Constant Voltage LED Power Supply
SES36-12VL
SES36-24VL

Product description

The SES36 series is a constant voltage LED driver for indoor use with an input voltage range of 220–240Vac. It has up to 87% conversion efficiency, fanless design, and operates in the ambient temperature range of –20° C to +45° C. It also has high power factor, ultra–low total harmonic distortion, low standby power consumption, and a full range of protection features that not only greatly improve product reliability, but also ensure the product life cycle. This series of products are designed for LED lighting, designed for indoor and outdoor lighting applications. It is suitable for various applications in almost all indoor locations where LED luminaires can be installed.

Standards

EN61347-1
EN61347-2-13
EN61547
EN55015
EN61000-3-2
EN61000-3-3
EN62493

Characteristics

- European input voltage 220–240VAC
- IP20
- Suitable for dry indoor environment
- Short circuit / over load protection
- Plastic case
- Compliance to worldwide safety regulations for lighting
- Warranty: 5 years

www.snappy.cn

SNAPPY
KNOW HOW. NO LIMITS.

Specifications

Model		SES36-12VL	SES36-24VL
Output	turn on time(S)	<0.5	<0.5
	output power(W)	24	24
	output voltage(V)	12	24
	output voltage tolerance	≤±5%	≤±5%
	ripple voltage(mV)	< 3%	< 5%
	Line Regulation	1%	1%
	Load Regulation	2%	1%
	working current range(A)	0-3	0-1.5
	SVM	0.1	0.1
	Pst	0.1	0.1
Input	rated DC supply voltage(Vdc)	180-240	180-240
	rated supply voltage(Vac)	220-240	220-240
	voltage range(Vac)	198-264	198-264
	line frequency(Hz)	50/60	50/60
	input current(A)	0.25	0.25
	efficiency	86%@full load	87%@full load
	average efficiency(TYPE) 3	85%	86%
	no load power consumption(W)	≤0.5W	≤0.5W
	power factor	0.95@full load	0.95@full load
	Displacement factor	0.95	0.95
	THD(typ.)	5%	5%
	inrush current(Ipk)	30A/300uS	30A/300uS
	Leakage current	0.7@240Vac 60Hz	0.7@240Vac 60Hz
Protection	short circuit protection	hiccup mode, restart automatically after fault correction.	hiccup mode, restart automatically after fault correction.
	over load protection	hiccup mode, restart automatically after fault correction.	exceed maximum rated load times 1.1
	Over voltage protection	Yes(latch off)	Yes(latch off)
	surge capacity	L-N: 500V	L-N: 500V
	Withstand voltage	Input-Output：3000V/5mA/1min Input-gnd:1500V/5mA/1min	Input-Output：3000V/5mA/1min Input-gnd:1500V/5mA/1min
Ambient	Ta(C)	-20…45(see fig.2)	-20…45(see fig.2)
	Tc max.(C)	max.85	max.85
	Storage Temperature(C)	-30...80	-30...80

and Life	ambient humidity range	5%...85%RH, Not condensing	5%...85%RH, Not condensing
	nominal life-time(hrs)	50'000@Ta	50'000@Ta
Other	dimensions (L×W×H)(mm)	149*40.4*26.7	149*40.4*26.7
	weight(g)	180	180
	casing material	Plastic	Plastic
	housing colour	White	White
	type of protection	IP20	IP20
	protection class	class II	class II
	certificate		
Note	1.Tolerance:includes set up tolerance, line regulation and load regulation. 2.Tested at full load,230Vac.Refer to"Power Factor" and "EFFICIENT"curve graphs. 3.Calculate the model's average efficiency for each test voltage by testing at 100%, 75%, 50%, and 25% of rated current and then computing the simple arithmetic average of these four values. 4.All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature. 5.The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.		

