Constant Voltage LED Power Supply

SL320-24VF
SL320-48VF



Product description

SL320 is an indoor constant voltage power supply. Its input voltage range is 198-264Vac , with the high efficiency up to 96%, fanless design, working in the temperature range of -20 ° C to + 45° C under free air convection. It has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, with all-round protection functions which not only greatly improves the reliability of the product, but also ensures the life cycle of product. This series for LED Lighting design, applied to indoor lighting design. Suitable for almost any indoor location where LED Lighting can be installed in a variety of applications. Comply with the world lighting equipment safety specifications, at the same time to ensure the safety of users and lighting system in the installation process.

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
- IP20
- Suitable for dry indoor environment
- Protections: Short circuit / Over voltage / Over temperature/Over load
- Adopt plastic case
- Compliance to worldwide safety regulations for lighting
- 5 years warranty

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Specifications

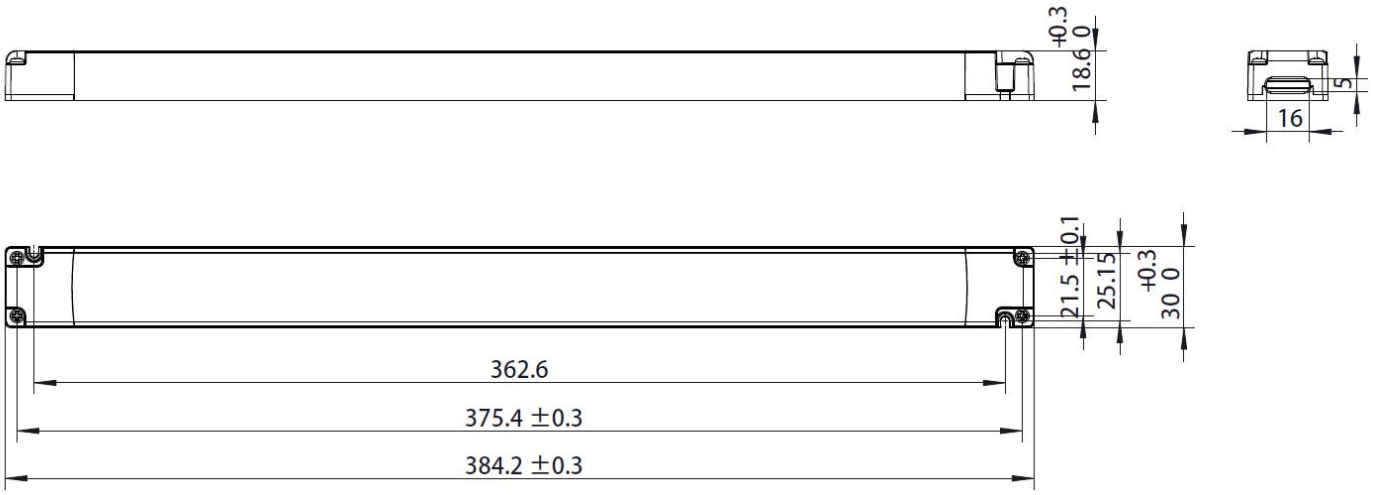
Model		SL320-24VF	SL320-48VF
Output	turn on time(S)	＜0.5	＜0.5
	output power(W)	300	320
	output voltage(V)	24	48
	output voltage tolerance	≤±5%	≤±5%
	ripple voltage(mV)	240	480
	Line Regulation	1%	1%
	Load Regulation	1%	1%
	working current range(A)	0-12.5	0-6.67
	SVM	＜0.4	
	Pst	＜1.0	
	dimming type	NA	
	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)	1.6	1.6
	efficiency (TYPE)	95.5%@full load	95.5%@full load
	average efficiency(TYPE) 3	94.5%	95%
	no load power consumption(W)	≤0.5W	
	power factor	0.95@full load	
	Displacement factor	0.95	
	THD(typ.) THD	6%	
	inrush current(Ipk)	95A/520uS	
	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	hiccup mode, restart automatically after fault correction.	
	Over temperature protection	hiccup mode, restart automatically after fault correction.	
	surge capacity	L-N: 1KV	
	Withstand voltage	Input-Output：3000V/5mA/1min	
	Ta(℃)	-20…45	
	Tc max.(℃)	max.90	

