

Constant Voltage LED Power Supply

SNP250-12VL-1

SNP250-24VL-1

SNP250-48VL-1



Product description

SNP250 is an indoor constant voltage LED driver, with an input voltage range of 180-264Vac and a maximum conversion efficiency of up to 94%. It adopts fanless design and operates in the temperature range of -20 ° C to +45 ° C natural cooling and cooling casing, and has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, and comprehensive protection functions. It not only greatly improves product reliability, but also ensures product life cycle. This series of products is designed for LED lighting design and applied to indoor lighting. It is suitable for various application environments in almost all indoor places where LED luminaires can be installed. Comply with the world's lighting safety regulations, and at the same time ensure 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

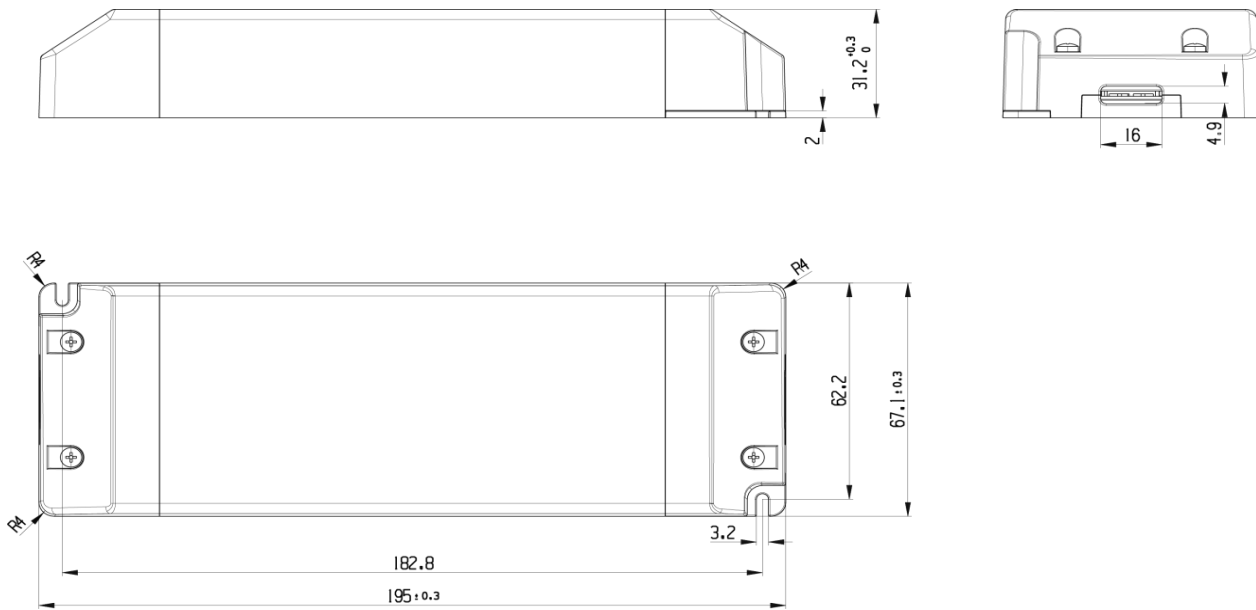
- European AC input (180-264VAC)
- With active PFC function
- IP20
- Suitable for dry indoor environment
- Protections: Short circuit / Over voltage / Over temperature
- Plastic case
- Compliance to worldwide safety regulations for lighting
- 5 years warranty

Specifications

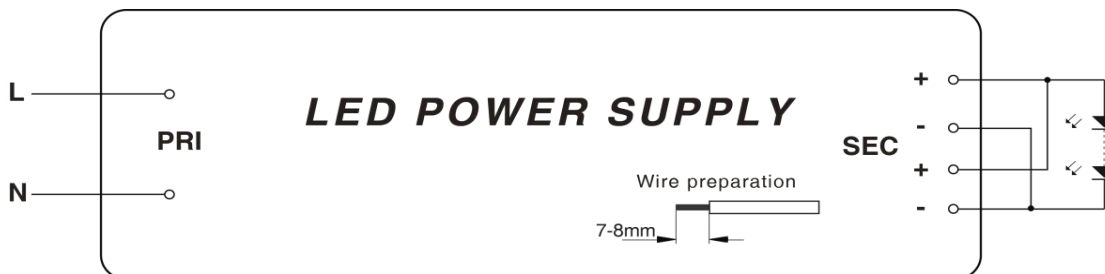
Model		SNP250-12VL-1	SNP250-24VL-1	SNP250-48VL-1
Output	turn on time(S)	<0.5	<0.5	<0.5
	output power(W)	216	250	240
	output voltage(V)	12	24	48
	output voltage tolerance	≤±5%	≤±5%	≤±5%
	ripple voltage(mV)	240	480	960
	Line Regulation	1%	1%	1%
	Load Regulation	1%	1%	1%
	working current range(A)	18MAX	10.4MAX	5MAX
	SVM	0.4		
	Pst	1.0		
	dimming type	NA		
	dimming range	NA		
	Input	rated DC supply voltage(Vdc)	NA	
rated supply voltage(Vac)		200-240		
voltage range(Vac)		180-264		
line frequency(Hz)		50/60		
input current(A)		1.4		
efficiency		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.)		15%		
inrush current(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		

