

SUNCOM 新创电源	产品类型	LED 驱动电源 LED INTEGRATED SPECIAL DRIVER		
	产品系列	HVC-100W-143X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-100W-143X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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◆ 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
- 0-10V dimming&&color temperature adjustment(dim-to-off)
0-10V无极调光 (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性能。

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■ MODEL LIST 型号列表

Model 型号	Rated Power 额定输出功率	Input Voltage 输入电压	Output Voltage 输出电压范围	Output Current 输出电流	THD. (Typ)	PF. (Typ)
HVC-100W-143B	100W	100-277Vac	95-143V	0.5-1.05A	8.9%	0.96

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

■ ELECTRICAL SPECIFICATION 电气规格

◆ 输入性能 Input performance:

Parameter 参数	Min. 最小值	Typ. 典型值	Max. 最大值	Notes. 备注
Voltage Range 电压范围	90Vac	100-277Vac	305Vac	
Frequency Range 频率范围	47Hz	50/60Hz	63Hz	
AC Current 交流电流	-	-	1.4A	-
Inrush Current 浪涌电流	-	-	60A	At 230Vac input, 25℃ cold start 环温 25℃, 230Vac 冷机启动
PF. 功率因数	0.95	0.96	-	At 230Vac input, full load 满载, 输入 230Vac 下测量
THD. 总谐波失真	-	8.9%	10%	

◆ 输出性能: Output performance

Parameter 参数	Min. 最小值	Typ. 典型值	Max. 最大值	Notes. 备注
Voltage Range 电压范围	95Vdc	-	143Vdc	-
Current range Regulation 电流调节范围(电位器)	0.5A	-	1.05A	-
Rated Power 额定功率	-	-	100W	-
Over Voltage 空载电压	180V	-	190V	-
Efficiency 效率 Measured at full load and 230Vac input	≥91%	92.0%	-	At 230Vac input, 143V full load 输出143VDC满功率, 输入230Vac下测量
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		±3%	<±5%	-
Turn-on Delay Time 启动时间	-	750mS	<1S	Measured at full load and 230Vac input

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Short Circuit Protection 短路保护	-	-	10W	Hiccup mode, recovers automatically after fault condition is removed 恒流模式，故障排除后自动恢复

■ 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℃	+65℃	-
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：

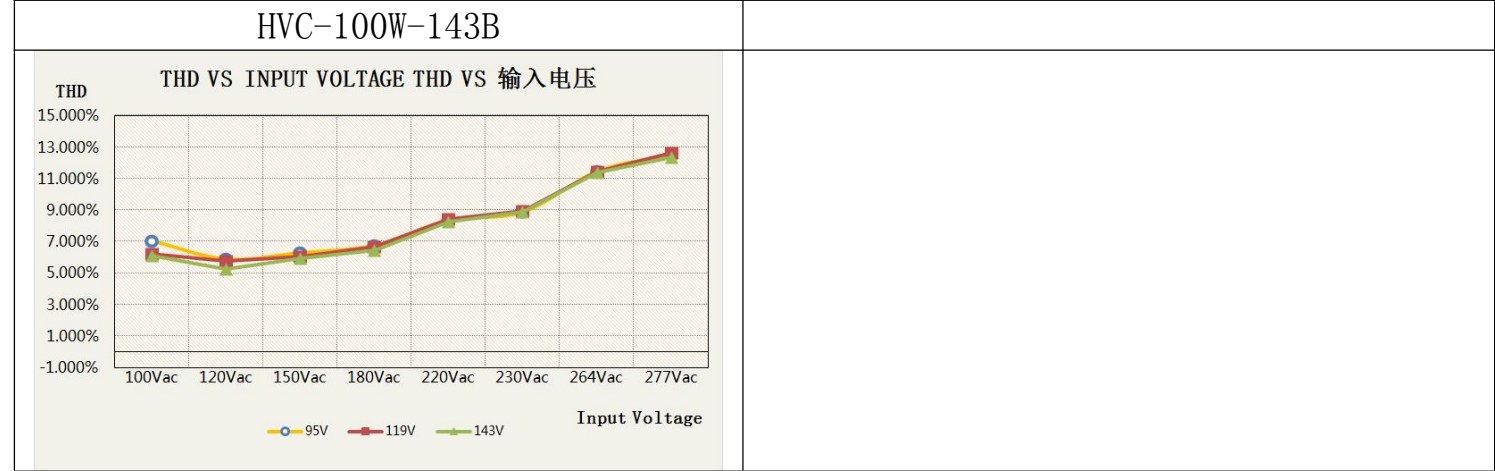
Withstand voltage 耐压	I/P - FG:1.75KVAC, I/P-O/P:3.75KVAC, I/P-调光: 3.75KVAC, O/P-调光: 0.5KVAC
Isolation Resistance 绝缘阻抗	≥10MΩ at I/P - FG 500VDC Test
leakage Current 漏电流	<0.75mA/277Vac
Earthing Resistance 接地电阻	<0.1Ω / 25A 1 min
Surge 浪涌	差模 L-N +/- 6KV (2 ohm), 共模 L, N-E +/- 10KV (12 ohm)
Conducted electromagnetic interference 传导	>3dB
Radiated electromagnetic interference 辐射	>3dB