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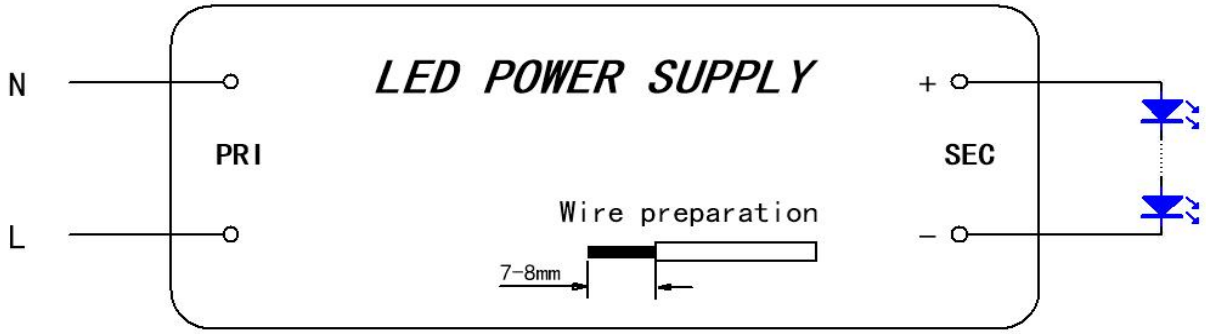
Ambient and Life	Storage Temperature(℃)	-30...80
	ambient humidity range	5%...85%RH, Not condensing
	nominal life-time(hrs)	50'000@Ta35℃
Other	dimensions (L×W×H)(mm)	384.2x30x18.6
	weight(g)	380
	casing material	plastics
	housing colour	White
	type of protection	IP20
	protection class	class Ⅱ
	certificate	
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.	

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Dimensions(mm)



Wiring Diagram



AC	Terminal + H03VVH2-F 2*0.75mm^2
DC	Terminal + H05VVH2-F 2*1.0mm^2*2（24V）H05VVH2-F 2*1.0mm^2(48V)

