200W-286X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:  | HVC-200W-286X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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|                                                                                      |      |                                              |     |      |
|--------------------------------------------------------------------------------------|------|----------------------------------------------|-----|------|
|  新创电源 | 产品类型 | LED 驱动电源    LED INTEGRATED    SPECIAL DRIVER |     |      |
|                                                                                      | 产品系列 | HVC-200W-286X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)  
三合一调光(调光可关断, 隔离设计)
- Over temperature drop current  
过温降电流
- Output current is adjustable  
输出电流可调
- THD<10%

## ◆ 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 Power Supply, Specially designed for LED, With low harmonic (< 10%), High Power Factor. Flicker free, Output current can be flexibly adjusted according to LED lamp voltage. 3 in 1 Dimming function.Built-in Surge Protection, Output Open-Circuit Protection, Short-Circuit Protection, Over Temperature drop current 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(<10%)、高功率因数、无频闪, 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, 过温降电流保护, 极大的提高了产品的安全可靠。

|                                                                                 |      |                                              |     |      |
|---------------------------------------------------------------------------------|------|----------------------------------------------|-----|------|
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|                                                                                 | 产品系列 | HVC-200W-286X系列                              | REV | V3.0 |

■ MODEL LIST 型号列表

| Model 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 | THD.<br>(Typ) | PF.<br>(Typ) |
|---------------|-----------------------|-----------------------|--------------------------|------------------------|---------------|--------------|
| HVC-200W-286X | 200W                  | 100-277Vac            | 143-286V                 | 0.5A-1.05A             | 7.8%          | 0.95         |

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” | 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 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                                           | 100Vac      | 120-277Vac  | 305ac       | -                                                                                     |
| Frequency Range 频率范围                                         | 47Hz        | 50/60Hz     | 63Hz        | -                                                                                     |
| AC Current 交流电流                                              | -           | -           | 2.0A        | At 120V AC input,full load<br>满载，输入120Vac                                             |
| Inrush Current 浪涌电流                                          | -           | -           | 60A         | At 230Vac input,25℃ cold start 环温<br>25℃，230Vac 冷机启动                                  |
| PF. 功率因数<br>At 230V AC input,full load 满载，输入<br>230Vac 下测量   | 0.95        | 0.97        | -           | -                                                                                     |
| THD. 总谐波失真<br>At 230V AC input,full load 满载，输入<br>230Vac 下测量 | -           | 7.8%        | 10%         | -                                                                                     |
| No Load Power 空载待机功耗                                         | -           | -           | 0.5W        | At 220Vac input, Dim-to-Off with Standby; 输入<br>220V 条件下，将调光信号调到关闭后进入待机状态<br>(仅 C 版本) |

◆ 输出性能：Output performance

| Parameter 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                      | 143VDC      | -           | 286VDC      |              |
| Current range Regulation<br>电流调节范围(电位器) | 0.5A        | -           | 1.05A       |              |

|                                            |       |       |                                           |                                                                                                                                                    |      |
|--------------------------------------------|-------|-------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>SUNCOM 新创电源</b>                         |       | 产品类型  | LED 驱动电源    LED INTEGRATED SPECIAL DRIVER |                                                                                                                                                    |      |
|                                            |       | 产品系列  | HVC-200W-286X系列                           | REV                                                                                                                                                | V3.0 |
| Rated Power 额定功率<br>(120-277Vac)           | -     | -     | 200W                                      | -                                                                                                                                                  |      |
| Output Power 输出功率<br>(90-100Vac)           | -     | 100W  | 200W                                      | The derating begins when the input voltage is less than 100Vac<br>输入电压小于 100Vac时开始降额                                                               |      |
| No Load Output Voltage<br>输出空载电压           | -     | -     | 306V                                      | -                                                                                                                                                  |      |
| Efficiency 效率<br>Measured at full load and | 91%   | 93.5% | -                                         | At 230V AC input, 286VDC Output full load;<br>输出286VDC 满载, 输入230V条件下                                                                               |      |
| Current Tolerance 电流精度                     | -5%   | -     | +5%                                       | -                                                                                                                                                  |      |
| Line Regulation 线性调整率                      | -3%   | -     | +3%                                       | -                                                                                                                                                  |      |
| Load Regulation 负载调整率                      | -3%   | -     | +3%                                       | -                                                                                                                                                  |      |
| Current Ripple 纹波电流                        |       | -     | <±5%                                      | -                                                                                                                                                  |      |
| Turn-on Delay Time 启动时间                    | 300mS | -     | <1S                                       | Measured at full load and 120-277Vac input;<br>输入 120-277Vac, 满载条件下                                                                                |      |
| Short Circuit Protection<br>短路保护           | -     | -     | 15W                                       | Hiccup mode, recovers automatically after fault condition is removed<br>打嗝模式, 故障排除后自动恢复                                                            |      |
| Over-temperature protection<br>过温保护        | -     | 90℃   | -                                         | Shell Tc point temperature, Drop current mode, the current automatically recovers after over temperature release,<br>外壳TC点温度, 降电流模式, 过温解除后, 电流自动恢复 |      |