Dimensions(mm)
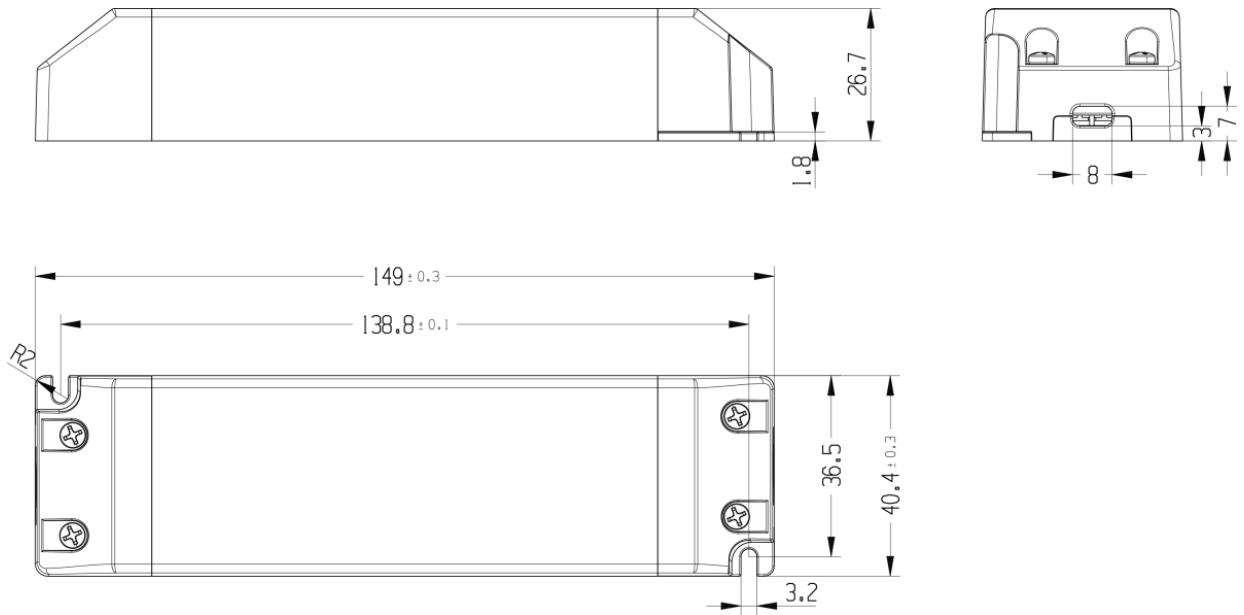
Wiring Diagram
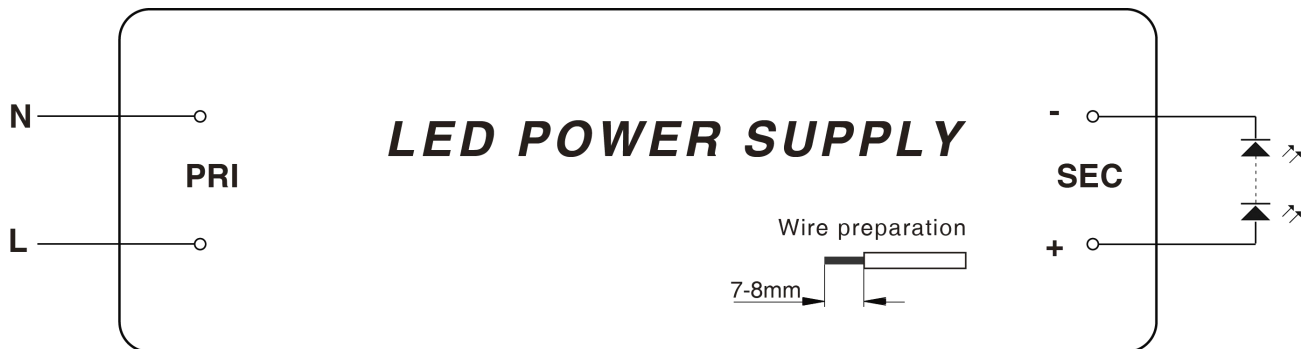
AC	Terminal, H03VVH2-F 2*0.75mm^2
DC	Terminal, H03VVH2-F 2*0.75mm^2

SNAPPY
KNOW HOW. NO LIMITS.

