

Constant Voltage LED Power Supply

SPF24-12VSP SPF24--24VSP



Product description

SPF24 is a constant voltage IP67 LED driver with an input voltage range of 220-240Vac and a conversion efficiency up to 86%. It works in the temperature range of -20 ° C ~ +45 ° C natural cooling radiator housing, and has ultra-high power factor, ultra-low Total harmonic distortion, low standby power consumption, and all-round protection functions, which not only greatly improves the reliability of the product, but also ensures the Product lifecycle. Comply with global lighting safety regulations, ensuring the safety of both users and lighting systems during installation.

Standards

EN61347-1
EN61347-2-13
AS/NZS 61347.2.13
EN55015
EN61000-3-2
EN62493

Characteristics

- AC input range (220-240VAC)
- With active PFC function
- Waterproof IP67
- Suitable for indoor environments
- Protection type: short circuit/overvoltage protection
- Using plastic shell, internal potting
- Conforms to world lighting safety regulations
- Warranty 5 years

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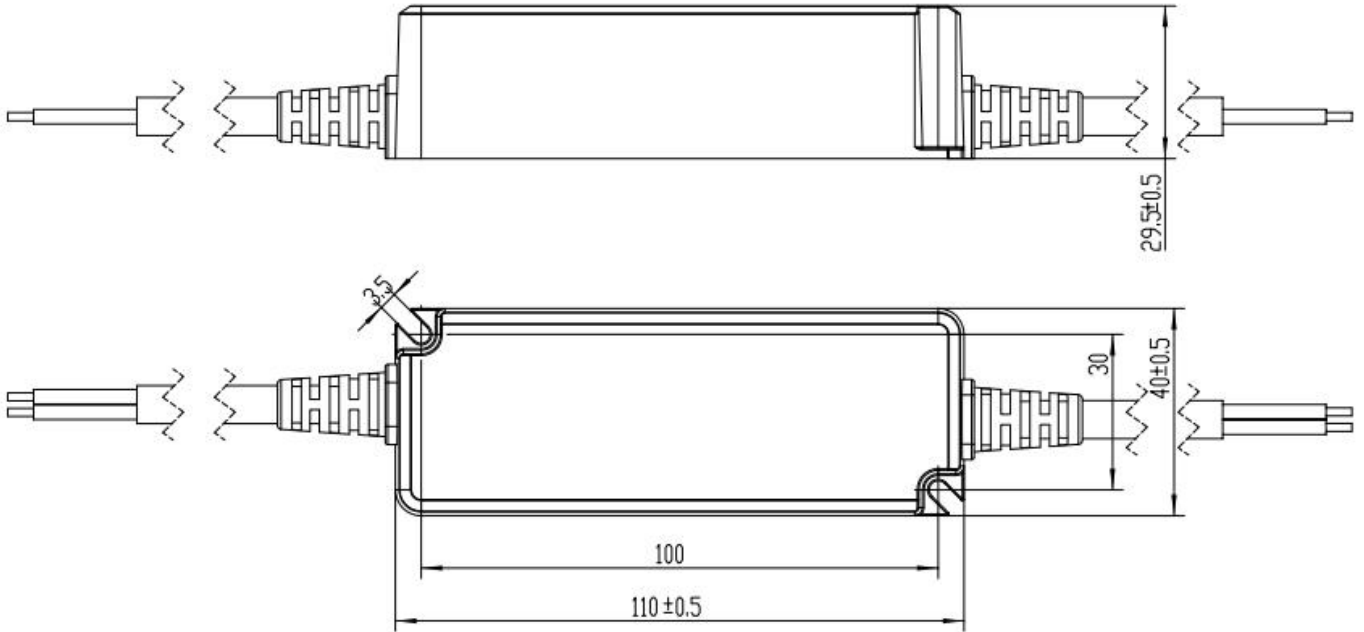
Specifications