Ambient and Life	Ta(C)	-20...45
	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
Other	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	
Note	<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	terminal + H03VVH2-F 2*0.75mm ²
DC	terminal + H05VVH2-F 2*1.0mm ² *2 (12/24V) /H05VVH2-F 2*1.0mm ² (48V)

Electrical curves

Fig. 1 Output load-Temperature curve

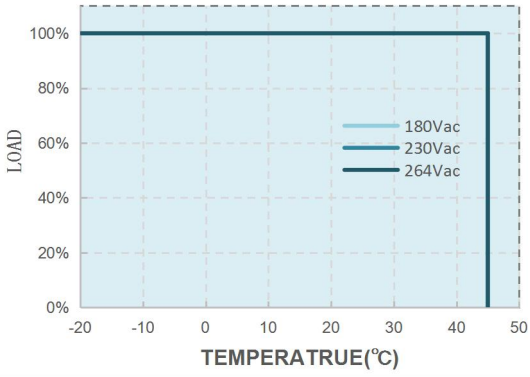


Fig. 2 Static characteristic curve

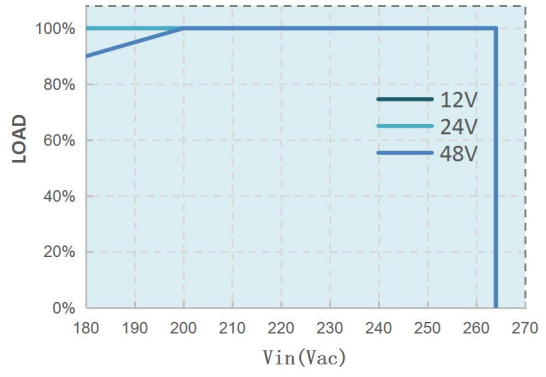


Fig. 3 I-V curve

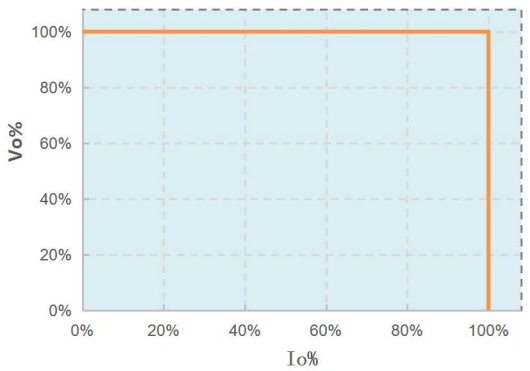


Fig. 4 Power factor characteristic curve

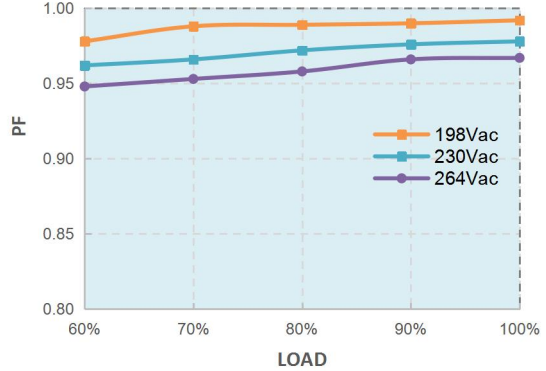


Fig.5 Total harmonic distortion curve (THD)

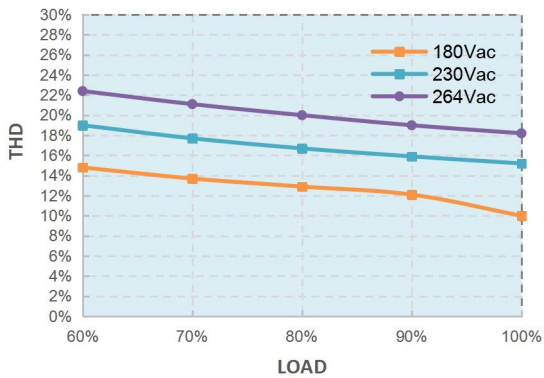
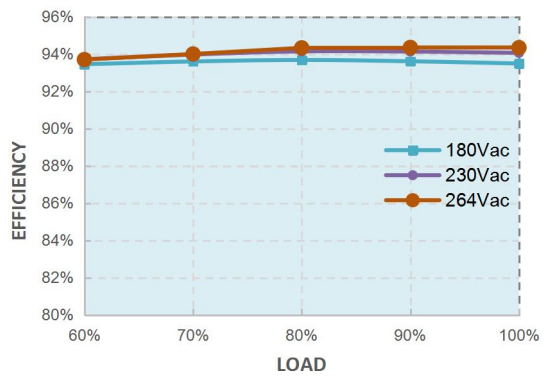


Fig.6 Efficiency-Load curve



MCBS

MCBS Model	B10	B13	B16	B20	C10	C13	C16	C20
SNP250-XXVL-1	2	3	4	5	3	4	5	6

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SNP250-XXVL-1			

Revision history

Date	Rev.	Remark
2023.8.20	A2	Initial release.
2023.8.30	A3	Add 48V