

	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2

SPECIFICATION FOR APPROVAL

CUSTOMER:	
MODEL NO.:	GEP-100-XX SERIES
Rev.:	V2.2
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

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



	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2

■ CHANGE HISTORY

[illegible]

SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER			
	Product Series	GEP-100-XX SERIES	REV	V2.2	

◆ Features :

- Input Rated voltage : 100-277Vac 50Hz/60Hz
- Isolate, Constant current mode output
- Surge Protection: L-N :4KV; L/N- E:6KV
- Input over-voltage protection
- Over temperature drop current
- THD<15%

◆ Applications :

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

◆ Description:

This product is a constant current driver, specially designed for LED, with low harmonic (< 15%), high power factor, high Efficiency. Built-in Surge protection, output open circuit, short circuit protection, over temperature drop current, greatly improve the safety and reliability of the product.



■ MODELLIST

Model	Rated Power	Input Voltage	Output Voltage	Output Current	THD. (Typ)	PF. (Typ)
GEP-100-36	100W	100-277Vac	25-36V	3000mA	6.2%	0.97
GEP-100-42	100W	100-277Vac	30-42V	2500mA	6.4%	0.97
GEP-100-54	100W	100-277Vac	34-54V	1900mA	7.9%	0.97
GEP-100-90	100W	100-277Vac	54-90V	1100mA	9.1%	0.97
GEP-80-42	80W	100-277Vac	25-42V	2200mA	8.4%	0.96
GEP-75-90	75W	100-277Vac	54-90V	790mA	10%	0.96

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

SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2

■ ELECTRICALSPECIFICATION

◆ Input performance:

Parameter	Min.	Typ.	Max.	Notes
Voltage Range	90Vac	100-277Vac	305Vac	
Frequency Range	47Hz	50/60Hz	63Hz	
AC Current	-	-	1.3A	GEP-100-90
				GEP-100-54
				GEP-100-42
				GEP-100-36
	-	-	1A	GEP-80-42
	-	-	1A	GEP-75-90
Inrush Current	-	-	25A	At 230Vac input,25℃ cold start
PF. At 230V AC input,full load	0.95	0.96	-	-
THD. At 230V AC input,full load	-	9.1%	15%	GEP-100-90
	-	6.2%	15%	GEP-100-54
	-	6.4%	15%	GEP-100-42
	-	7.9%	15%	GEP-100-36
	-	8.4%	15%	GEP-80-42
	-	10%	15%	GEP-75-90
Over-voltage Protection	320Vac	330Vac	340Vac	Turn off the output voltage and resume work after the AC voltage is normal
Over-voltage Recovery Voltage	295Vac	300Vac	310Vac	

◆ Output performance

Parameter	Min.	Typ.	Max.	Notes
Voltage Range	54VDC	-	90VDC	GEP-100-90
				GEP-75-90
	25VDC	-	36VDC	GEP-100-36
	30VDC	-	42VDC	GEP-100-42
	34VDC	-	54VDC	GEP-100-54
	25VDC	-	42VDC	GEP-80-42
Current Setting Range (Normally ±5% of typical value)	700mA	1100mA	1500mA	GEP-100-90
	1300mA	1900mA	2000mA	GEP-100-54
	1600mA	2500mA	2600mA	GEP-100-42
	2000mA	3000mA	3000mA	GEP-100-36

