

Constant Voltage LED Power Supply

SNP320-12VL-1 SNP320-24VL-1 SNP320-48VL-1



Product description

SNP320 series is an indoor constant voltage LED driver with an input voltage range of 198-264Vac, whose efficiency is up to 94%, it's working in the temperature range of - 20 ° C to + 45° C under free air convection. It has a high power factor, ultra-low total harmonic distortion, low standby power consumption, lightning protection and other comprehensive protection functions, which not only greatly improves the reliability of the product, but also guarantees the product life cycle. This series is designed for LED lighting and is used in indoor lighting applications. They are suitable for a wide range of applications in almost all kinds of environments where LED luminaires can be installed. The product designed completely in accordance with world's lighting equipment safety regulations to ensure the safety of both user and luminaire system during installation.

Standards

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

Characteristics

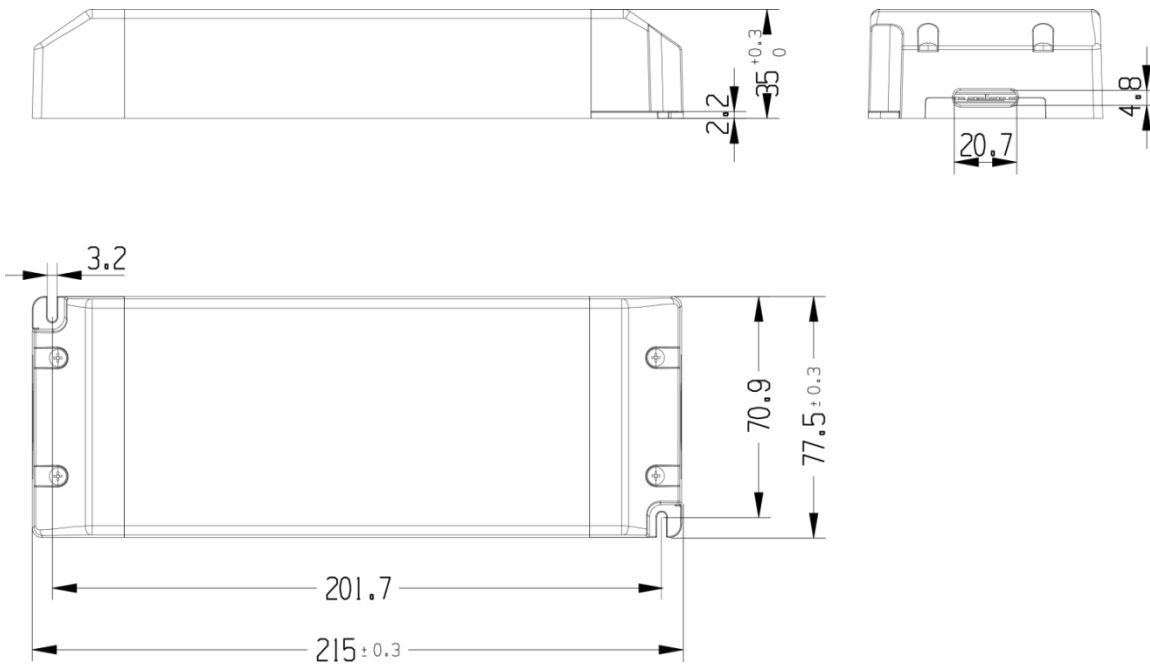
- European AC input / (198-264VAC)
- Built-in active PFC function.
- Waterproof IP20
- Suitable for indoor environment
- Protections: Short circuit / Over temperature / Over voltage.
- Adopt plastic case and internal glue potting.
- Compliance to worldwide safety regulations for lighting
- Warranty 5 years

