

	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	SVE-100H series	REV	V1.0

SPECIFICATION FOR APPROVAL

CUSTOMER:			
MODEL NO. :	SVE-100H SERIES		
Rev.	V1.0		
SAMPLE DATE:			
Customer Confirmation			
TESTED BY	CHECKED BY	APPROVED BY	
NOTE			
Please return to us one copy of “SPECIFICATION FOR APPROVAL” with you approved signature.			
Suncom confirmation			
TESTED BY	CHECKED BY	APPROVED BY	
Guangdong Suncom Power Technology Co., Ltd No.1 of Yongyi 3rd Road Henglan Town Zhongshan Guangdong China. Post code:528478 TEL:0760-22326609 28168136 FAX:0760-87600929			

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Product Type

LED INTEGRATED SPECIAL DRIVER

Product Series

SVE-100H series

REV

V1.0

◆ Features:

- Input rated voltage : 180-264Vac 50Hz/60Hz
- Isolation, constant current mode output
- Surge Protection: L-N :6KV; L/N- E:10KV
- Built-in power line carrier (PLC) Dimming
- Input over / under voltage protection
- Over temperature drop current
- THD<10%

◆ Applications:

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

◆ Description:

This product is a constant current drive power supply, designed for LED, with low harmonics (THD:<10%) , high power factor. Built-in surge protection, input over / under voltage protection, over-temperature protection, output open-circuit, short-circuit protection, greatly improve the safety and reliability of products. Built-in power line carrier (PLC) dimming function, the intelligent street lamp control system can remotely monitor the working status, position and control the brightness and working time of each lamp through the timing task.

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◆PLC features:

Build-in PLC carrier communication, using HiSilicon chip Hi3921SV100, which integrates high-speed/low-speed multi-mode power line carrier communication modem and high-performance application processing core, integrated with high-performance ARM Cortex-M3 processor, equipped with Huawei IoT open source operating system LiteOS, providing a more open development

development environment and faster & safer system operation.

■ With a complete communication protocol, OFDM multi-channel power line carrier communication realizes two-way communication between the lamps and the concentrator.

■ The product is addressed through IP and automatically forms a network after power-on. The system networking capacity is up to 1,000 nodes (actual use recommends about 250 nodes).

■ Reliable communication can be achieved without deploying communication lines.

■ Communication distance $\geq 1000\text{m}$ (subject to power grid networking mode).

■ Query street light information, measure total electric energy in real time, and measure real-time voltage, current, active power, power factor and other parameters.

■ Strong anti-interference ability. Broadband power line carrier communication adopts OFDM technology and adopts bottom-level noise suppression measures, the operating frequency band is between 2 ~12Mhz, with strong anti-interference ability.

■ High bandwidth and high speed. Broadband power line carrier can achieve a transmission rate of 2Mbps~10Mbps, which is fast and no packet loss.

■ Provide street light monitoring data for the system, significantly saving energy and reducing maintenance costs. Reporting of lamp fault location information, etc.

■ Overload, over-voltage, under-voltage, over-current and temperature protection design. Trip alarm when overload, over-current, under-voltage, and over-voltage occur. The tripping alarm is released when over-voltage or under-voltage recovers.

■ Equipped with leakage protection function , supports external waterproof and immersion alarm protections. It can be connected to external residual current sensor and water immersion sensor to report real-time alarms.

■ Adopts advanced AES-128 data hardware encryption technology.

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■ **MODEL LIST :**

Model	Rated Power	Input Voltage	Output Voltage	Output Current	THD. (Typ)	PF. (Typ)
SVE-100H-56XX	100W	180-264Vac	30-56V	3.0A	8.3%	0.96
SVE-100H-130XX	100W	180-264Vac	80-130V	1.1A	8.2%	0.96

NOTE: All parameters NOT special mentioned are measured at 230Vac input, rated load and 25℃ of ambient temperature.

■ **“XX” Means Additional Function**

“XX”	External Bluetooth antenna	Water immersion detection/leakage detection
NA	×	×
NB	×	√
TA	√	×
TB	√	√

■ **ELECTRICAL SPECIFICATION :**

◆ Input performance:

Parameter	Min.	Typ.	Max.	Notes.
Voltage Range	180Vac	230Vac	264Vac	
Frequency Range	50Hz	50/60Hz	63Hz	
AC Current	–	–	0.8A	
Inrush Current	–	–	30A	At 230Vac input, 25℃ cold start
PF.	0.95	0.96	–	At 230Vac input, full load
THD.	–	8.3%	10%	
Under Voltage Protection	145Vac	150Vac	155Vac	Turn off the output voltage and resume work after the AC voltage is normal
Over Voltage Protection	305Vac	310Vac	315Vac	