SUNCOM	Product Type		LED INTEGRATED SPECIAL DRIVER		
	Product Series		GEP-100-XX SERIES	REV	V2.2
	1200mA	2200mA	2200mA	GEP-80-42	
	700mA	790mA	1100mA	GEP-75-90	
Rated Power	-	-	100W	GEP-100-90	
				GEP-100-54	
	-	-		GEP-100-42	
				GEP-100-36	
	-	-	80W	GEP-80-42	
	-	-	75W	GEP-75-90	
Over Voltage	98V	-	110V	GEP-100-90	
				GEP-75-90	
	48V	-	55V	GEP-100-36	
				GEP-100-42	
				GEP-80-42	
	60V	-	70V	GEP-100-54	
Efficiency Measured at full load and 230Vac input	≧91%	91.6%	-	GEP-100-90	
	≧91%	91.2%	-	GEP-100-54	
	≧90%	90.8%	-	GEP-100-42	
	≧89%	89.8%	-	GEP-100-36	
	≧90%	90.9%	-	GEP-80-42	
	≧91%	91.3%	-	GEP-75-90	
Current Tolerance	-5%	-	+5%	-	
Line Regulation	-3%	-	+3%	-	
Load Regulation	-3%	-	+3%	-	
Current Ripple	-	±45%	<±50%	-	
Turn-on Delay Time	-	800mS	<1S	Measured at full load and 230Vac input	
Short Circuit Protection	-	-	2W	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℃	-

SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2

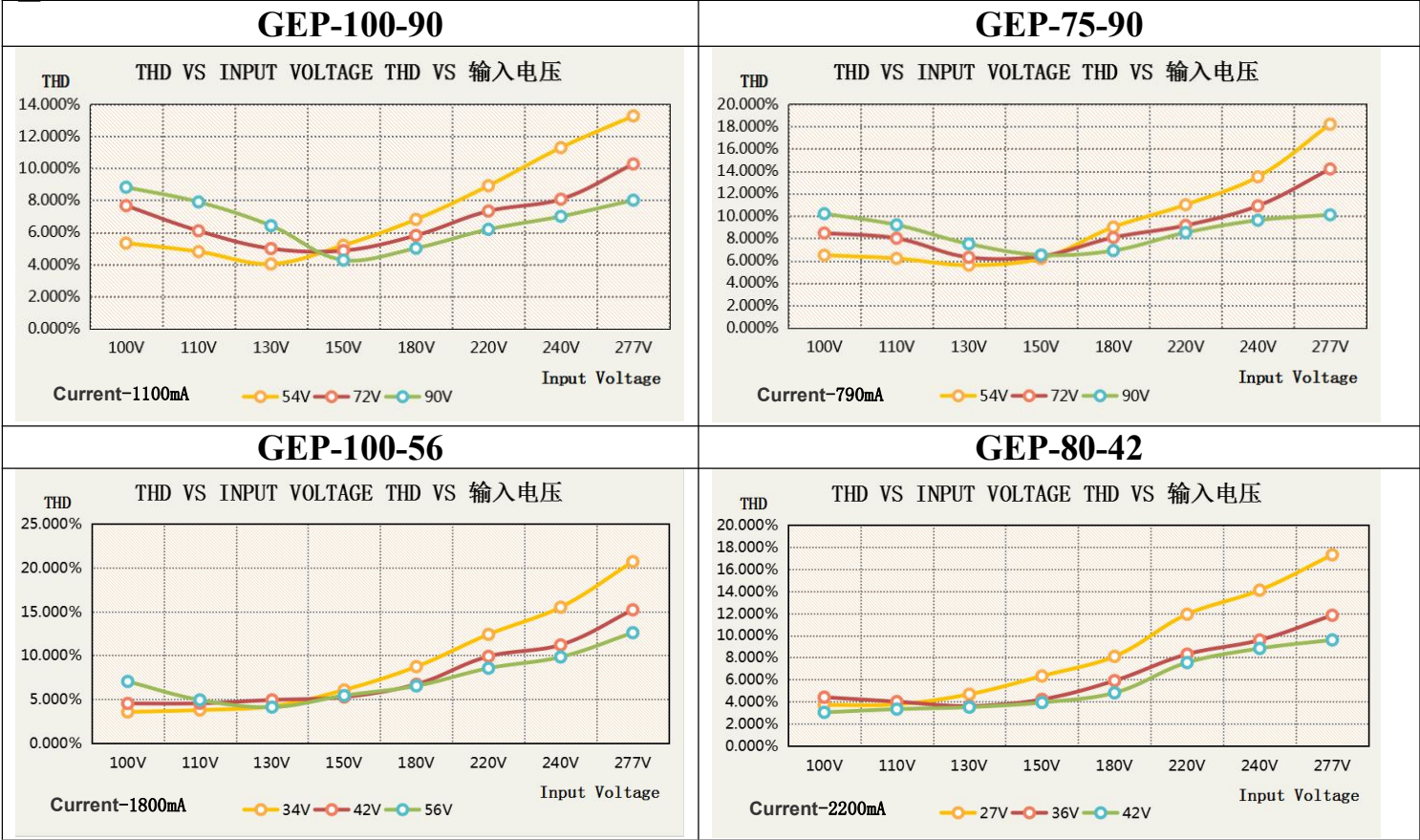
Safety and EMC:

Withstand voltage	I/P - FG:1.75KVAC,I/P-O/P:3.0KVAC
Isolation resistance	≥ 10MΩ at I/P - FG 500VDC Test
Leakage current	<0.75mA/277Vac
Earthing resistance	<0.1Ω / 25A 1 min
Surge	Differential mode: L-N +/- 4KV (2 ohm),common mode: L, N-E +/- 6KV (12 ohm)
Conducted electromagnetic interference	>3db
Radiated electromagnetic interference	>3db

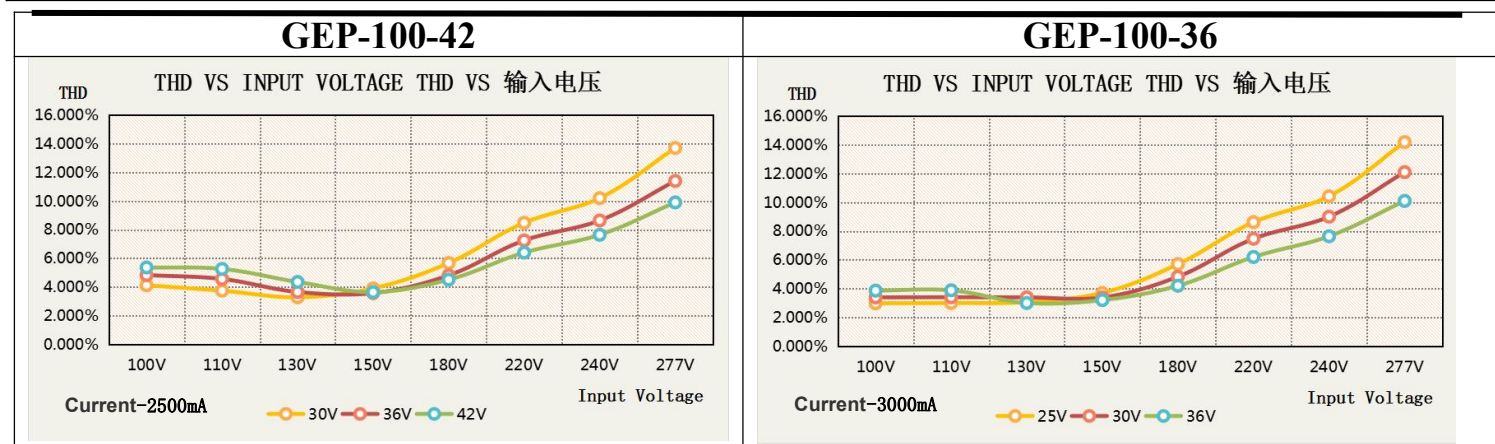
NOTE:

- 1)All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25℃ of ambient temperature
- 2) Tolerance:includes set up tolerance,lineregulation and load regulation.