NOTE:

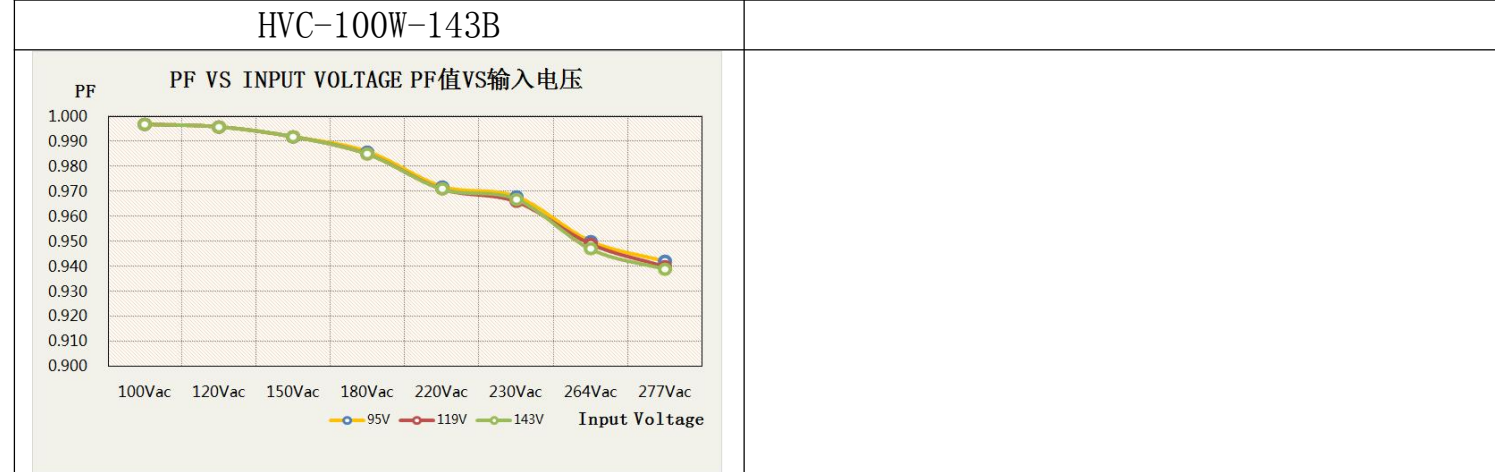
- 1) All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25℃ of ambient temperature.
如未特别说明，所有规格参数均在 230Vac (50Hz) 输入，额定负载，环境温度 25℃ 的条件下进行测量
- 2) Tolerance : includes set up tolerance, line regulation and load regulation.
误差：包含设定误差、线性调整率和负载调整率。