■ 环境：Environment

| Parameter<br>参数         | Min.<br>最小值 | Typ.<br>典型值 | Max.<br>最大值 | Notes.<br>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:<br>3.75KVAC, O/P-调光: 1.5KVAC |  |  |
| Isolation Resistance 绝缘阻抗                 | 100MΩ at I/P - FG 500VDC; I/P-O/P:100MΩ at 500VDC / 25℃                   |  |  |
| leakage Current 漏电流                       | <0.7mA/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 )                   |  |  |
| Conducted electromagnetic interference 传导 | >3dB                                                                      |  |  |
| Radiated electromagnetic interference 辐射  | >3dB                                                                      |  |  |

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.

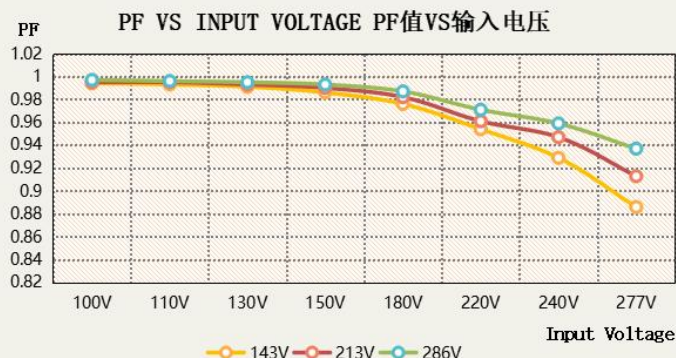
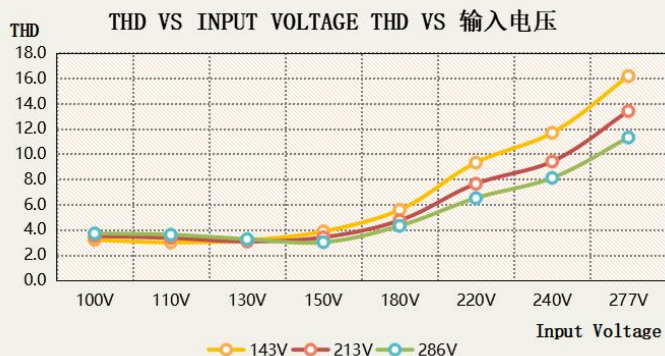
误差：包含设定误差、线性调整率和负载调整率。