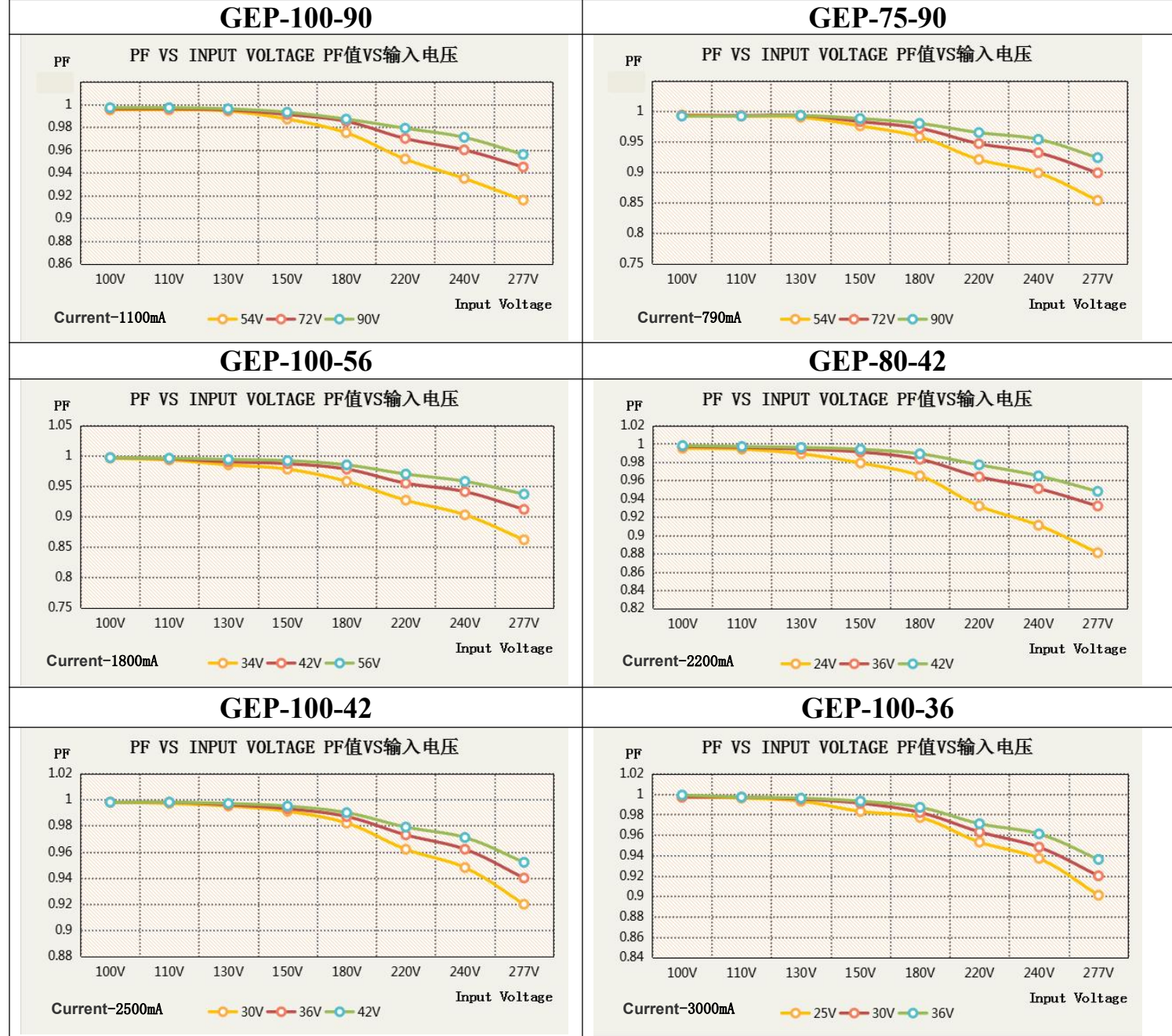
THD VS INPUT VOLTAGE



SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2



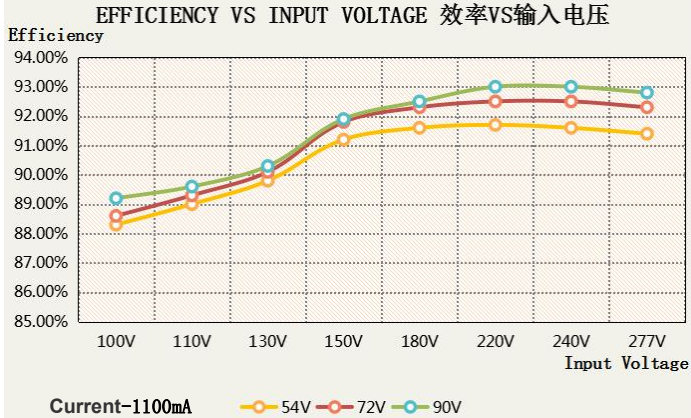
PF VS INPUT VOLTAGE



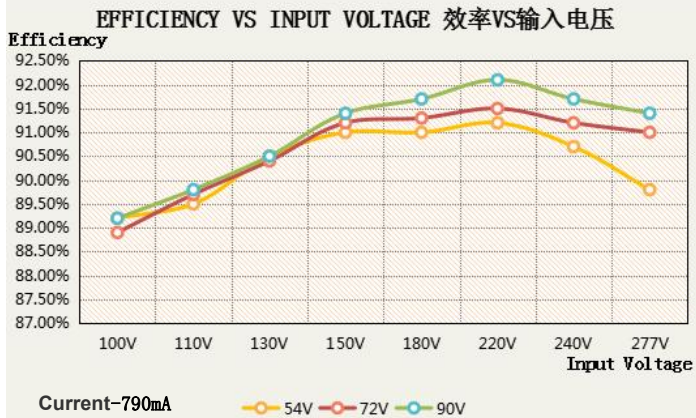
	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2