Electrical curves

Fig. 1 Output load-Temperature curve	Fig. 2 Static characteristic curve
Temperature Derating Curve	**Input Derating Curve**(Ta=25℃)
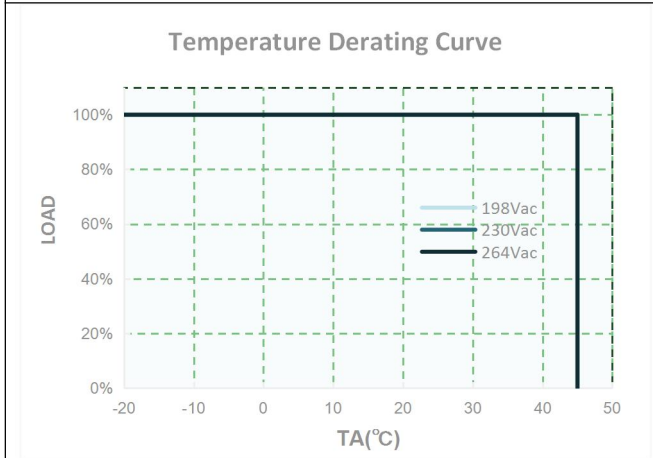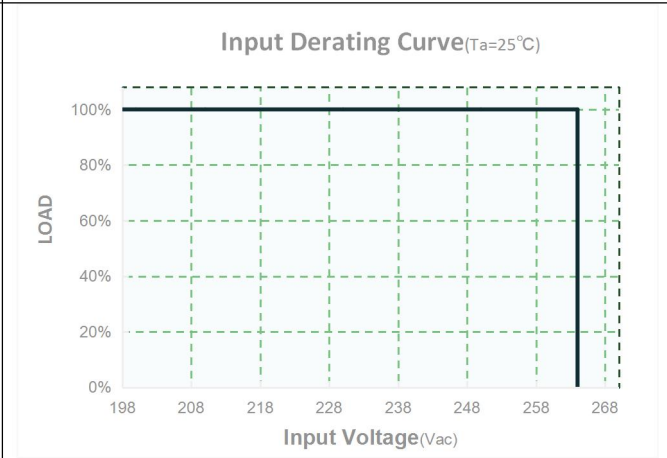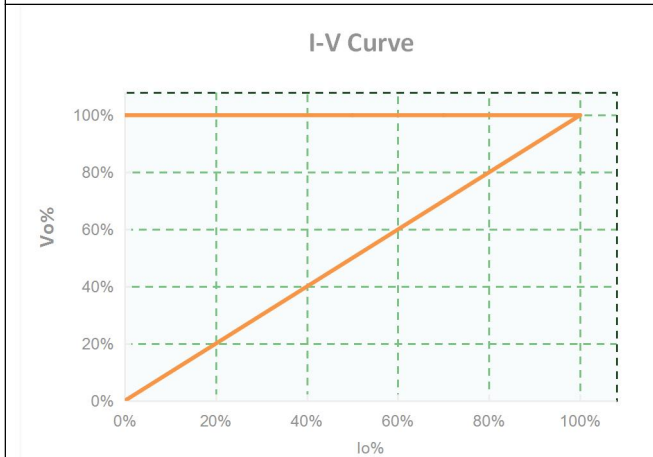
Fig. 3 I-V curve	Fig. 4 Power factor characteristic curve
I-V Curve	**PF Curve**
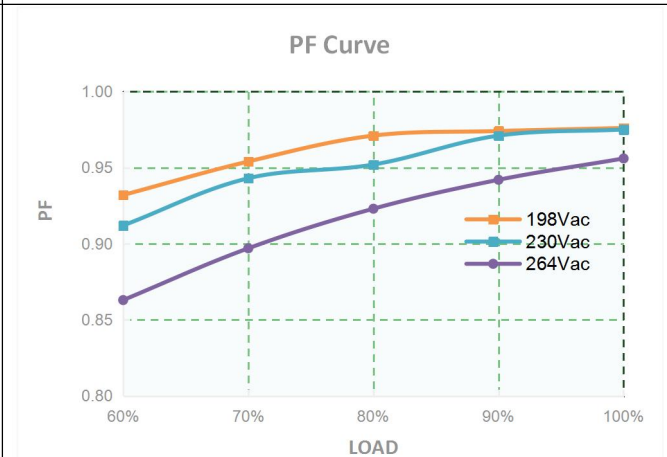
Fig.5 Total harmonic distortion curve（THD）	Fig.6 Efficiency-Load curve
THD Curve	**Efficiency Curve**
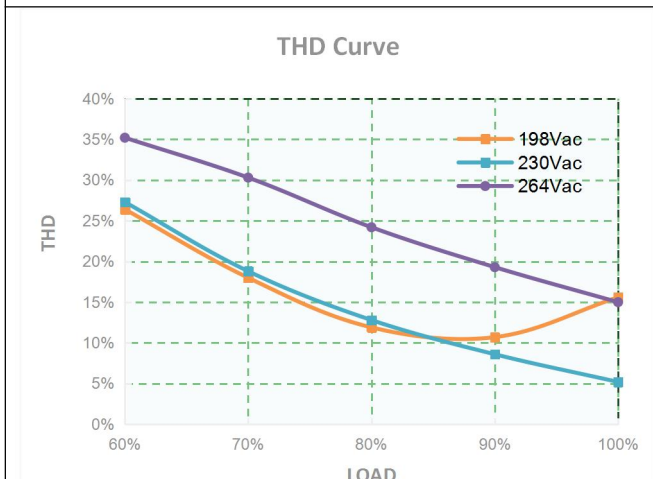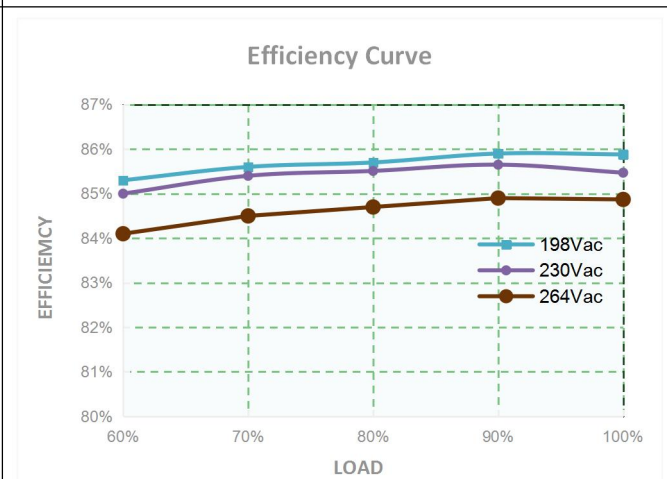
MCBS

MCBS / Model	B10	B13	B16	B20	C10	C13	C16	C20
SES36-12VL	20	26	32	40	16	20	25	32
SES36-24VL	20	26	32	40	16	20	25	32

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SES36-12VL			
SES36-24VL			

Revision history

Date	Rev.	Remark
2023.2.28	A1	Initial release.

SNAPPY
KNOW HOW. NO LIMITS.