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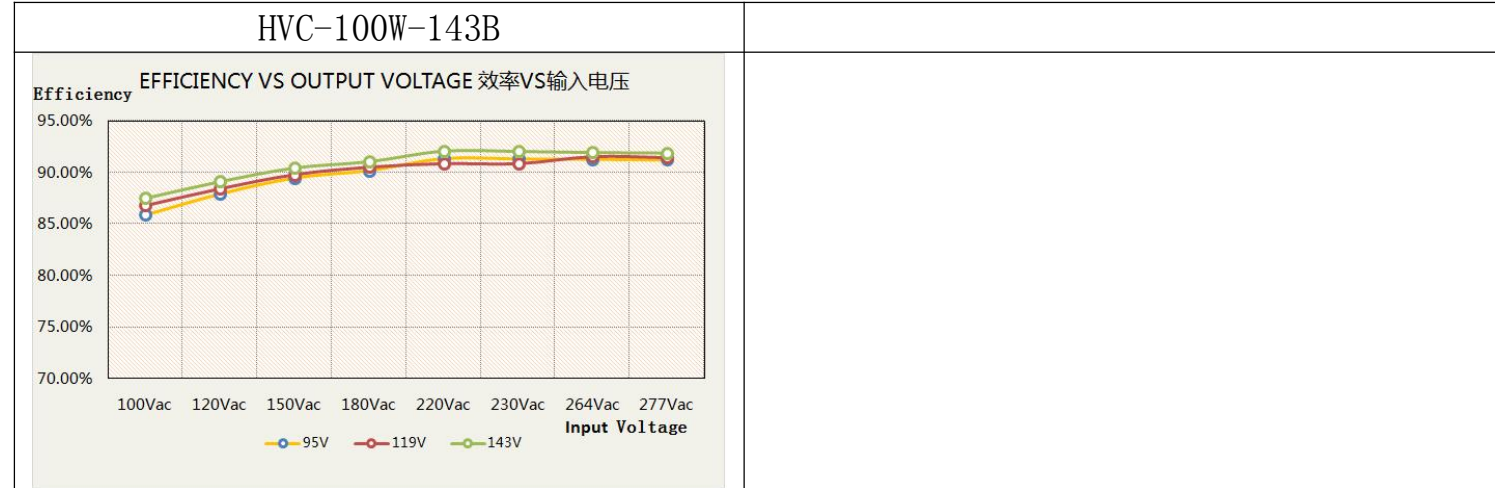
THD VS INPUT VOLTAGE THD VS 输入电压