## THD VS INPUT VOLTAGE THD VS 输入电压

## PF VS INPUT VOLTAGE PF 值 VS 输入电压

HVC-200W-286X

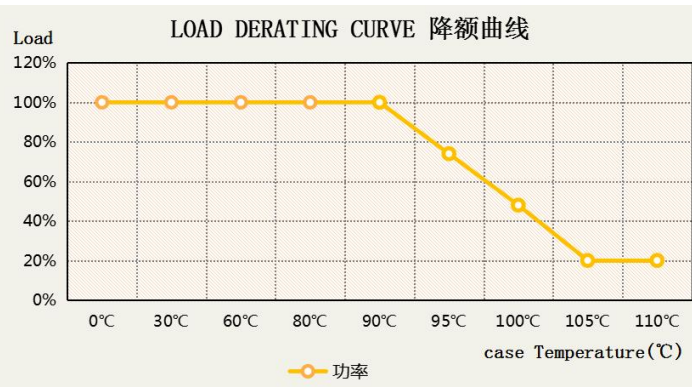
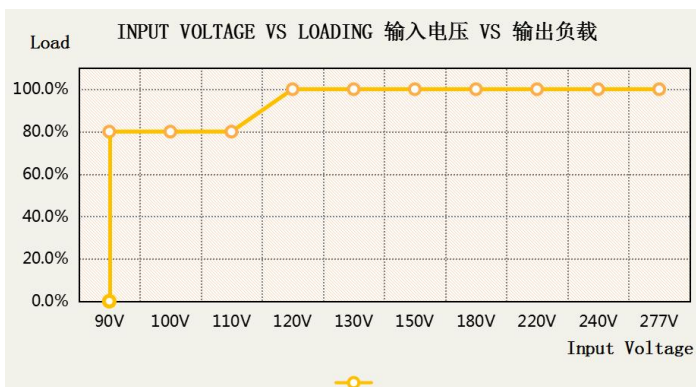