EFFICIENCY VS INPUT VOLTAGE

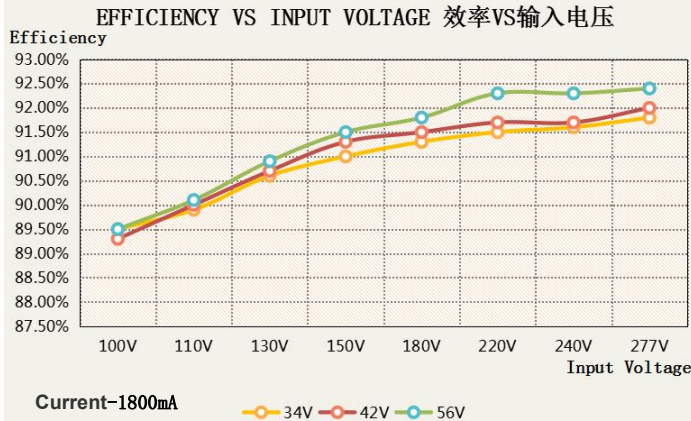
GEP-100-90



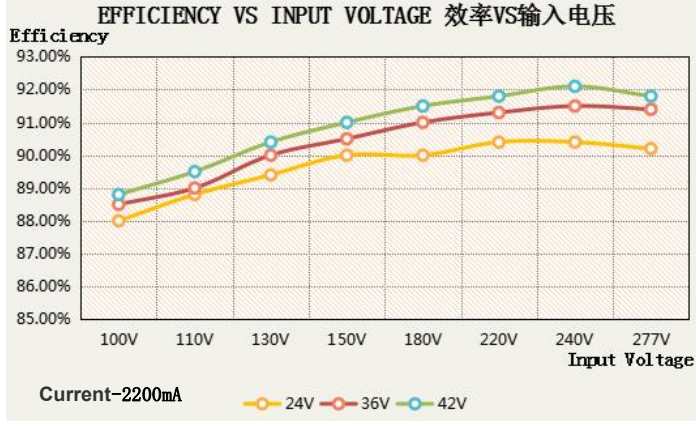
GEP-75-90



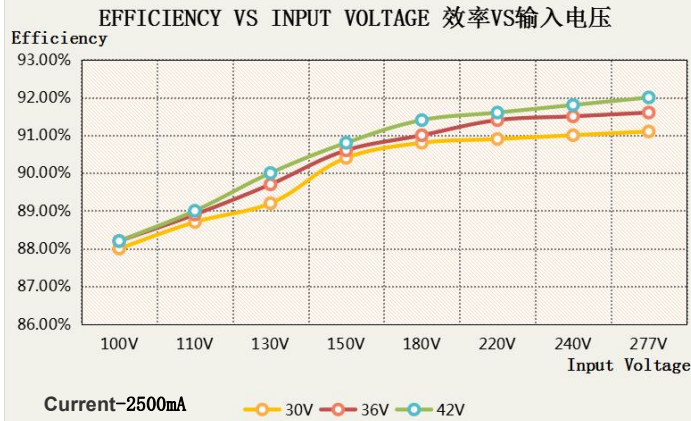