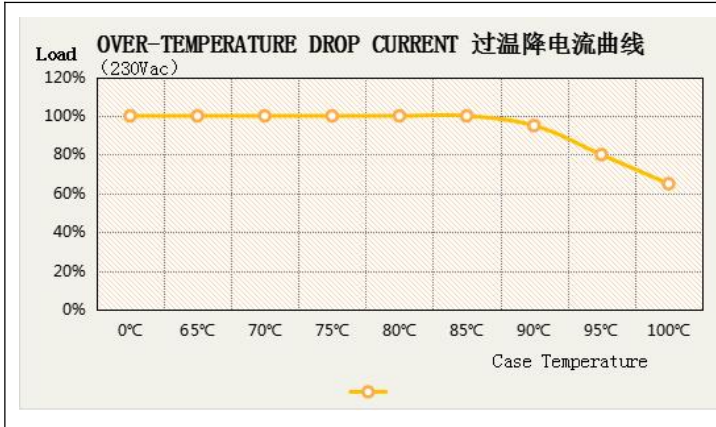
PF VS INPUT VOLTAGE PF 值 VS 输入电压



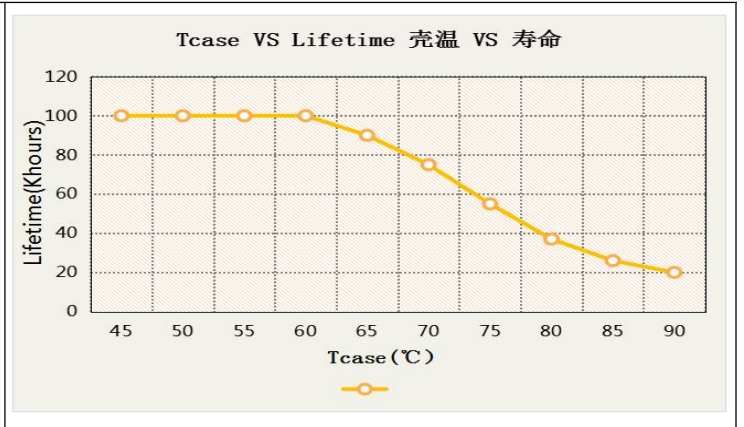
EFFICIENCY VS INPUT VOLTAGE 效率 VS 输入电压



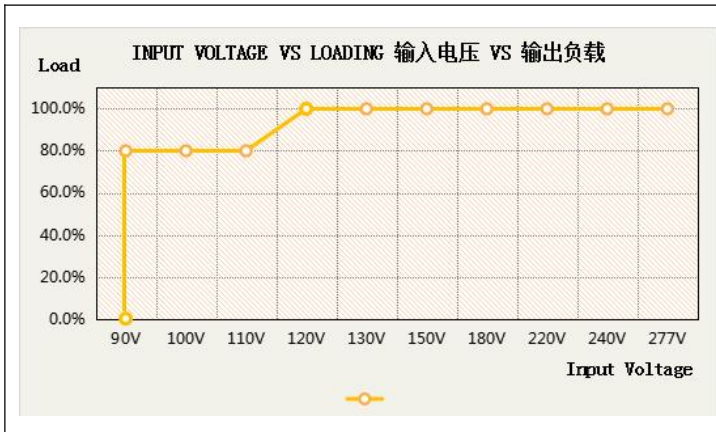
OVER-TEMPERATURE DROP CURRENT 过温降电流曲线



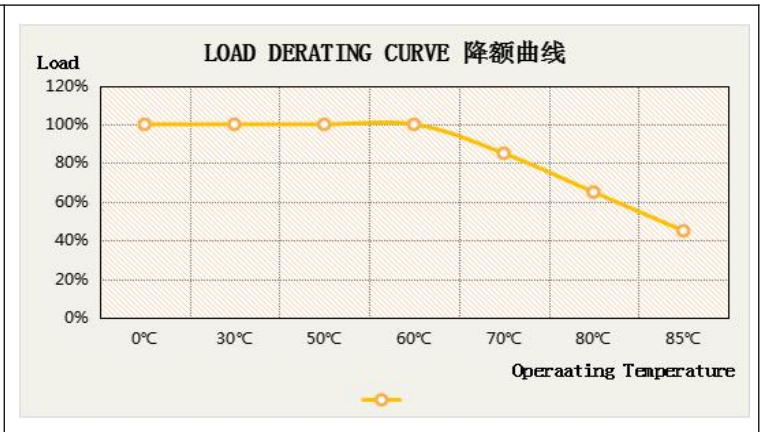
TCASE VS LIFETIME 壳温VS寿命



INPUT VOLTAGE VS LOADING 输入 电压 VS 输出负载