## INPUT VOLTAGE VS LOADING 输入电压 VS 输出负载

## LOAD DERATING CURVE 降额曲线

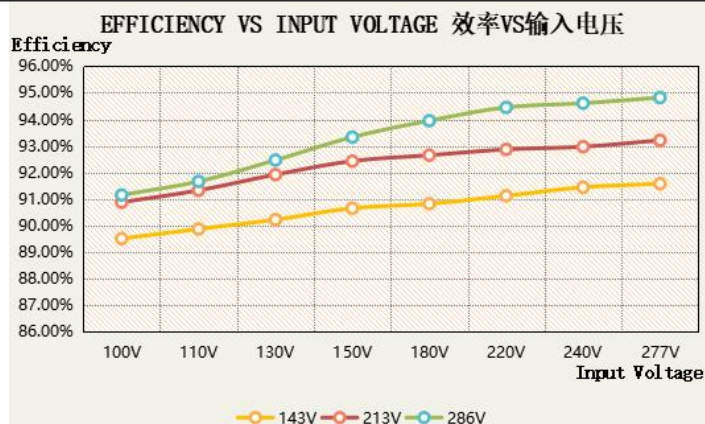
HVC-200W-286X

HVC-200W-286X

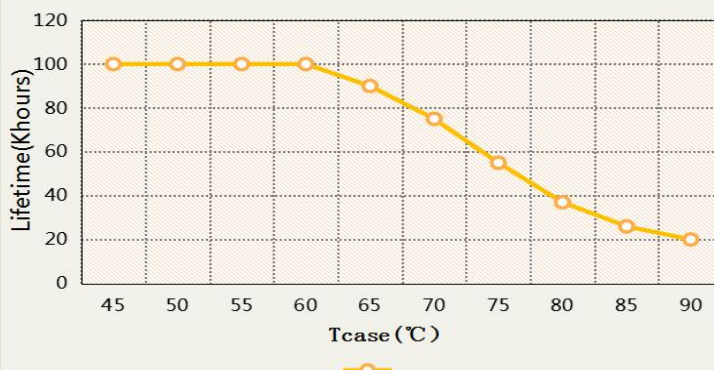


## EFFICIENCY VS INPUT VOLTAGE 效率 VS 输入电压

HVC-200W-286X



Tcase VS Lifetime 壳温 VS 寿命



## THE DIMMING CURVE 调光曲线

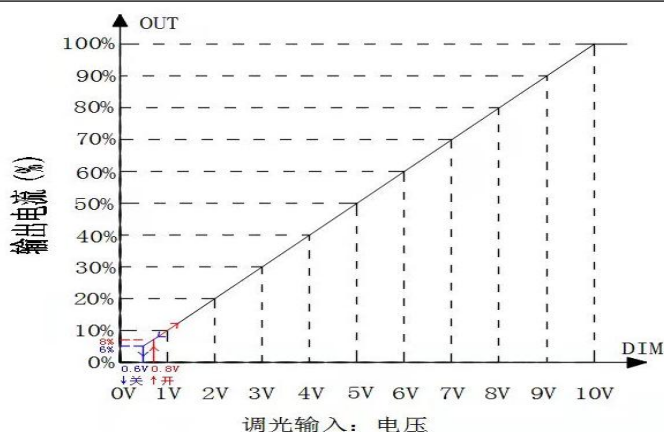
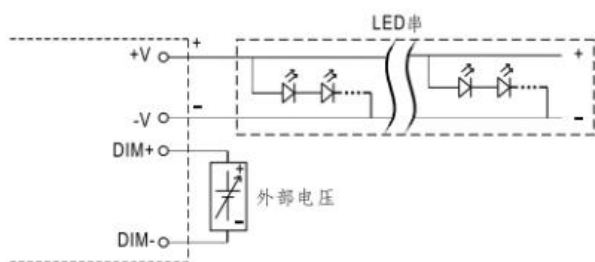
三合一调光功能及12V辅助源输出：

- 在DIM+（紫色线）和DIM-（灰色线）间连接一个电阻或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：12V/250mA（粉色线）

三合一调光曲线

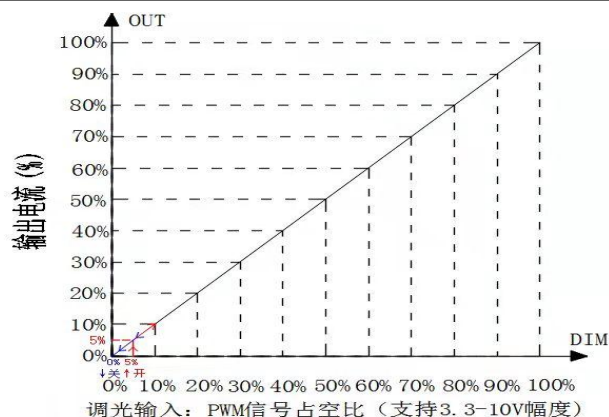
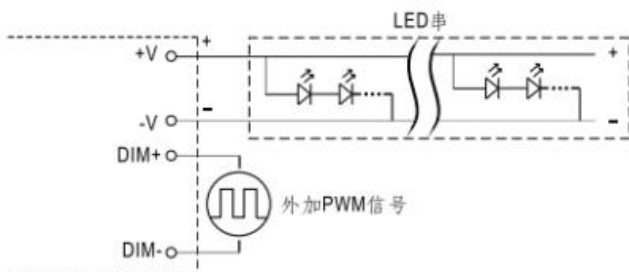
### 0-10V调光

#### 用外加0-10VDC电压



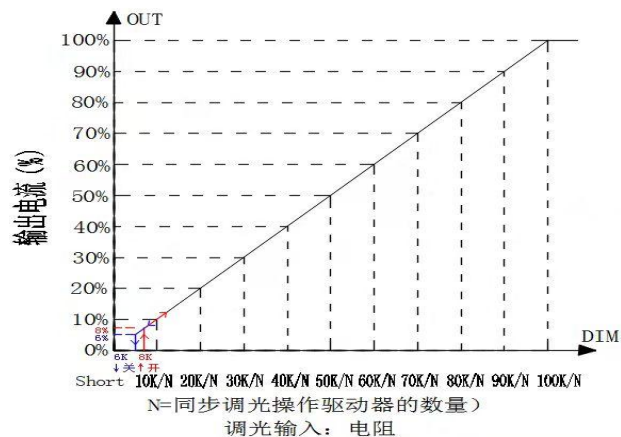
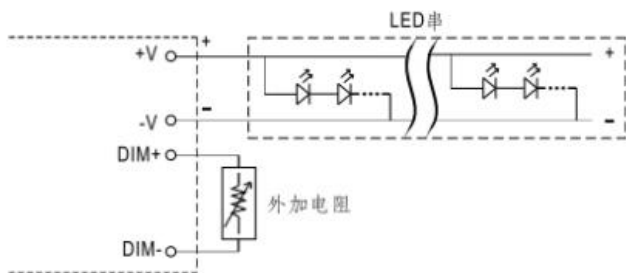
### PWM调光 (PWM频率 1KHZ)