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◆ Output performance

Parameter	Min.	Typ.	Max.	Notes.
Voltage Range	30VDC	—	56VDC	SVE-100H-56XX
	80VDC	—	130VDC	SVE-100H-130XX
Rated Power	—	—	100W	—
Non-load Voltage	60V	—	70V	SVE-100H-56XX
	150V	—	160V	SVE-100H-130XX
Efficiency At 230Vac input, 56V full load	≧90%	90.3%	—	SVE-100H-56XX
Efficiency At 230Vac input, 130V full load	≧91%	91.2%	—	SVE-100H-130XX
Current Tolerance	-5%	—	+5%	—
Line Regulation	-3%	—	+3%	—
Load Regulation	-3%	—	+3%	—
Current Ripple		±43%	<±45%	At full load maximum current test
Turn-on Delay Time	—	600mS	<1S	Measured at full load and 230Vac input
Short Circuit Protection	—	—	5W	Hiccup mode, recovers automatically after fault condition is removed

■ Environment:

Parameter	Min.	Typ.	Max.	Notes.
Working TEMP	-40℃	+25℃	+65℃	—
Storage TEMP	-40℃	+25℃	+85℃	—
Working Humidity	20% RH	—	90% RH	—
Storage Humidity	10% RH	—	90% RH	—
Maximum shell TEMP	—	—	+90℃	—

Safety and EMC:

Withstand voltage	I/P - FG:1.75KVAC, I/P-O/P:3.75KVAC, I/P-Water immersion wire: 3.75KVAC
Isolation Resistance	$\geq 10M\Omega$ at I/P - FG 500VDC Test
Leakage Current	$< 0.75mA/277Vac$
Earthing Resistance	$< 0.1\Omega$ / 25A 1 min
Surge	Differential mode L-N +/- 6KV (2 ohm), common mode: L, N-E +/- 10KV (12 ohm)
Conducted electromagnetic interference	$\geq 3dB$
Radiated electromagnetic interference	$\geq 3dB$

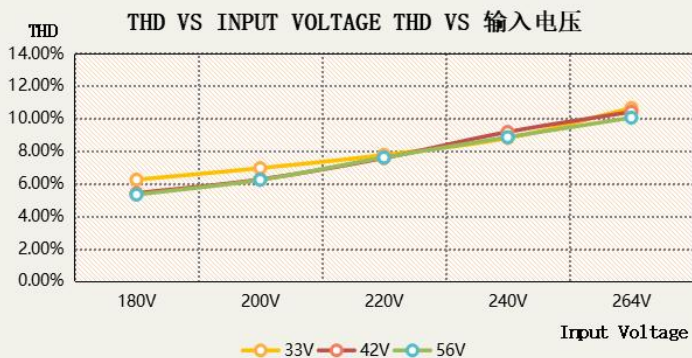
NOTE:

1) All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25°C of ambient temperature.

2) Tolerance: Includes set up tolerance, line regulation and load regulation.