LOAD DERATING CURVE 降额曲线



THE DIMMING CURVE 调光曲线

三合一调光功能（B型）：

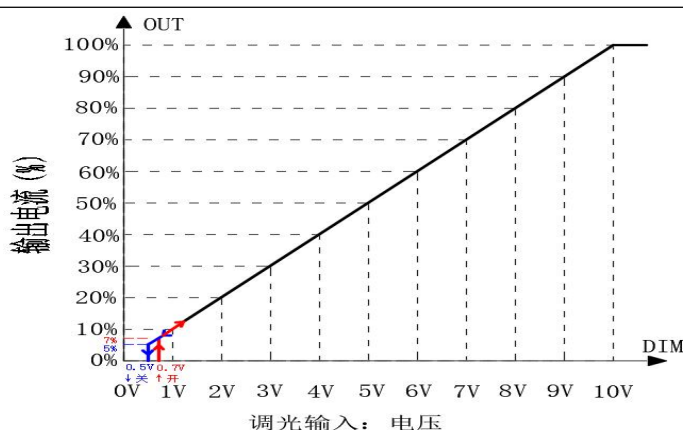
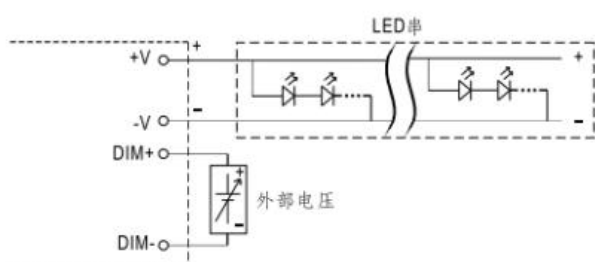
在DIM+（兰色线）和DIM-（白色线）间连接一个100K电阻或0-10V直流电压或PWM信号，即可调整输出恒电流的数值

调光端口输出电流：100uA（典型值）

三合一调光曲线

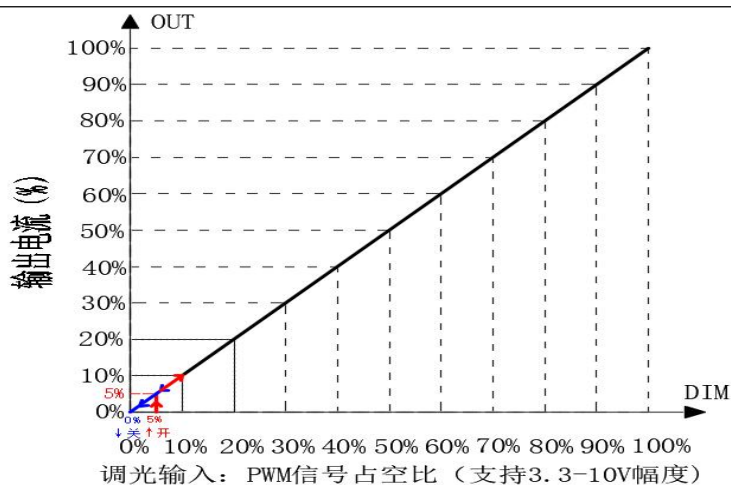
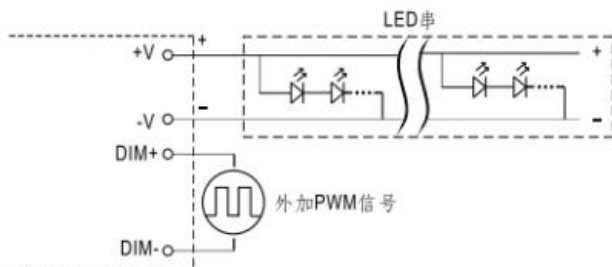
0-10V调光

