

# Constant Voltage LED Power Supply

SNP200-12VL-1

SNP200-24VL-1

SNP200-48VL-1



## Product description

The SNP200 series is an indoor constant voltage LED driver power supply. Its input voltage range is 180-264Vac, with a conversion efficiency of up to 94%. It adopts a fanless design and works at -20°C ~ +45°C with natural cooling. The temperature range of the chassis, ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, and all-round protection functions not only greatly improve the reliability of the product, but also ensure the product life cycle. This series of products is designed for LED lighting design and used in indoor lighting. Suitable for various application environments in almost all indoor places where LED lamps can be installed. Complies with world lighting equipment safety regulations while ensuring the safety of users and lighting systems during installation.

## Standards

EN61347-1  
EN61347-2-13  
EN61547  
EN55015  
EN61000-3-2  
EN61000-3-3  
EN62384  
EN62493

## Characteristics

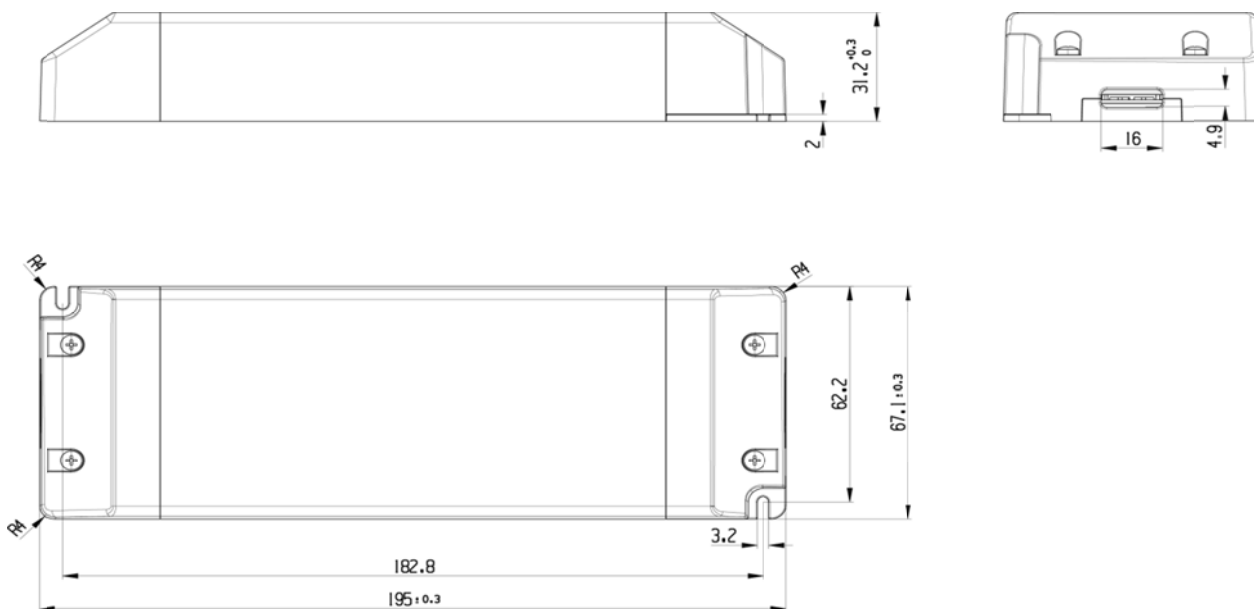
- European AC input range (180-264VAC)
- With active PFC function
- Waterproof rating IP20
- Suitable for indoor environments
- Protection type: short circuit/over temperature/over voltage protection
- plastic shell
- Comply with world lighting equipment safety regulations
- 5 years warranty