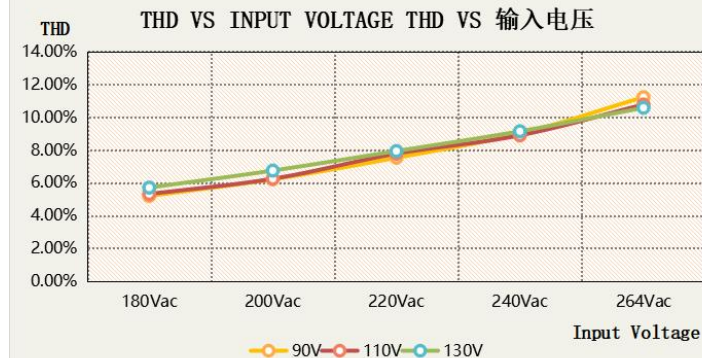
THD VS INPUT VOLTAGE

SVE-100H-56



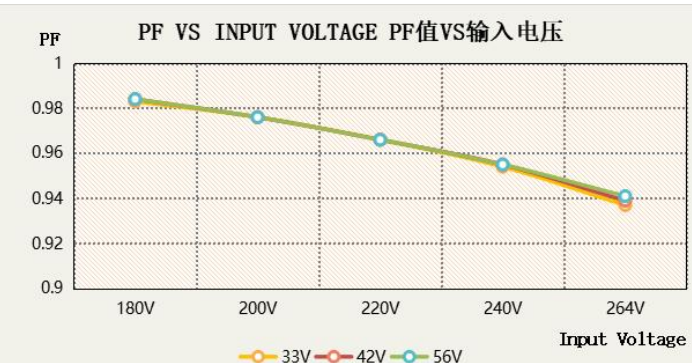
THD VS INPUT VOLTAGE

SVE-100H-130



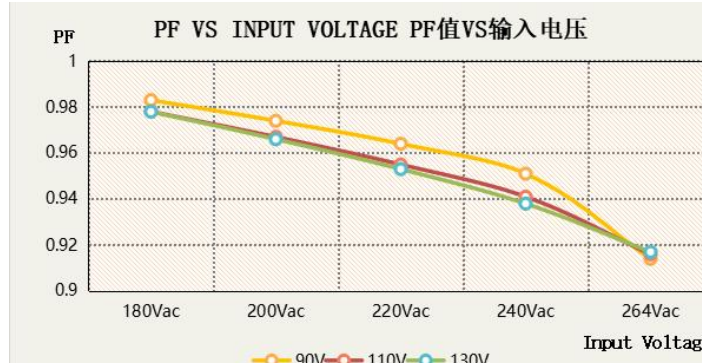
PF VS INPUT VOLTAGE

SVE-100H-56



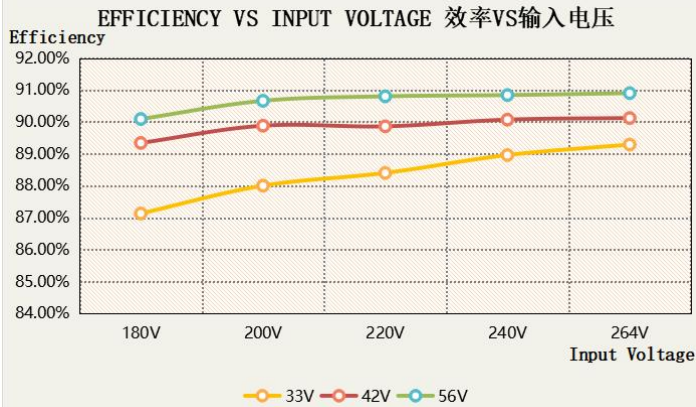
PF VS INPUT VOLTAGE

SVE-100H-130



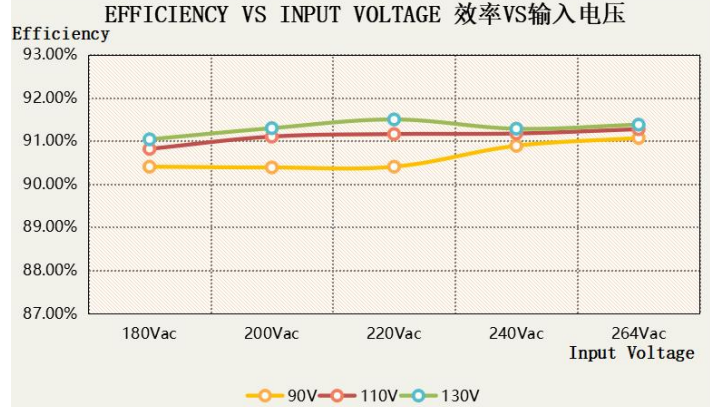
EFFICIENCY VS INPUT VOLTAGE

SVE-100H-56



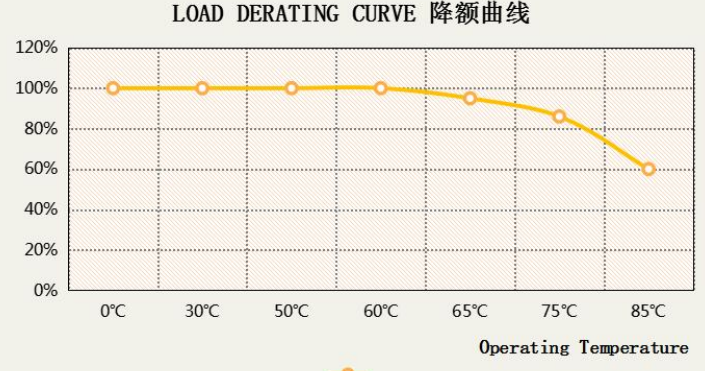
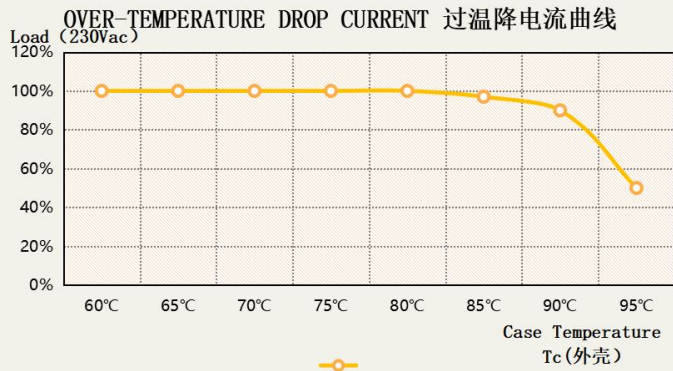
EFFICIENCY VS INPUT VOLTAGE