用外加0-10VDC电压

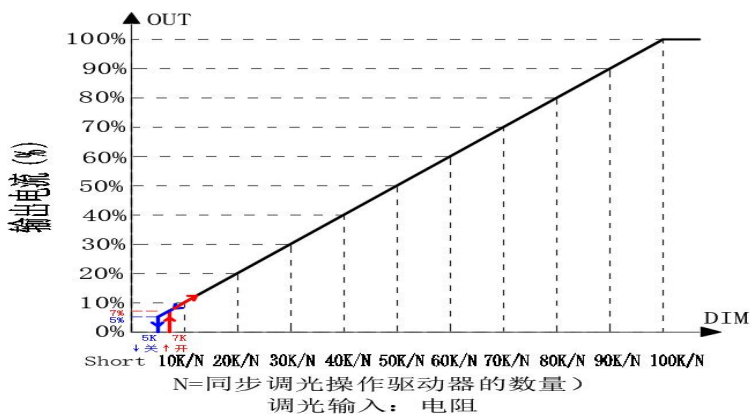
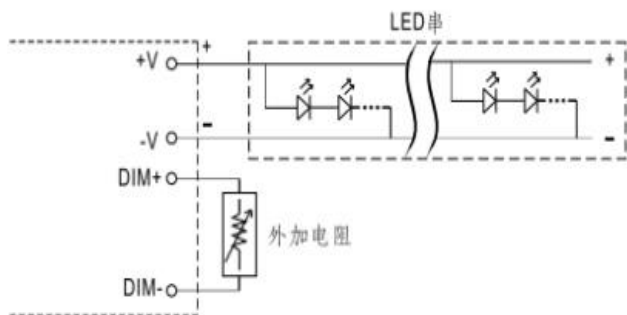


PWM调光（PWM频率 1KHZ）

用外加 PWM信号（频率0.5K-5K）



用外加电阻（0-100K）



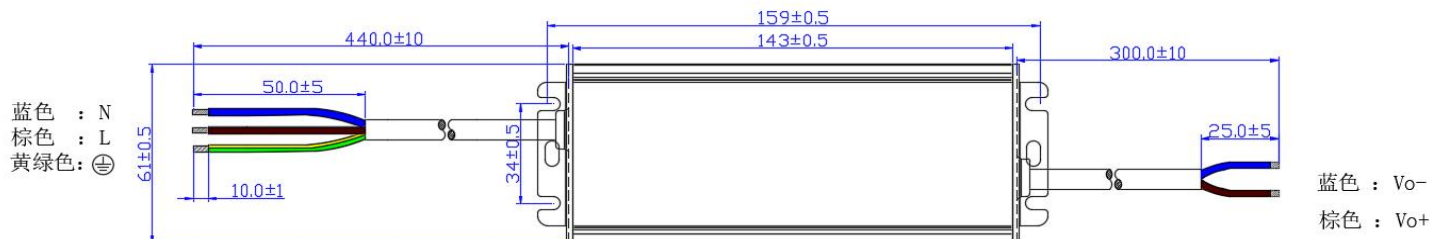
MECHANICAL SPECIFICATION & PACKING 机械尺寸图 & 包装:

Bare plate dimension 裸板尺寸	132*47*25mm (L*W*H)
final dimension 成品尺寸	167*61*32.5mm (L*W*H)
Product Weight 产品重量	650g