## Specifications

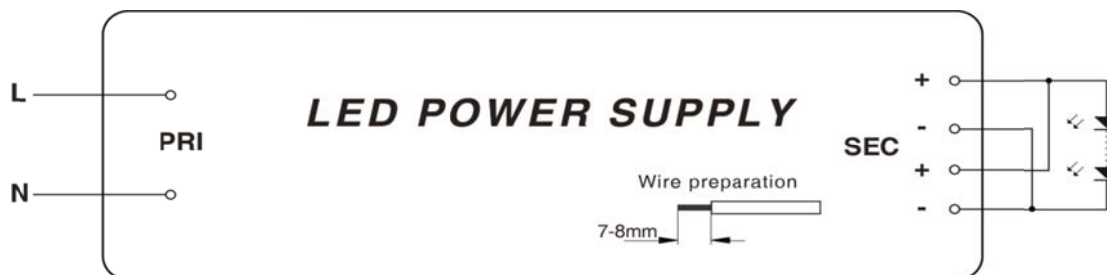
Model		SNP200-12VL-1	SNP200-24VL-1	SNP200-48VL-1	
Output	turn on time(S)	<0.5	<0.5	<0.5	
	output power(W)	180	200	200	
	output voltage(V)	12	24	48	
	output voltage tolerance	≤±5%	≤±5%	≤±5%	
	ripple voltage(mV)	240	480	960	
	Line Regulation	1%	1%	1%	
	Load Regulation	1%	1%	1%	
	working current range(A)	15MAX	8.33MAX	4.16MAX	
	SVM	0.4			
	Pst	1.0			
	dimming type	NA			
	dimming range	NA			
	rated DC supply voltage(Vdc)	NA			
	Input	rated supply voltage(Vac)	200-240		
voltage range(Vac)		180-264			
line frequency(Hz)		50/60			
input current(A)		1.2			
efficiency (TYPE)		93%@full load	94%@full load	93%@full load	
average efficiency(TYPE) 3		91.5%	92.5%	91.5%	
no load power consumption(W)		≤0.5W			
power factor		0.95@full load			
Displacement factor		0.95			
THD(typ.) THD (Type)		15%			
inrush current(Ipk) (Ipk)		65A/500uS			
Leakage current (mA)		0.7@240Vac 60Hz			
Protection		short circuit protection	hiccup mode, restart automatically after fault correction.		
		over load protection	hiccup mode, restart automatically after fault correction.		
	Over voltage protection	Yes(latch off)			
	Over temperature protection	Yes(latch off)			
	surge capacity	L-N: 1KV			
	Withstand voltage	Input-Output: 3000V/5mA/1min			
Ta(C)	-20...45				

<b>Ambient and Life</b>	Tc max.(C)	max.90
	Storage Temperature(C)	-30...80
	ambient humidity range	5%...85%RH, Not condensing
	nominal life-time(hrs)	50'000@Ta
<b>Other</b>	dimensions (L×W×H)(mm)	195mm * 67.1mm * 31.2mm
	weight(g)	520
	casing material	plastics
	housing colour	White
	type of protection	IP20
	protection class	class II
	certificate	
<b>Note</b>	<p>1.Tolerance:includes set up tolerance, line regulation and load regulation.</p> <p>2.Tested at full load,230Vac.Refer to"Power Factor" and "EFFICIENT"curve graphs.</p> <p>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.</p> <p>4.All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature.</p> <p>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.</p>	

## Dimensions(mm)



## Wiring Diagram



AC	H03VVH2-F 2*0.75mm <sup>2</sup>
DC	H05VVH2-F 2*1.0mm <sup>2</sup> *2 (12/24V) /H05VVH2-F 2*1.0mm <sup>2</sup> (48V)