#### 用外加 PWM信号 (频率0.5K-5K)



### 电阻调光 (100K)

#### 用外加电阻 (0-100K)



|      |                                        |     |      |
|------|----------------------------------------|-----|------|
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| 产品系列 | HVC-200W-286X系列                        | REV | V3.0 |

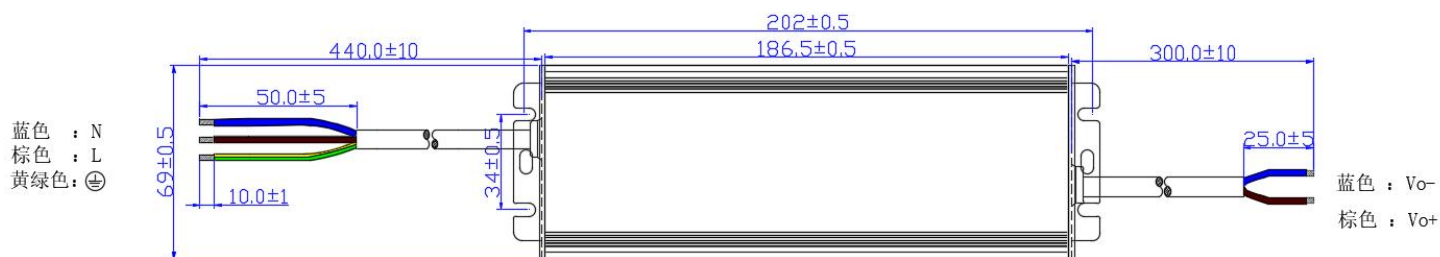
**MECHANICAL SPECIFICATION & PACKING 机械尺寸图 & 包装:**

|                           |                       |
|---------------------------|-----------------------|
| Bare plate dimension 裸板尺寸 | 176.5*56*30mm (L*W*H) |
| final dimension 成品尺寸      | 210*69*36.2mm (L*W*H) |
| Product Weight 产品重量       | 1057g                 |