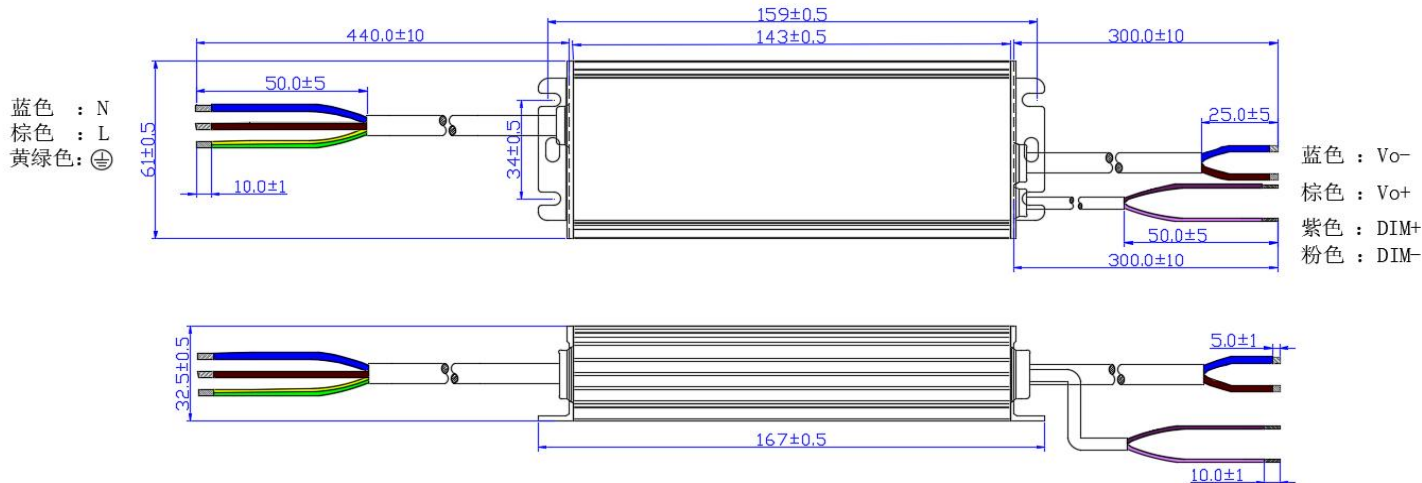
Case No. 机壳型号: 100W

Unit 单位:mm

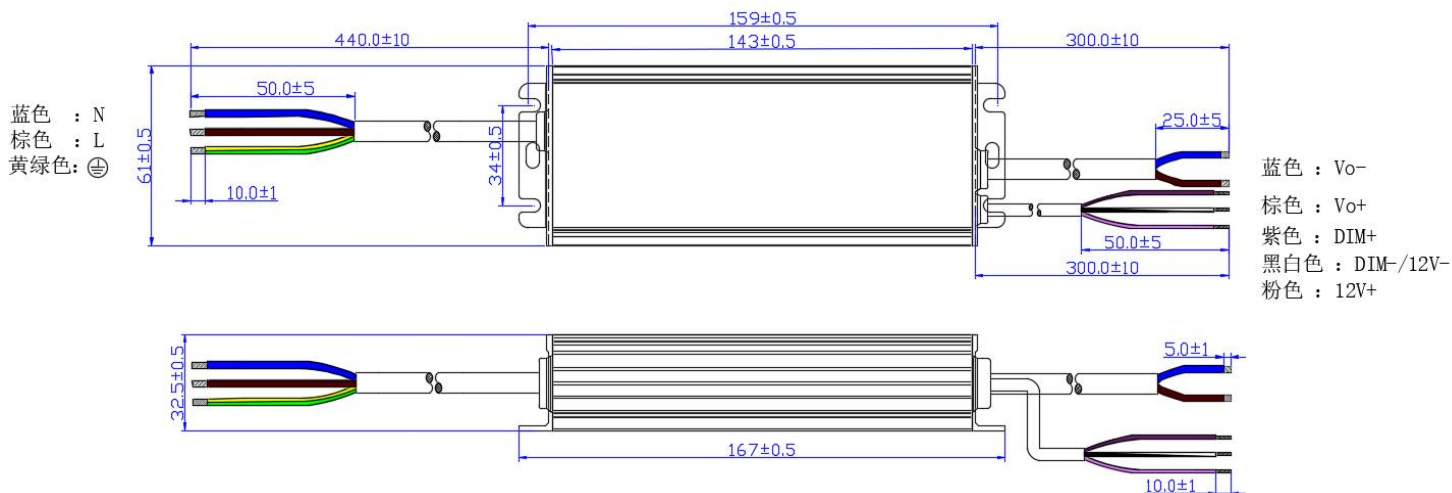
HVC-100W-143A



HVC-100W-143B



HVC-100W-143C



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Nameplate 铭牌

尺寸：139*45mm 样式：贴纸

HVC-100W-143A		HVC-100W-143B																																									
SUNCOM HVC-100W-143A (型号)LED控制装置 <table><tr><td>INPUT 输入端</td><td>Vin(输入):100-240V~1.35A 50/60Hz</td><td>Vout(输出):71-143V ≐ 500-1050mA</td><td>OUTPUT 输出端</td></tr><tr><td>☐ ACL-(BN绿)BK-黑</td><td>Vin(输入):277V~0.5A 50/60Hz</td><td>Max.(最大电压):Uout 190V ≐</td><td>(BN绿)RD-红 Vo + ○</td></tr><tr><td>☐ ACN-(BU蓝)WH-白</td><td>η:≥91% PF:≥0.95 •tc</td><td>Rated Power(额定功率):100W</td><td>(BU蓝)BK-黑 Vo - ○</td></tr><tr><td>☒ (GN绿/YL黄)</td><td colspan="2">+277 for North American only. Suitable for dry,Damp and wet locations No. 1-02, Yongyi Road Three, Yongxing Industry Zone, Henglan Town, Zhongshan City, 528478 Guangdong, China</td><td>(VT黄)DIM + ○</td></tr><tr><td colspan="2">广东新创电源科技有限公司</td><td>CE CB CCC IP67</td><td>(PK粉)DIM - ○</td></tr></table>		INPUT 输入端	Vin(输入):100-240V~1.35A 50/60Hz	Vout(输出):71-143V ≐ 500-1050mA	OUTPUT 输出端	☐ ACL-(BN绿)BK-黑	Vin(输入):277V~0.5A 50/60Hz	Max.(最大电压):Uout 190V ≐	(BN绿)RD-红 Vo + ○	☐ ACN-(BU蓝)WH-白	η:≥91% PF:≥0.95 •tc	Rated Power(额定功率):100W	(BU蓝)BK-黑 Vo - ○	☒ (GN绿/YL黄)	+277 for North American only. Suitable for dry,Damp and wet locations No. 1-02, Yongyi Road