GEP-100-56



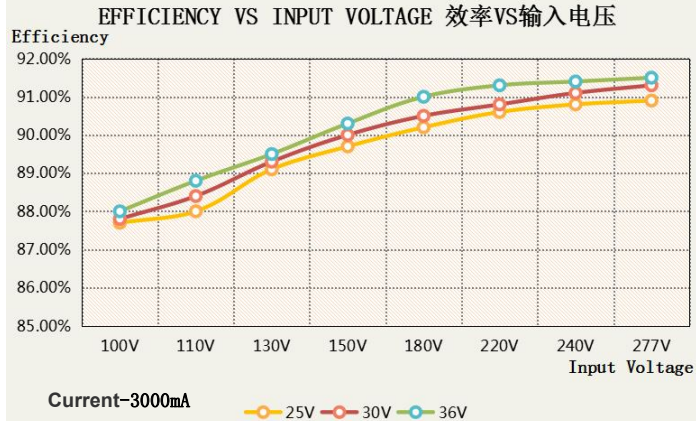
GEP-80-42



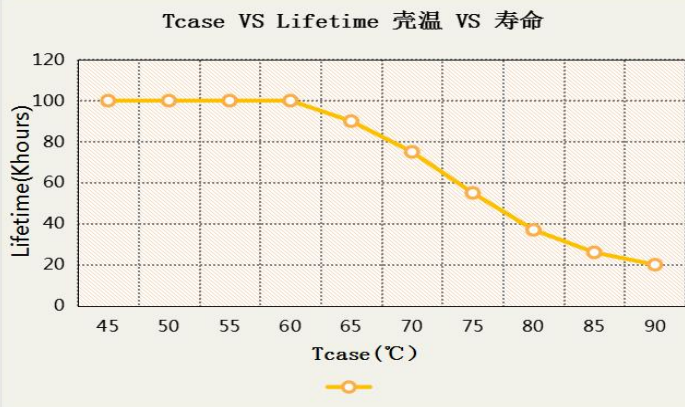
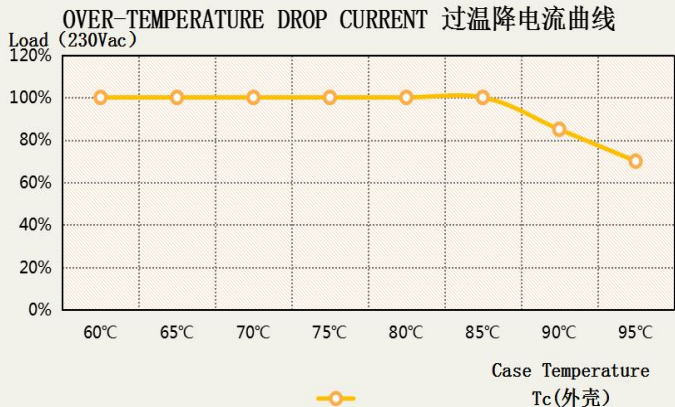
GEP-100-42