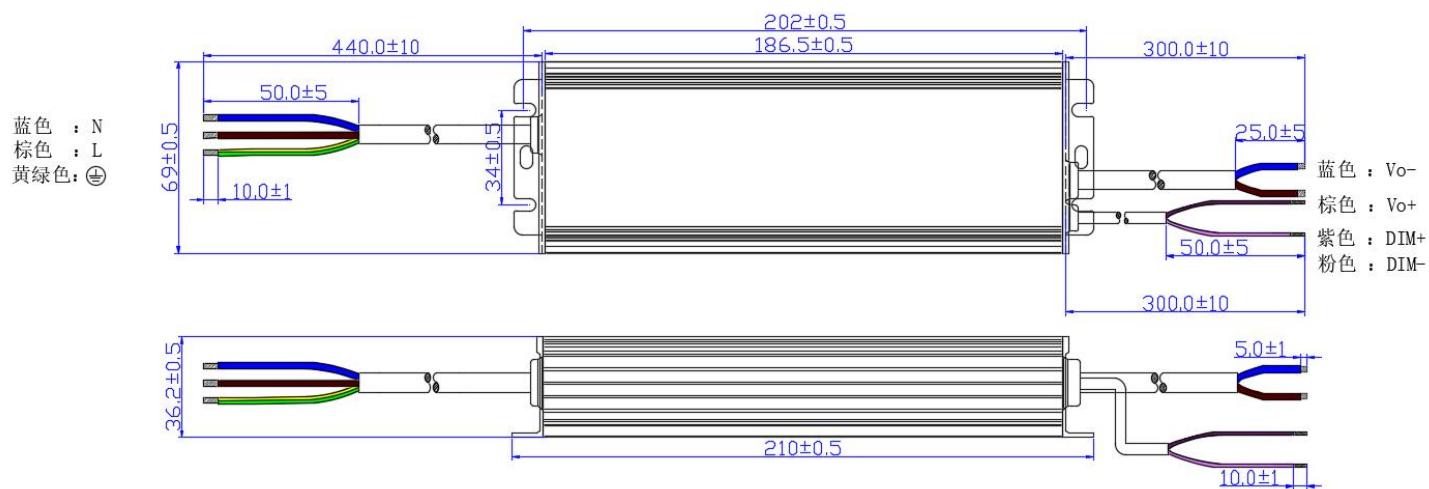
Case No. 机壳型号: 200W

Unit 单位:mm

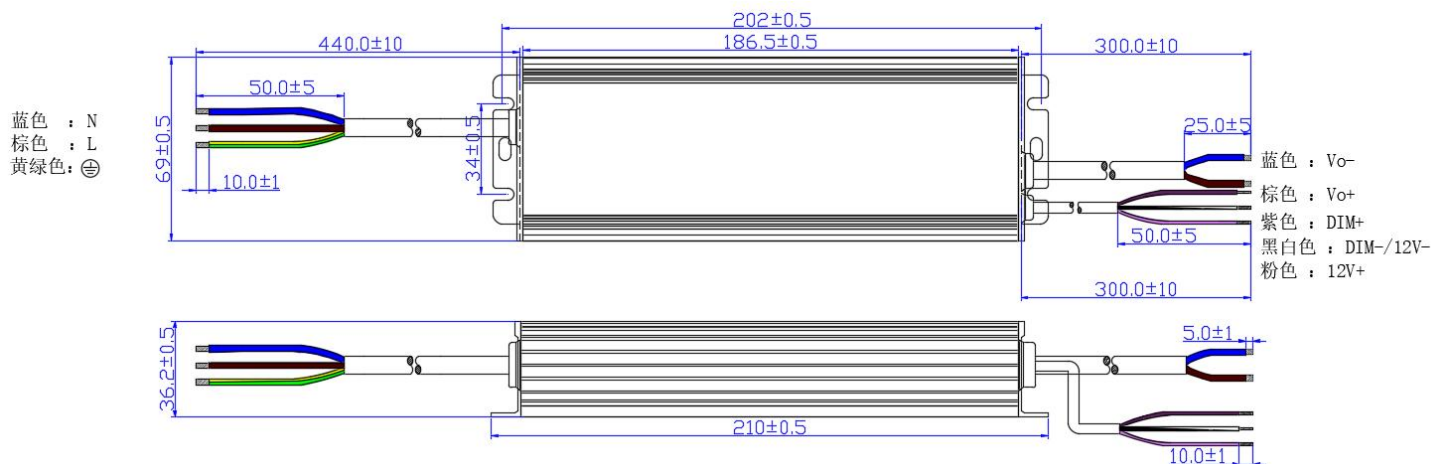
**HVC-200W-286A**



**HVC-200W-286B**



**HVC-200W-286C**





|                        |      |                                              |     |      |
|------------------------|------|----------------------------------------------|-----|------|
| <div>SUNCOM 新创电源</div> | 产品类型 | LED 驱动电源    LED INTEGRATED    SPECIAL DRIVER |     |      |
|                        | 产品系列 | HVC-200W-286X系列                              | REV | V3.0 |