## Electrical curves

Fig. 1 Output load-Temperature curve

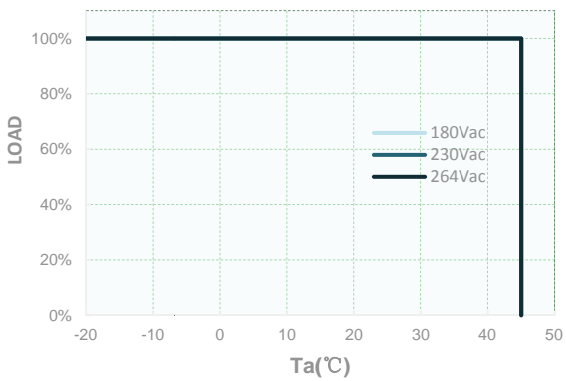


Fig. 2 Static characteristic curve

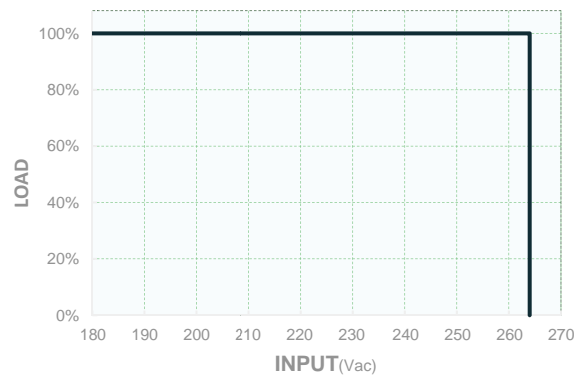


Fig. 3 I-V curve

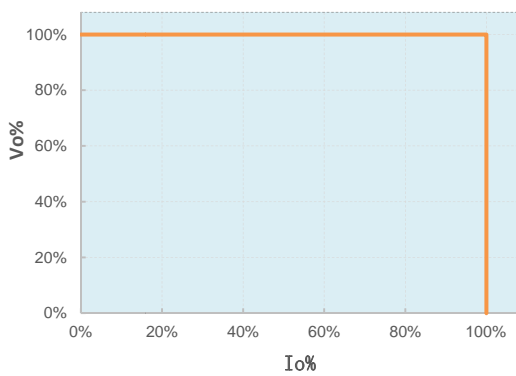


Fig. 4 Power factor characteristic curve

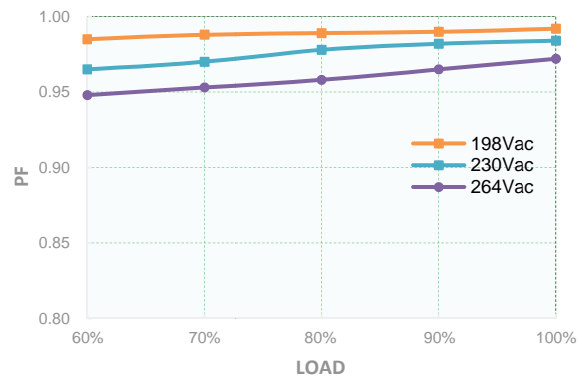
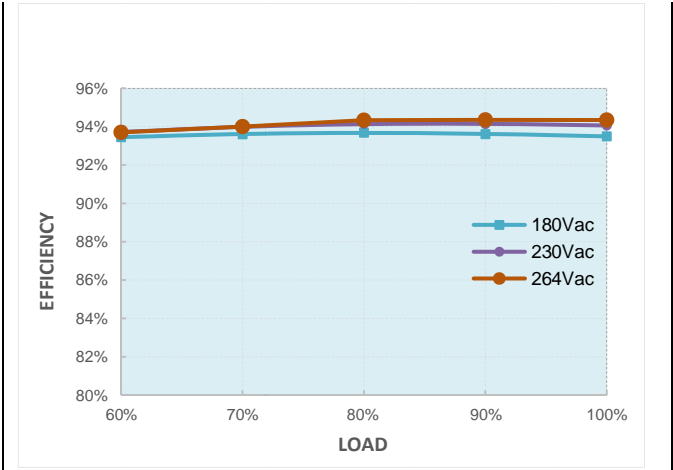
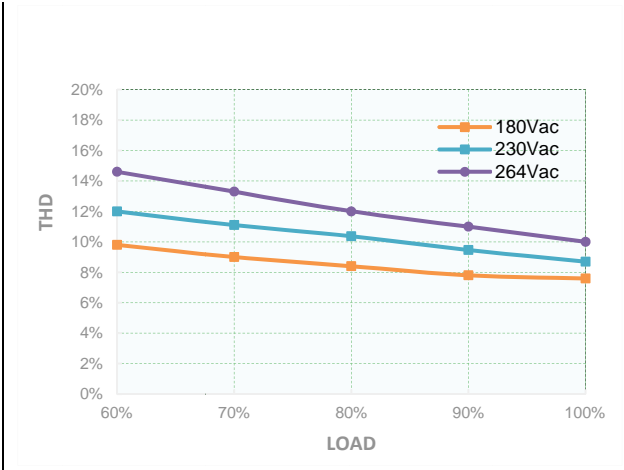


Fig.5 Total harmonic distortion curve (THD)

Fig.6 Efficiency-Load curve



MCBS

MCBS Model	B10	B13	B16	B20	C10	C13	C16	C20
SNP200-XXVL-1	2	3	4	5	3	4	5	6

## Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SNP200-XXVL-1			

## Revision history

Date	Rev.	Remark
2023.8.20	A2	release