Three, Yongxing Industry Zone, Henglan Town, Zhongshan City, 528478 Guangdong, China		(VT黄)DIM + ○	广东新创电源科技有限公司		CE CB CCC IP67	(PK粉)DIM - ○	SUNCOM HVC-100W-143B (型号)LED控制装置 <table><tr><td>INPUT 输入端</td><td>Vin(输入):100-240V~1.35A 50/60Hz</td><td>Vout(输出):71-143V ≐ 500-1050mA</td><td>OUTPUT 输出端</td></tr><tr><td>☐ ACL-(BN绿)BK-黑</td><td>Vin(输入):277V~0.5A 50/60Hz</td><td>Max.(最大电压):Uout 190V ≐</td><td>(BN绿)RD-红 Vo + ○</td></tr><tr><td>☐ ACN-(BU蓝)WH-白</td><td>η:≥91% PF:≥0.95 •tc</td><td>Rated Power(额定功率):100W</td><td>(BU蓝)BK-黑 Vo - ○</td></tr><tr><td>☒ (GN绿/YL黄)</td><td colspan="2">+277 for North American only. Suitable for dry,Damp and wet locations No. 1-02, Yongyi Road Three, Yongxing Industry Zone, Henglan Town, Zhongshan City, 528478 Guangdong, China</td><td>(VT黄)DIM + ○</td></tr><tr><td colspan="2">广东新创电源科技有限公司</td><td>CE CB CCC IP67</td><td>(PK粉)DIM - ○</td></tr></table>		INPUT 输入端	Vin(输入):100-240V~1.35A 50/60Hz	Vout(输出):71-143V ≐ 500-1050mA	OUTPUT 输出端	☐ ACL-(BN绿)BK-黑	Vin(输入):277V~0.5A 50/60Hz	Max.(最大电压):Uout 190V ≐	(BN绿)RD-红 Vo + ○	☐ ACN-(BU蓝)WH-白	η:≥91% PF:≥0.95 •tc	Rated Power(额定功率):100W	(BU蓝)BK-黑 Vo - ○	☒ (GN绿/YL黄)	+277 for North American only. Suitable for dry,Damp and wet locations No. 1-02, Yongyi Road Three, Yongxing Industry Zone, Henglan Town, Zhongshan City, 528478 Guangdong, China		(VT黄)DIM + ○	广东新创电源科技有限公司		CE CB CCC IP67	(PK粉)DIM - ○
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