Model		SPF24-24VSP	SPF24-12VSP		
Output	turn on time(S)	<0.5	<0.5		
	output power(W)	24	24		
	output voltage(V)	24	12		
	output voltage tolerance	±5%	±5%		
	ripple voltage(mV)	135	135		
	Line Regulation	±3%	±3%		
	Load Regulation	±3%	±3%		
	working current range(A)	0-1	0-2		
	SVM	SVM≤0.4	SVM≤0.4		
	Pst	Pst LM≤1	Pst LM≤1		
	dimming type	N/A	N/A		
	dimming range	N/A	N/A		
	Input	rated DC supply voltage(Vdc)	--	--	
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)		0.126/230V	0.126/230V		
efficiency		≥86%@full load	≥86%@full load		
average efficiency 3		≥86%	≥86%		
no load power consumption(W)		≤0.5W	≤0.5W		
power factor		0.95@full load	0.95@full load		
THD(typ.)		10%	10%		
inrush current(Ipk)		25.7A/306uS	25.7A/306uS		
Leakage current	--	--			
Protection	short circuit protection	hiccup mode, restart automatically after fault correction.	hiccup mode, restart automatically after fault correction.		
	over load protection	exceed maximum rated load times 1.2	exceed maximum rated load times 1.2		
	Over voltage protection	N/A	N/A		
	Over temperature protection	N/A	N/A		
	surge capacity	L-N: 500V	M-N: 500V		

	Withstand voltage	Input-Output: 3750V/5mA/1min	Input-Output: 3750V/5mA/1min		
Ambient and Life	Ta(C)	-20...45	-20...45		
	Tc max.(C)	max.90	max.90		
	Storage Temperature(C)	-30...80	-30...80		
	ambient humidity range	5%...85%RH, Not condensing	5%...85%RH, Not condensing		
	nominal life-time(hrs)	30'000@Ta	30'000@Ta		
Other	dimensions (L×W×H)(mm)	110*40*29.5	110*40*29.5		
	weight(g)	266G	266G		
	casing material	Plastic	Plastic		
	housing colour	White	White		
	type of protection	IP67	IP67		
	protection class	class II	class II		
	certificate				
Note	<p>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.</p>				

Dimensions(mm)