SVE-100H-130



OVER-TEMPERATURE DROP CURRENT

LOAD DERATING CURVE



MECHANICAL SPECIFICATION & PACKING :

Bare plate dimension	154*55.5*31mm (L*W*H)
final dimension	182*69*36.2mm (L*W*H)
Product Weight	850g

Case No. : 100W	Unit :mm
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蓝色 : N
棕色 : L
黄绿色 : ⊕

蓝色 : Vo-
棕色 : Vo+

紫色 黑/白色 : 水浸传感器
粉色 蓝/白色 : 漏电互感器

SUNCOM® 100W LED控制装置 机型:SVE-100H-56NA 输入:220-240V~50/60Hz Max 0.8A 功率:Max 100W 功率因数:≥0.95 输出:30-56V==Max 3000mA(恒流);Max 70V --- IP67 RoHS ta:65°C tc:90°C 备注:产品输入电力线缆减通讯,电流可再次设定,可调光,调光范围从10%到100%  输入: L:棕色 N:蓝色 FG ⊕ 黄绿色 物理ID 输出: V+:棕色 V-:蓝色 中国制造	SUNCOM® 100W LED控制装置 机型:SVE-100H-56NB 输入:220-240V~50/60Hz Max 0.8A 功率:Max 100W 功率因数:≥0.95 输出:30-56V==Max 3000mA(恒流);Max 70V --- IP67 RoHS ta:65°C tc:90°C 备注:产品输入电力线缆减通讯,电流可再次设定,可调光,调光范围从10%到100%  输入: L:棕色 N:蓝色 FG ⊕ 黄绿色 物理ID 输出: V+:棕色 V-:蓝色 中国制造
SUNCOM® 100W LED控制装置 机型:SVE-100H-56TA 输入:220-240V~50/60Hz Max 0.8A 功率:Max 100W 功率因数:≥0.95 输出:30-56V==Max 3000mA(恒流);Max 70V --- IP67 RoHS ta:65°C tc:90°C 备注:产品输入电力线缆减通讯,电流可再次设定,可调光,调光范围从10%到100%  输入: L:棕色 N:蓝色 FG ⊕ 黄绿色 物理ID 输出: V+:棕色 V-:蓝色 中国制造	SUNCOM® 100W LED控制装置 机型:SVE-100H-56TB 输入:220-240V~50/60Hz Max 0.8A 功率:Max 100W 功率因数:≥0.95 输出:30-56V==Max 3000mA(恒流);Max 70V --- IP67 RoHS ta:65°C tc:90°C 备注:产品输入电力线缆减通讯,电流可再次设定,可调光,调光范围从10%到100%  输入: L:棕色 N:蓝色 FG ⊕ 黄绿色 物理ID 输出: V+:棕色 V-:蓝色 中国制造
SUNCOM® 100W LED控制装置 机型:SVE-100H-130NA 输入:220-240V~50/60Hz Max 0.8A 功率:Max 100W 功率因数:≥0.95 输出:80-130V==Max 1100mA(恒流);Max 160V --- IP67 RoHS ta:65°C tc:90°C 备注:产品输入电力线缆减通讯,电流可再次设定,可调光,调光范围从10%到100%  输入: L:棕色 N:蓝色 FG ⊕ 黄绿色 物理ID 输出: V+:棕色 V-:蓝色 中国制造	SUNCOM® 100W LED控制装置 机型:SVE-100H-130NB 输入:220-240V~50/60Hz Max 0.8A 功率:Max 100W 功率因数:≥0.95 输出:80-130V==Max 1100mA(恒流);Max 160V --- IP67 RoHS ta:65°C tc:90°C 备注:产品输入电力线缆减通讯,电流可再次设定,可调光,调光范围从10%到100%  输入: L:棕色 N:蓝色 FG ⊕ 黄绿色 物理ID 输出: V+:棕色 V-:蓝色 中国制造
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