GEP-100-36



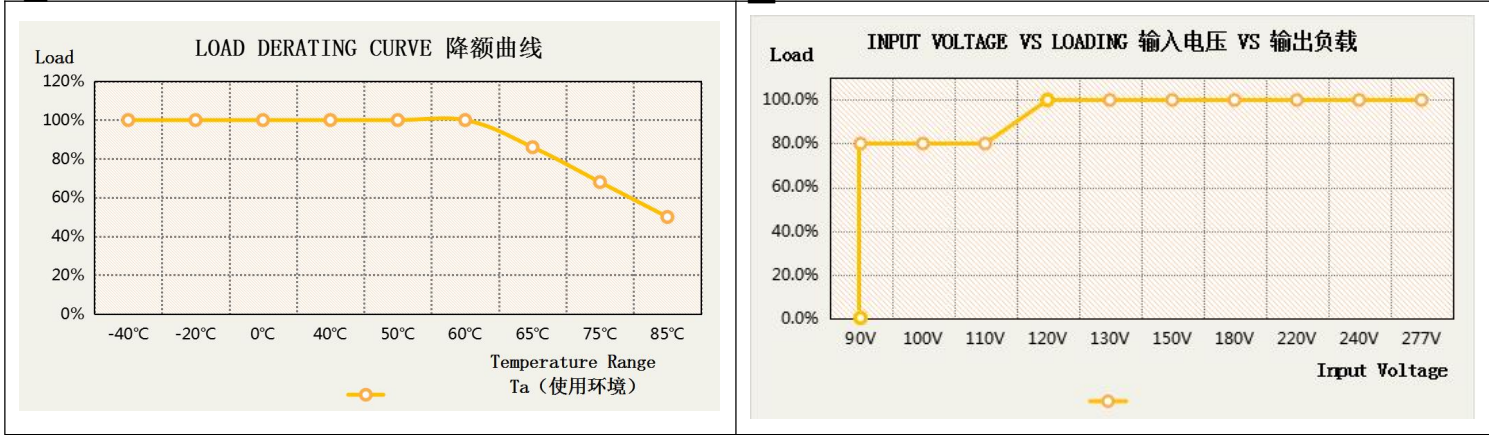
OVER-TEMPERATURE DROP CURRENT TCASE VS LIFETIME



SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2

LOAD DERATING CURVE

INPUT VOLTAGE VS LOADING



MECHANICAL SPECIFICATION & PACKING

Bare Plate Dimension	112*43*26mm(L*W*H)
Final Dimension	142*49*33mm(L*W*H)
Product Weight	440g

Case No: 100W Unit: mm

Top View Dimensions:
Overall Length: 142.0 ± 0.2 mm
Internal Length: 131.0 ± 0.2 mm
Wire Spacing: 4 * φ4.5 ± 0.2 mm
Wire Bundle Width (Left): 34.5 ± 0.2 mm
Wire Bundle Width (Right): 49.0 ± 0.2 mm

Wire Color Codes:
Left: 黄绿色 GND, 蓝色 N, 棕色 L
Right: 蓝色 V-, 棕色 V+

Side View Dimensions:
Overall Length: 340.0 ± 10 mm
Wire Bundle Width (Left): 50.0 ± 5 mm
Wire Bundle Width (Right): 50.0 ± 5 mm
Wire Spacing (Right): 3.5 ± 1 mm
Mounting Hole Spacing (Right): 33.0 ± 0.5 mm

SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2

■ Nameplate

Dimension: 84*31mm Style: sticker

GEP-100-36

SUNCOM GEP-100-36 (型号)LED控制装置			
INPUT 输入端 ☐ ACN(BU蓝) ☐ ACL(BN棕) ☒ (GN绿/YL黄)	Vin(输入):100-277V~1.3A 50/60Hz	Vout(输出):25-36V $\pm$ 3000mA $\pm$ 5%	OUTPUT 输出端 (BU蓝)Vo - ☐ (BN棕)Vo + ☐
	η : $\geq$ 89%	Max.Uout(最大电压): 55V $\pm$	
	PF: $\geq$ 0.95	Rated Power(额定功率):100W •tc	
	广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD		
MADE IN CHINA (中国制造)		ta:50°C@Vin100-200V~ ta:60°C@Vin200-277V~ tc:90°C	
IP65 SELV			