Remark:	
AC	H05RN-F 2*1.0mm ² VDE
DC	SVT 18AWG*2C 105°C 300V



Electrical curves

Fig. 1 Output load-Temperature curve

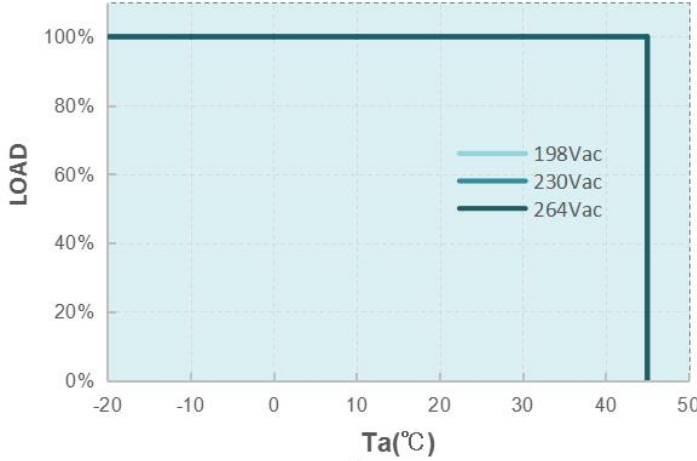


Fig. 2 Static characteristic curve

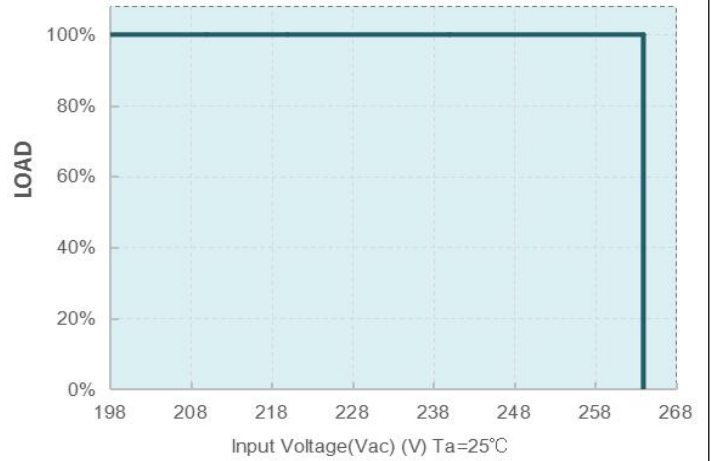


Fig. 3 I-V curve

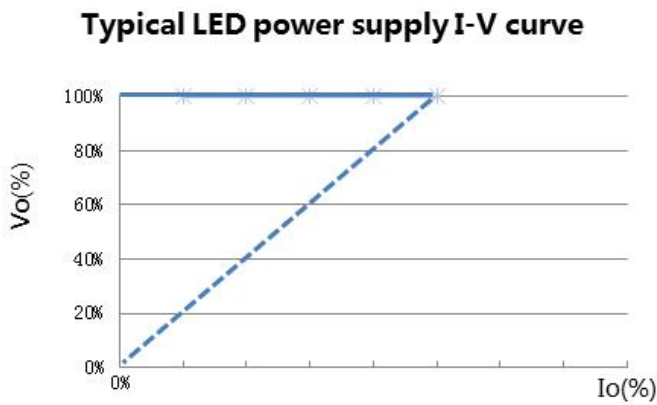


Fig. 4 Power factor characteristic curve

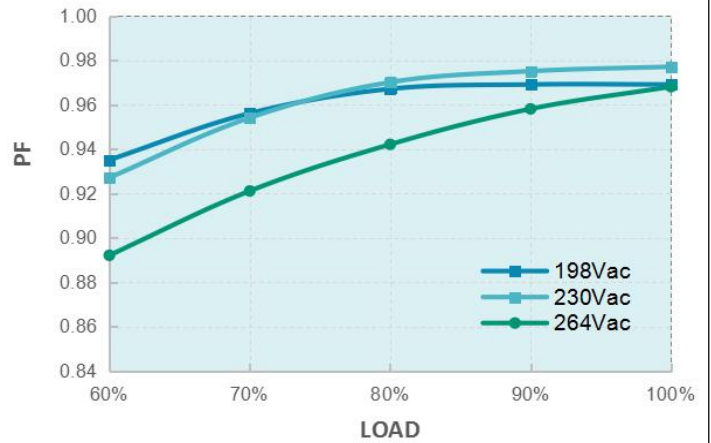


Fig.5 Total harmonic distortion curve (THD)

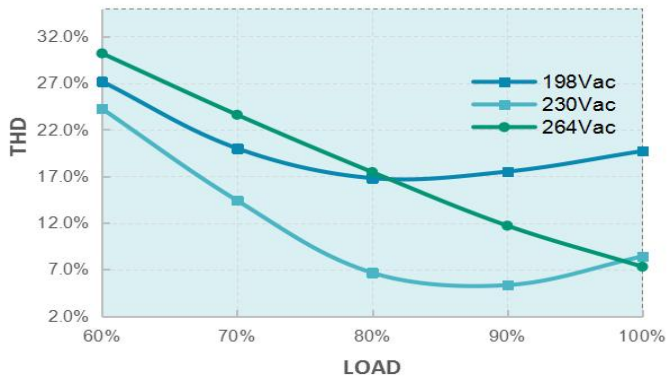
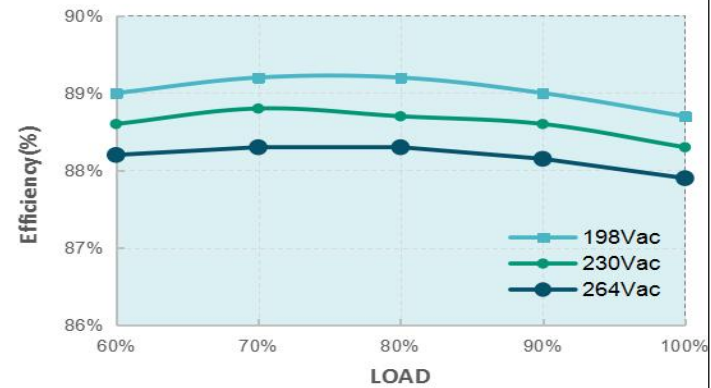


Fig.6 Efficiency-Load curve



MCBS

MCBS Model	B10	B13	B16	B20	C10	C13	C16	C20
SPF24-12VSP	21	28	34	43	36	47	58	72
SPF24-24VSP	26	34	42	53	44	58	71	88

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SPF24-12VSP			
SPF24-24VSP			

Revision history

Date	Rev.	Remark
2023.1.16	V0.01	Initial release.