
	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	SCP-100-56X Series	REV	V3.0

SPECIFICATION FOR APPROVAL

CUSTOMER			
MODEL NO.	SCP-100-56X Series		
Rev.	V3.0		
SAMPLE DATE :			
Customer Confirmation			
TESTED BY	CHECKED BY	APPROVED BY	
NOTES			
Please return to us one copy of “SPECIFICATION FOR APPROVAL” with you approved signature.			
SUNCOM Confirmation			
TESTED BY	CHECKED BY	APPROVED BY	
<div>Guangdong Suncom Power Technology Co., Ltd</div> <div>No.1 of Yongyi 3rd Road Henglan Town, Zhongshan, Guangdong, China. Post code: 528478</div> <div>TEL:+86-760-2232 6609, 2816 8136 FAX:+86-760-8760 0929</div>			



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CHANGE HISTORY

[illegible]

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◆ Features:

- Input Rated voltage : 100-277Vac 50Hz/60Hz
- Isolation, Constant current mode output
- Surge Protection: L-N :6KV; L/N- E:10KV
- 3 in 1 dimming(dim-to-off) : PWM/0-10V/resistance
- AUX Power:12V/0.25A
- Over temperature drop current
- Output current is adjustable
- Input under-voltage protection
- THD<15%



◆ Applications:

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

◆ Description:

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.

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■ MODELLIST

Model	Rated Power	Input Voltage	Output Voltage	Output Current	Default Current @42V	THD. (Typ.)	PF. (Typ.)
SCP-100-56X	100W	100-277Vac	28-56V	1.6A-3A	2.1A	10%	0.97

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

■ “X” Means Additional Function

“X”	Time control (Adjustable current+ default the power to be half after continuing working 6 hours: suffix F)	ADJ Current (suffix A)	0-10V Dim/PWM Dim/Resistor Dim: Suffix B	0-10V Dim/PWM Dim/Resistor Dim+AUX 12V : Suffix C
B			√	

NOTE: When using the B/C version, it is recommended that the LED voltage is above 30V to prevent the dimming shutdown from failing to turn off the LED ;

■ ELECTRICAL SPECIFICATION

◆ Input performance:

Parameter	Min.	Typ.	Max.	Notes.
Voltage Range	90Vac	100-277Vac	305Vac	-
Frequency Range	47Hz	50/60Hz	63Hz	-
AC Current	-	-	1.4A	-
Inrush Current	-	-	70A	At 230Vac input, 25°C cold start
PF.	0.95	0.97	-	At 230Vac input, full load
THD.	-	10%	15%	

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◆ Output performance

Parameter	Min.	Typ.	Max.	Notes.
Voltage Range	28VDC	-	56VDC	-
Current range Regulation	1.6A	-	3.0A	-
Rated Power	-	-	100W	Output Voltage > 33V
Over Voltage	63V		70V	-
Efficiency	≧90%	90.5%	-	Measured at full load and 230Vac input
Current Tolerance	-5%	-	+5%	-
Line Regulation	-5%	-	+5%	-
Load Regulation	-3%	-	+3%	-
Current Ripple	-	±50%	<±55%	-
Turn-on Delay Time	-	600mS	<1S	Measured at full load and 230Vac input
Short Circuit Protection	-	-	2W	Hiccup mode,recovers automatically after fault condition is removed
Over-temperature protection	-	90℃	-	Shell Tc point temperature, Drop current mode, the current automatically recovers after over temperature
Under Voltage Protection	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

■ Environment:

Parameter	Min.	Typ.	Max.	Notes.
Working TEMP	-40℃	+25℃	+60℃	-
Storage TEMP	-40℃	+25℃	+85℃	-
Working Humidity	20% RH	-	90% RH	-
Storage Humidity	10% RH	-	90% RH	-
Maximum shell TEMP	-	-	+90℃	-


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■ Safety regulations and EMC:

Withstand voltage	I/P - FG:1.75KVAC,I/P-O/P:3.75KVAC, I/P-Dim: 3.75KVAC,O/P-Dim: 0.5KVAC
isolation resistance	$\geq 10M\Omega$ at I/P - FG 500VDC Test
leakage current	<0.75mA/277Vac
Earthing resistance	<0.1 Ω / 25A 1 min
Surge	L-N +/- 6KV (2 ohm); L, N-E +/- 10KV (12 ohm)
Conducted Electromagnetic Interference	-
Radiated electromagnetic interference	-