Specifications

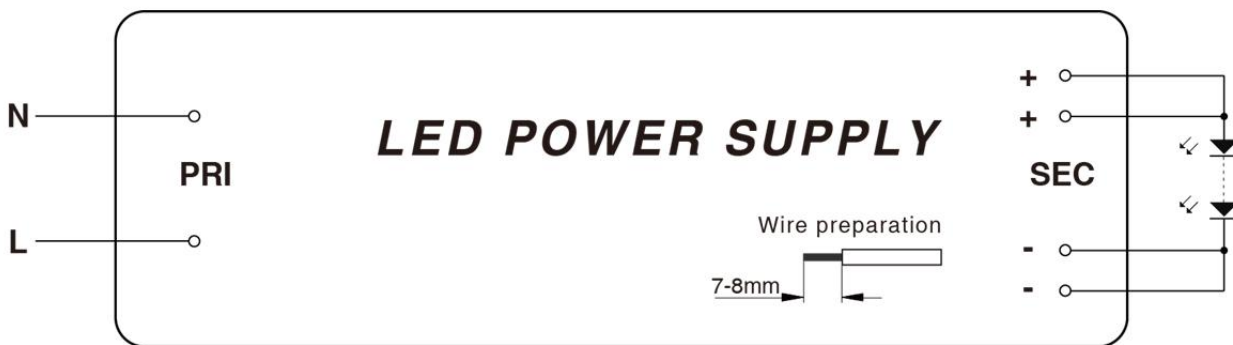
Model		SNP320-12VL-1	SNP320-24VL-1	SNP320-48VL-1	
Output	turn on time(S)	<0.5	<0.5	<0.5	
	output power(W)	260	320	320	
	output voltage(V)	12	24	48	
	output voltage tolerance	≤±5%	≤±5%	≤±5%	
	ripple voltage(mV)	240	480	960	
	Line Regulation	1%	1%	1%	
	Load Regulation	1%	1%	1%	
	working current range(A)	21.7MAX	13.3MAX	6.67MAX	
	SVM		0.4		
	Pst		1.0		
	dimming type		NA		
dimming range		NA			
Input	rated DC supply voltage(Vdc)		NA		
	rated supply voltage(Vac)		220-240		
	voltage range(Vac)		198-264		
	line frequency(Hz)		50/60		
	input current(A)		1.7		
	efficiency	93.5%@full load	94.5%@full load	94.5%@full load	
	average efficiency 3	92.5%	93.5%	93.5%	
	no load power consumption(W)		≤0.5W		
	power factor		0.95@full load		
	Displacement factor		0.95		
	THD(typ.) THD		10%		
	inrush current(Ipk) (Ipk)		92A/470uS		
	Leakage current		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.85	
	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)	215*77.5*35	
	weight(g)	800	
	casing material	plastics	
	housing colour	White Color	
	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



Note:

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

Electrical curves

Fig. 1 Output load-Temperature curve

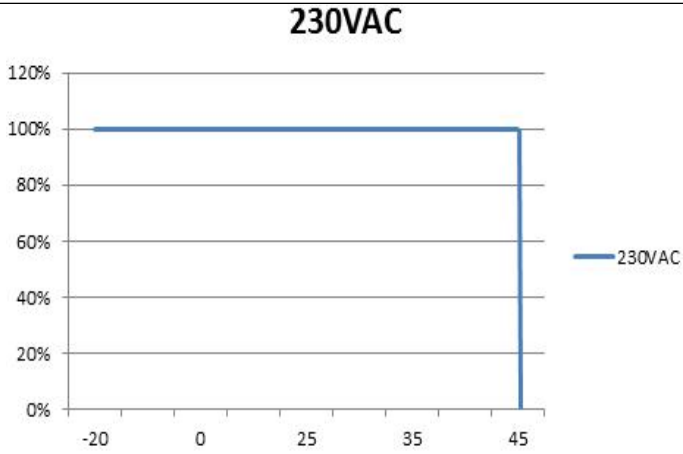


Fig. 2 Static characteristic curve



Fig. 3 I-V curve

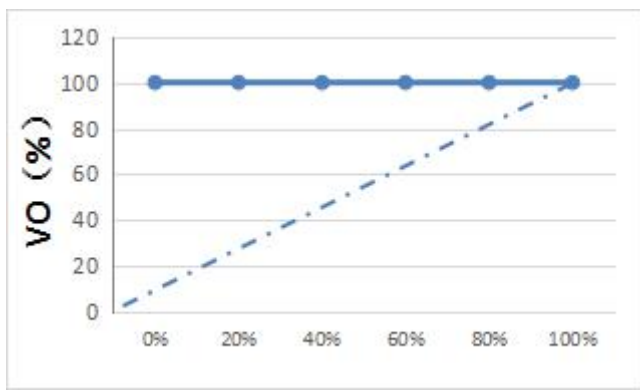


Fig. 4 Power factor characteristic curve

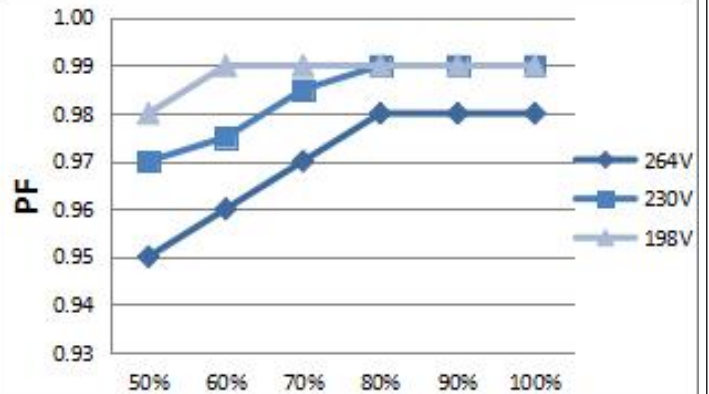


Fig.5 Total harmonic distortion curve (THD)

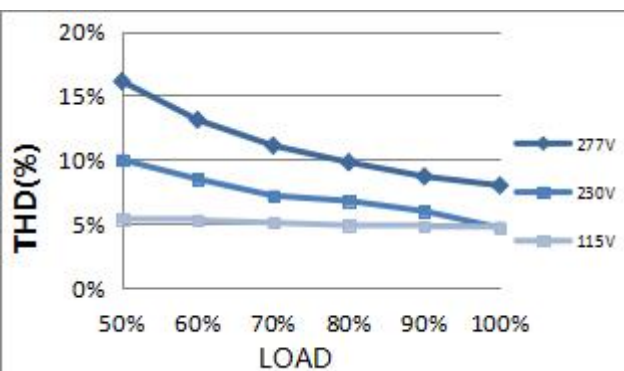
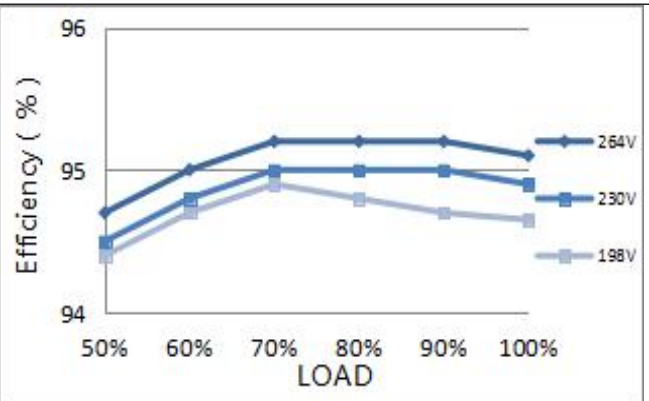


Fig.6 Efficiency-Load curve



MCBS

Model \ MCBS	B10	B13	B16	B20	C10	C13	C16	C20
SNP320-XXVL-1	2	3	4	5	3	4	5	6

Package

Model	Carton quantity(pcs)	Carton dimension(cm)	G.W./CTN(kg)
SNP320-XXVL-1			

Revision history

Date	Rev.	Remark
2023.7.7	A2	Initial release.