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Electrical curves

Fig. 1 Output load-Temperature curve

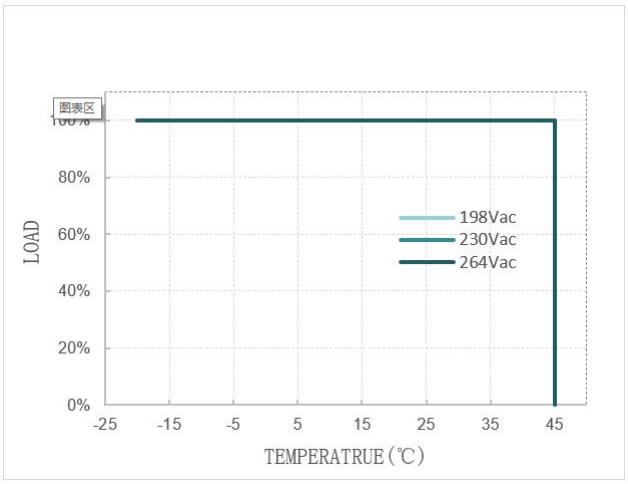


Fig. 2 Static characteristic curve

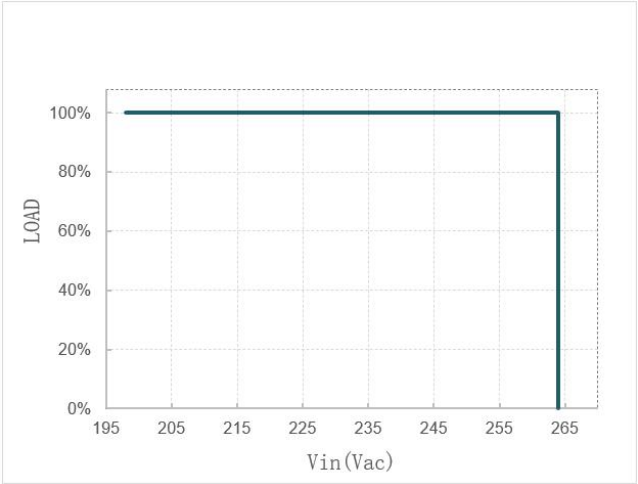


Fig. 3 I-V curve

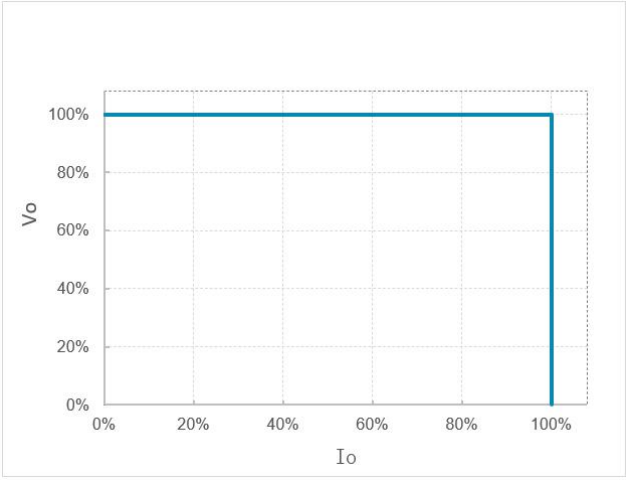


Fig. 4 Power factor characteristic curve

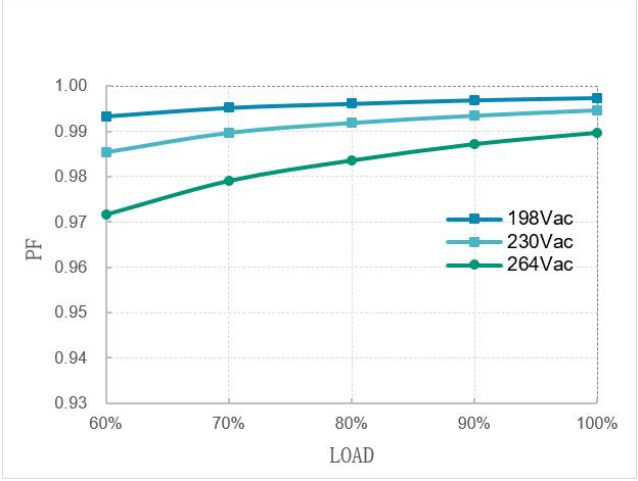


Fig.5 Total harmonic distortion curve（THD）

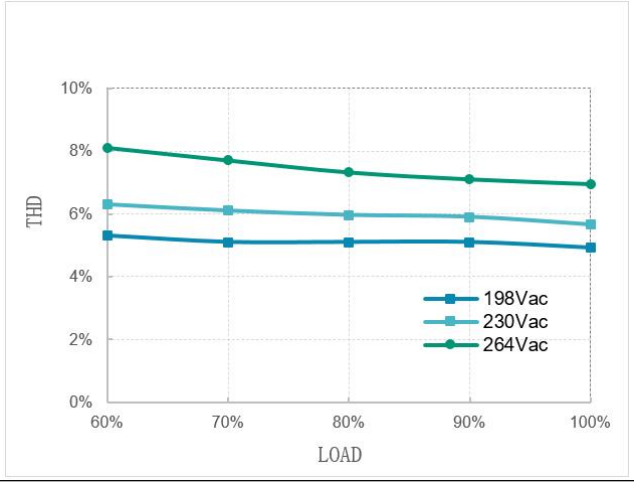
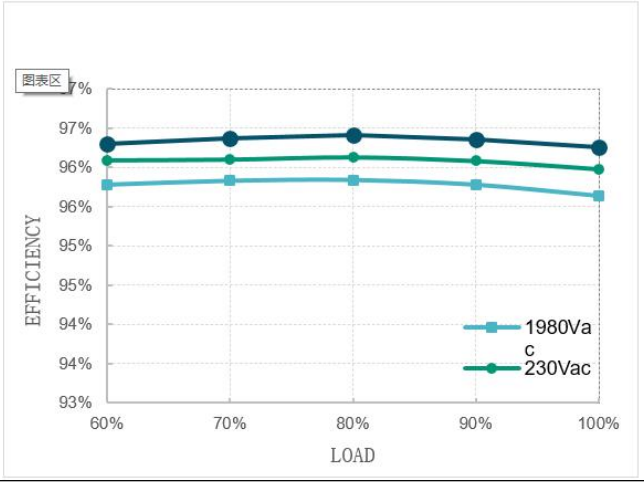


Fig.6 Efficiency-Load curve



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MCBS

MCBS / Model	B10	B13	B16	B20	C10	C13	C16	C20
SL320-24/48VF	3	4	5	6	4	5	6	7

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SL320-24/48VF			

Revision history

Date	Rev.	Remark
202.12.9	A0	Initial release