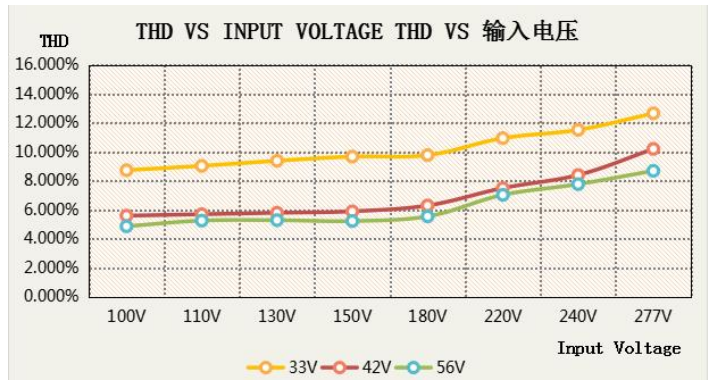
NOTE:

- 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.

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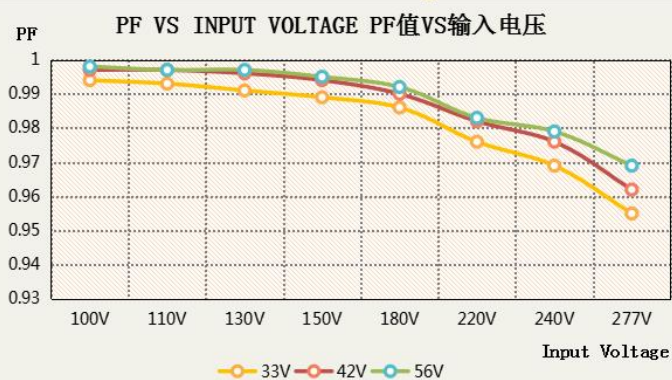
THD VS INPUT VOLTAGE

SCP-100-56X



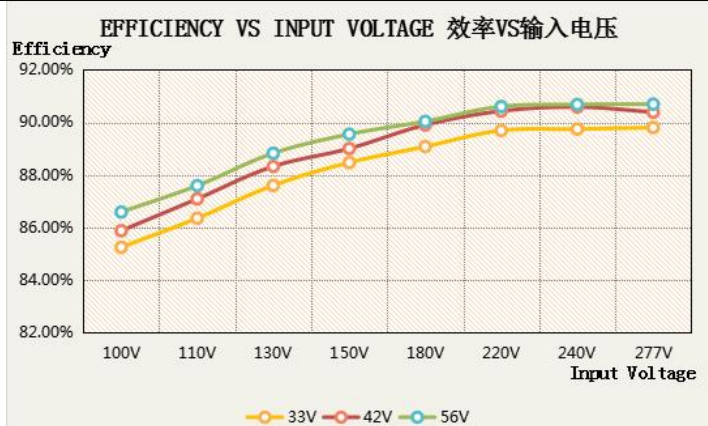
PF VS INPUT VOLTAGE

SCP-100-56X



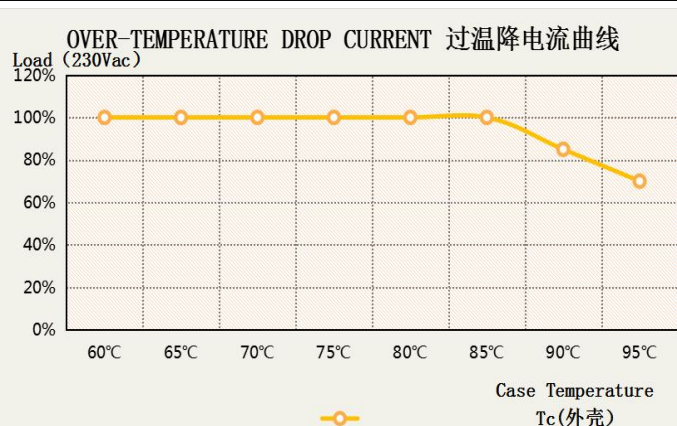
EFFICIENCY VS INPUT VOLTAGE CURRENT

SCP-100-56X



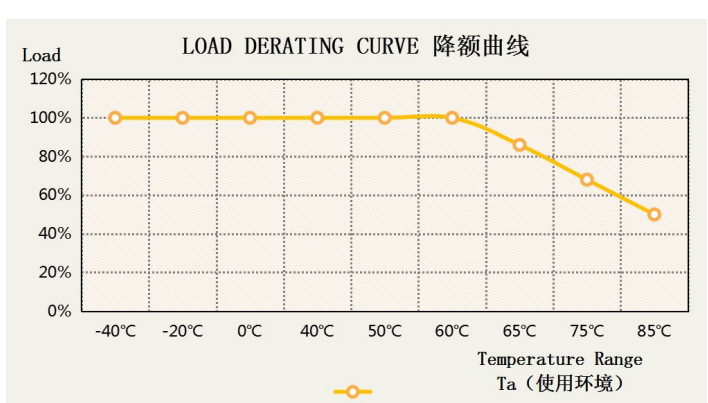
OVER-TEMPERATURE DROP

SCP-100-56X



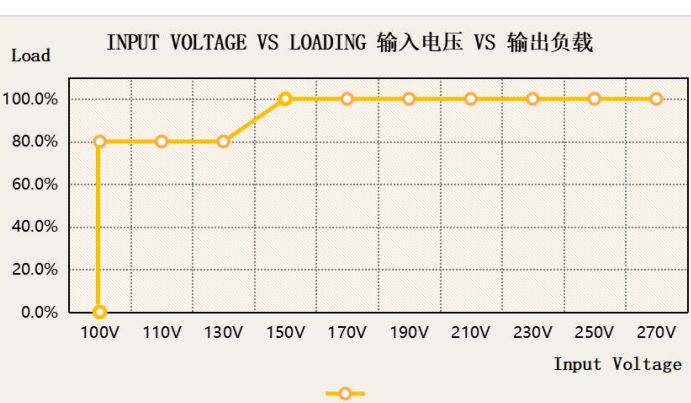
LOAD DERATING CURVE

SCP-100-56X

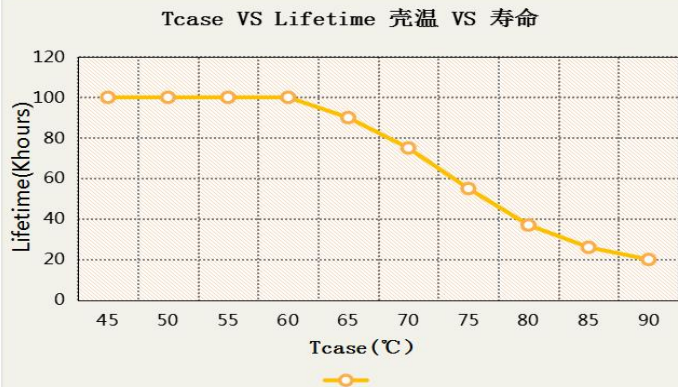


INPUT VOLTAGE VS LOADING

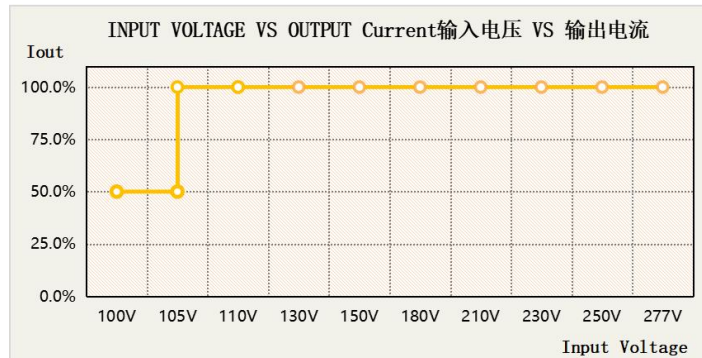
SCP-100-56X



TCASE VS LIFETIME



Under-voltage DROP CURRENT



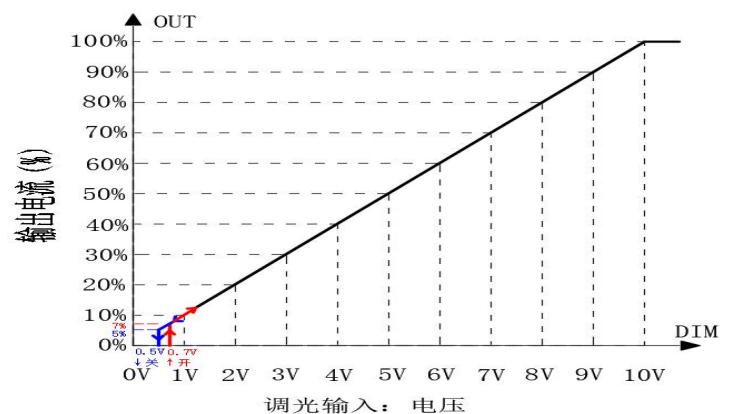
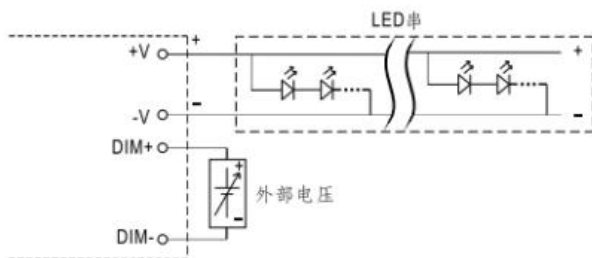
THE DIMMING CURVE

Three-in-one dimming function (Type B/C):

- Connect a 100K resistor or 0-10V DC voltage or PWM signal between DIM+ (blue line) and DIM- (white line) to adjust the value of the output constant current
- Output current of dimming port: 100uA (typical value)
- Auxiliary function (Type C): output voltage:12V auxiliary, and output max current 250mA.

0-10V Dimming

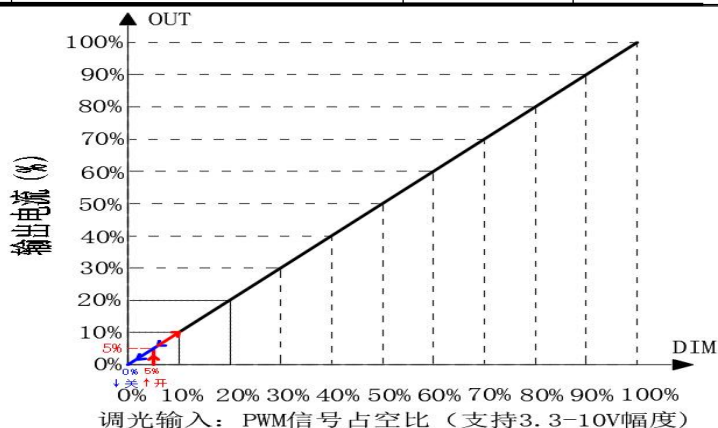
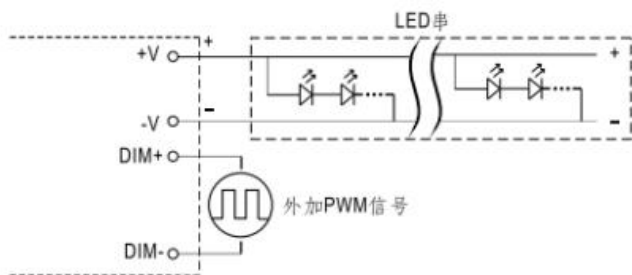
Applying additive 0-10VDC



PWM dimming (PWM frequency 10V 1KHZ)

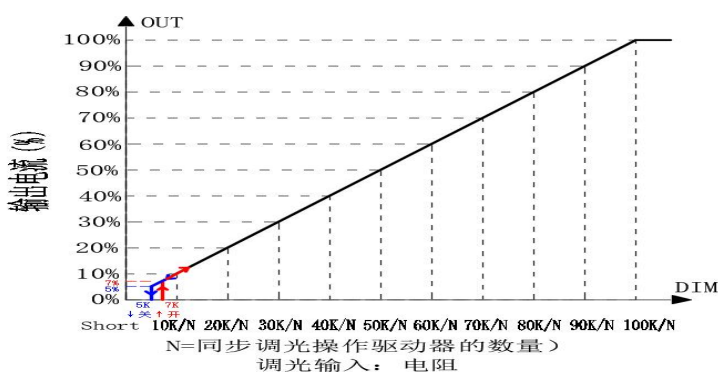
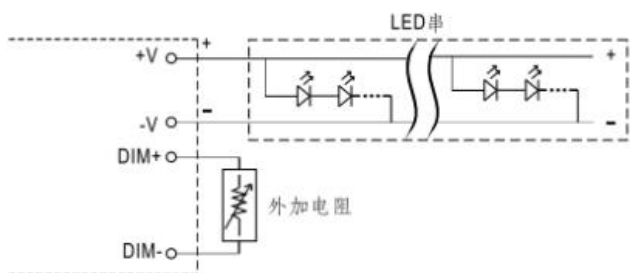
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Applying additive 10V PWM signal (frequency 0.2K-10K)



Resistor Dimming (100K)

Applying additive resistance (0-100K)



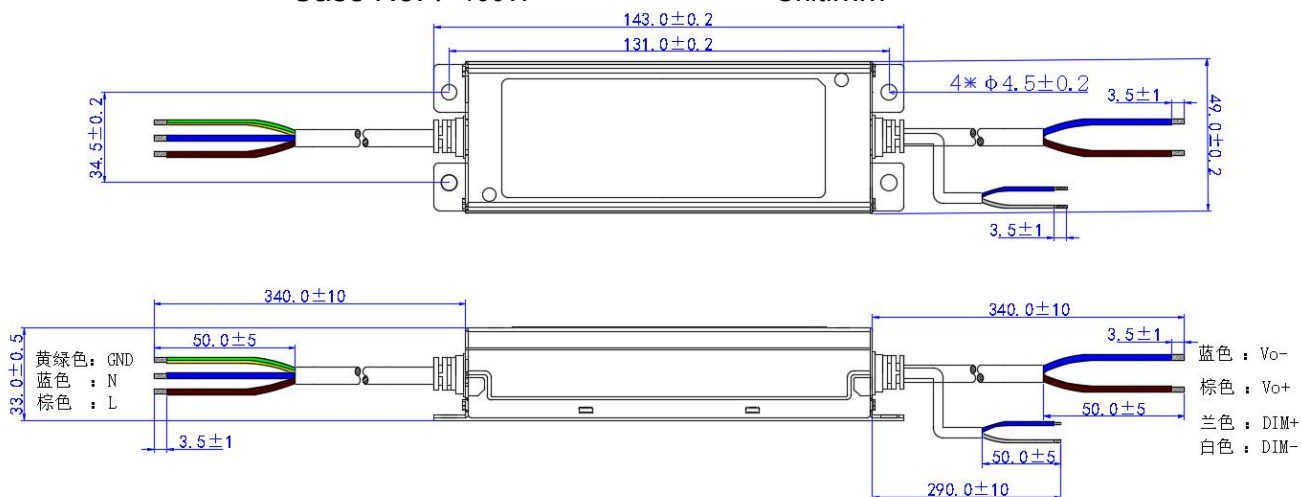
MECHANICAL

SPECIFICATION & PACKING

Bare plate dimension	114*44*26mm(L*W*H)
Final dimension	143*49*33mm(L*W*H)
Product Weight	420g

Case No. : 100W

Unit:mm



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Nameplate

Size: 84*31mm Style: sticker

SCP-100-56A		SCP-100-56B	
<div><div>SUNCOM SCP-100-56A (型号)LED控制装置</div><div><div>INPUT 输入端</div><div><div>ACN(BU蓝)</div><div>ACL(BN棕)</div><div>(GN绿/YL黄)</div></div><div>Vin(输入):100-277V~1.4A 50/60Hz</div><div><div>PF:≥0.95</div><div>ta:60℃ tc:90℃</div></div><div><div>Vout(输出):28-56V ≐ 1600-3000mA</div><div>Max.Uout(最大电压): 70V ≐</div><div>Rated Power(额定功率):100W</div></div><div><div>tc:90℃</div><div>ta:50℃@Vin100-200V~</div><div>ta:60℃@Vin200-277V~</div></div><div><div>广东新创电源科技有限公司</div><div>www.gdsuncom.com</div><div>GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD</div></div><div><div>MADE IN CHINA</div><div>(中国制造)</div></div><div><div><div></div><div></div><div></div></div><div>IP65</div><div>SELV</div></div></div></div> <div><div>OUTPUT 输出端</div><div><div>(BU蓝)Vo - ○</div><div>(BN棕)Vo + ○</div><div>(BU蓝)DIM + ○</div><div>(WH白)DIM - ○</div></div></div>		<div><div>SUNCOM SCP-100-56B (型号)LED控制装置</div><div><div>INPUT 输入端</div><div><div>ACN(BU蓝)</div><div>ACL(BN棕)</div><div>(GN绿/YL黄)</div></div><div>Vin(输入):100-277V~1.4A 50/60Hz</div><div><div>PF:≥0.95</div><div>ta:60℃ tc:90℃</div></div><div><div>Vout(输出):28-56V ≐ 1600-3000mA</div><div>Max.Uout(最大电压): 70V ≐</div><div>Rated Power(额定功率):100W</div></div><div><div>tc:90℃</div><div>ta:50℃@Vin100-200V~</div><div>ta:60℃@Vin200-277V~</div></div><div><div>广东新创电源科技有限公司</div><div>www.gdsuncom.com</div><div>GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD</div></div><div><div>MADE IN CHINA</div><div>(中国制造)</div></div><div><div><div></div><div></div><div></div></div><div>IP65</div><div>SELV</div></div></div></div> <div><div>OUTPUT 输出端</div><div><div>(BU蓝)Vo - ○</div><div>(BN棕)Vo + ○</div><div>(BU蓝)DIM + ○</div><div>(WH白)DIM - ○</div></div></div>	
SCP-100-56C			
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