GEP-100-42

SUNCOM GEP-100-42 (型号)LED控制装置			
INPUT 输入端 ☐ ACN(BU蓝) ☐ ACL(BN棕) ☒ (GN绿/YL黄)	Vin(输入):100-277V~1.3A 50/60Hz	Vout(输出):30-42V $\pm$ 2500mA $\pm$ 5%	OUTPUT 输出端 (BU蓝)Vo - ☐ (BN棕)Vo + ☐
	η : $\geq$ 90%	Max.Uout(最大电压): 55V $\pm$	
	PF: $\geq$ 0.95	Rated Power(额定功率):100W •tc	
	广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD		
MADE IN CHINA (中国制造)		ta:50°C@Vin100-200V~ ta:60°C@Vin200-277V~ tc:90°C	
IP65 SELV			

GEP-100-54

SUNCOM GEP-100-54 (型号)LED控制装置			
INPUT 输入端 ☐ ACN(BU蓝) ☐ ACL(BN棕) ☒ (GN绿/YL黄)	Vin(输入):100-277V~1.3A 50/60Hz	Vout(输出):34-54V $\pm$ 1900mA $\pm$ 5%	OUTPUT 输出端 (BU蓝)Vo - ☐ (BN棕)Vo + ☐
	η : $\geq$ 91%	Max.Uout(最大电压): 70V $\pm$	
	PF: $\geq$ 0.95	Rated Power(额定功率):100W •tc	
	广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD		
MADE IN CHINA (中国制造)		ta:50°C@Vin100-200V~ ta:60°C@Vin200-277V~ tc:90°C	
IP65 SELV			

GEP-100-90

SUNCOM GEP-100-90 (型号)LED控制装置			
INPUT 输入端 ☐ ACN(BU蓝) ☐ ACL(BN棕) ☒ (GN绿/YL黄)	Vin(输入):100-277V~1.3A 50/60Hz	Vout(输出):54-90V $\pm$ 1100mA $\pm$ 5%	OUTPUT 输出端 (BU蓝)Vo - ☐ (BN棕)Vo + ☐
	η : $\geq$ 91%	Max.Uout(最大电压): 110V $\pm$	
	PF: $\geq$ 0.95	Rated Power(额定功率):100W •tc	
	广东新创电源科技有限公司 www.gdsuncom.com GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD		
MADE IN CHINA (中国制造)		ta:50°C@Vin100-200V~ ta:60°C@Vin200-277V~ tc:90°C	
IP65 SELV			

GEP-80-42

SUNCOM	Product Type	LED INTEGRATED SPECIAL DRIVER		
	Product Series	GEP-100-XX SERIES	REV	V2.2

SUNCOM

GEP-80-42

(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~1A 50/60Hz

Vout(输出):25-42V $\pm$ 2200mA $\pm$ 5%

η : $\geq$ 90%

Max.Uout(最大电压): 55V $\pm$

PF: $\geq$ 0.95

Rated Power(额定功率):80W $\bullet$ tc

广东新创电源科技有限公司 www.gdsuncom.com

GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD

tc:90°C

ta:50°C@Vin100-200V~

ta:60°C@Vin200-277V~

OUTPUT 输出端

(BU蓝)Vo - ○

(BN棕)Vo + ○

 IP65 SELV

GEP-79-90

SUNCOM

GEP-75-90

(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~1A 50/60Hz

Vout(输出):54-90V $\pm$ 790mA $\pm$ 5%

η : $\geq$ 91%

Max.Uout(最大电压): 110V $\pm$

PF: $\geq$ 0.95

Rated Power(额定功率):75W $\bullet$ tc

广东新创电源科技有限公司 www.gdsuncom.com

GUANGDONG SUNCOM POWER TECHNOLOGY CO., LTD

tc:90°C

ta:50°C@Vin100-200V~

ta:60°C@Vin200-277V~

OUTPUT 输出端

(BU蓝)Vo - ○

(BN棕)Vo + ○

 IP65 SELV