Nameplate 铭牌

尺寸：182.5\*48mm 样式：贴纸

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <div>HVC-200W-286A</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <div>HVC-200W-286B</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <div><div><div>SUNCOM</div><div>HVC-200W-286A (型号)LED控制装置</div></div><div><div><div>INPUT 输入端</div><div><div><div>○ ACL-(BN绿)BK-黑</div><div>○ ACN-(BU蓝)WH-白</div><div><div>⊕</div>(GN绿/YL黄)</div></div><div><div>Vin(输入):100-240V~2.5A 50/60Hz</div><div>Vin(输入):277V~0.9A 50/60Hz</div><div>η:≥93% PF:≥0.95</div><div>•tc</div><div>*277 for North American only.<br/>Suitable for dry,Damp and wet locations<br/>No.1-02, Yongyi Road Three, Yongqing Industry Zone, Henglan Town,<br/>Zhongshan City, 528478 Guangdong, China</div></div><div><div>Vout(输出):143-286V ≐ 500-1050mA</div><div>Max.(最大电压):Uout 300V ≐</div><div>Rated Power(额定功率):200W</div></div></div><div><div><div>(BN绿)RD-红 Vo+ ○</div><div>(BU蓝)BK-黑 Vo- ○</div></div><div><div>tc:90℃</div><div>ta:50℃@Vin100-200V~</div><div>ta:60℃@Vin200-277V~</div></div></div><div><div>广东新创电源科技有限公司</div><div>GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD</div><div>CE CB    IP67</div></div></div></div></div>                                                                            | <div><div><div>SUNCOM</div><div>HVC-200W-286B (型号)LED控制装置</div></div><div><div><div>INPUT 输入端</div><div><div><div>○ ACL-(BN绿)BK-黑</div><div>○ ACN-(BU蓝)WH-白</div><div><div>⊕</div>(GN绿/YL黄)</div></div><div><div>Vin(输入):100-240V~2.5A 50/60Hz</div><div>Vin(输入):277V~0.9A 50/60Hz</div><div>η:≥93% PF:≥0.95</div><div>•tc</div><div>*277 for North American only.<br/>Suitable for dry,Damp and wet locations<br/>No.1-02, Yongyi Road Three, Yongqing Industry Zone, Henglan Town,<br/>Zhongshan City, 528478 Guangdong, China</div></div><div><div>Vout(输出):143-286V ≐ 500-1050mA</div><div>Max.(最大电压):Uout 300V ≐</div><div>Rated Power(额定功率):200W</div></div></div><div><div><div>(BN绿)RD-红 Vo+ ○</div><div>(BU蓝)BK-黑 Vo- ○</div><div>(VT黄)DIM+ ○</div><div>(PK粉)DIM- ○</div></div><div><div>tc:90℃</div><div>ta:50℃@Vin100-200V~</div><div>ta:60℃@Vin200-277V~</div></div></div><div><div>广东新创电源科技有限公司</div><div>GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD</div><div>CE CB    IP67</div></div></div></div></div> |
| <div>HVC-200W-286C</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <div><div><div>SUNCOM</div><div>HVC-200W-286C (型号)LED控制装置</div></div><div><div><div>INPUT 输入端</div><div><div><div>○ ACL-(BN绿)BK-黑</div><div>○ ACN-(BU蓝)WH-白</div><div><div>⊕</div>(GN绿/YL黄)</div></div><div><div>Vin(输入):100-240V~2.5A 50/60Hz</div><div>Vin(输入):277V~0.9A 50/60Hz</div><div>η:≥93% PF:≥0.95</div><div>•tc</div><div>*277 for North American only.<br/>Suitable for dry,Damp and wet locations<br/>No.1-02, Yongyi Road Three, Yongqing Industry Zone, Henglan Town,<br/>Zhongshan City, 528478 Guangdong, China</div></div><div><div>Vout(输出):143-286V ≐ 500-1050mA</div><div>Max.(最大电压):Uout 300V ≐</div><div>Rated Power(额定功率):200W</div></div></div><div><div><div>(BN绿)RD-红 Vo+ ○</div><div>(BU蓝)BK-黑 Vo- ○</div><div>(VT黄)DIM+ ○</div><div>(BK黑/WH白)12V-/DIM- ○</div><div>(PK粉)12V+ ○</div></div><div><div>tc:90℃</div><div>ta:50℃@Vin100-200V~</div><div>ta:60℃@Vin200-277V~</div></div></div><div><div>广东新创电源科技有限公司</div><div>GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD</div><div>CE CB    IP67</div></div></div></div></div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |