

Constant Voltage LED Power Supply

SPF35-12VSP SPF35-24VSP



Product description

SPF35 series is a constant voltage IP67 LED driver with a rated input voltage range of 220-240Vac and a conversion efficiency up to 86%. High power factor, low standby power consumption, and comprehensive protection functions not only greatly improve product reliability, but also ensure 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 equipment safety regulations, and at the same time ensure the safety of users and lighting systems during installation.



Standards

EN61347-1:2015
EN 61347-2-13:2014+A1
EN62493:2015
AS/NZS 61347.2.13
EN 61347-2-13:2014 +A1
EN61347-1:2015

Characteristics

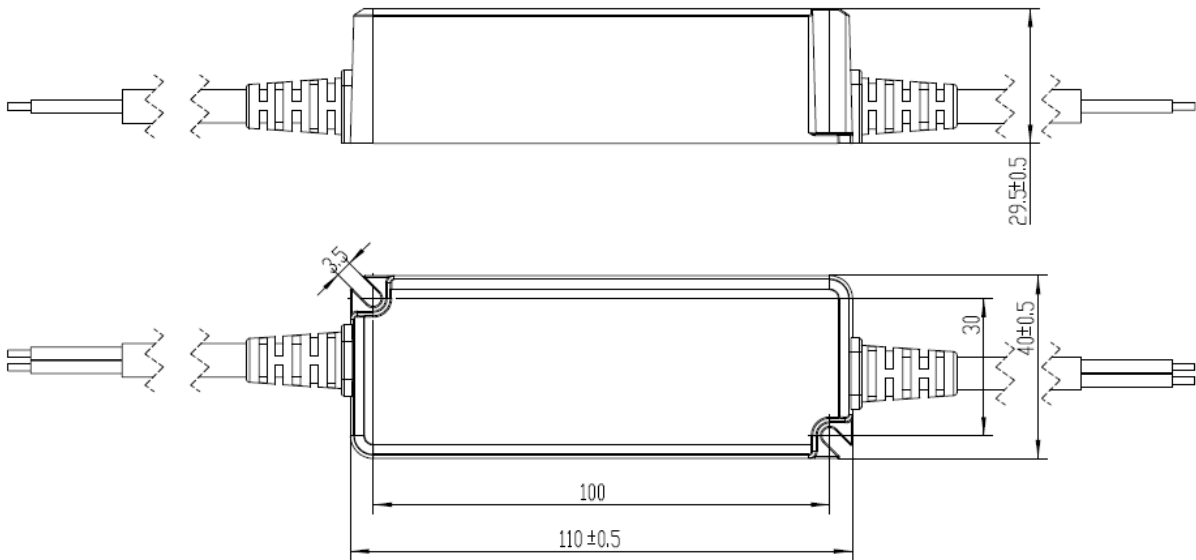
- AC input voltage (220-240VAC)
- Waterproof IP67
- Suitable for indoor environments
- Protection type: short circuit/overload/open circuit protection
- Plastic case
- Conforms to world lighting safety regulations
- 5 years warranty

Specifications

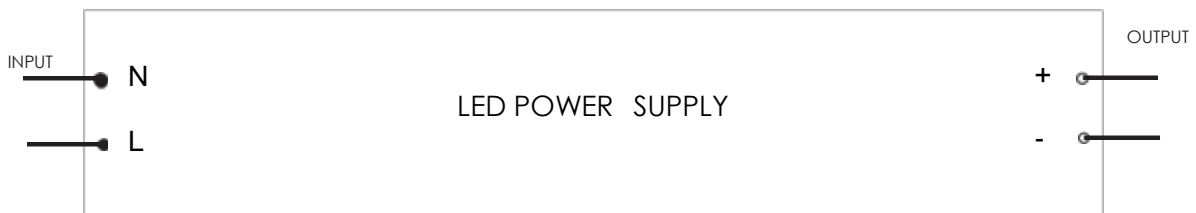
Model		SPF35-12VSP	SPF35-24VSP
Output	Turn on time(S)	<0.5	<0.5
	Output power(W)	35	35
	Output voltage(V)	12	24
	Output voltage tolerance	±5%	±5%
	Ripple voltage(mV)	240	240
	Line Regulation	3%	3%
	Load Regulation	3%	3%
	working current range(A)	0-2.9	0-1.45
	SVM	≤0.4	≤0.4
	Pst	≤1	≤1
	Dimming type	N/A	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)		0.18	0.18
Efficiency		86%@full load	87%@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
Displacement factor		≥0.9	≥0.9
THD(typ.) THD		10%	10%
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 1.3
	Over voltage protection	-	-
	Over temperature protection	IC detect	IC detect
	Surge capacity	L-N: 1KV	L-N: 1KV
	Withstand voltage	Input-Output: 3750V/5mA/1 min	Input-Output: 3750V/5mA/1 min
Ambient	Ta(°C)	-20...50	-20...65 (See derating)
	Tc max.(°C)	max.80	max.85
	Storage Temperature(°C)	-40...80	-40...80

and Life time	Ambient humidity range	10%...95%RH, Not condensing	10%...95%RH, Not condensing
	Nominal life-time (hrs)	50'000@Ta	50'000@Ta
Other	Dimensions (L×W×H) (mm)	110*40*29.5	110*40*29.5
	Weight(g)	228	250
	Casing material	Plastic	Plastic
	Housing colour	White	White
	Type of protection	IP67	IP67
	Protection class	class II	class II
	Certificate	TUV CE	TUV CE
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)



Wiring Diagram



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

Electrical curves

SPF35-12VSP

Fig. 1 Output load-Temperature curve

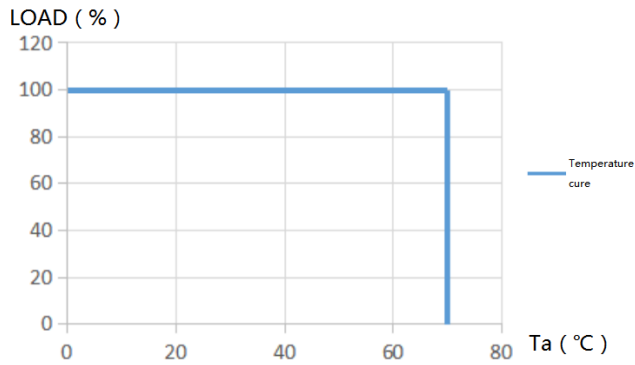


Fig. 2 Static characteristic curve

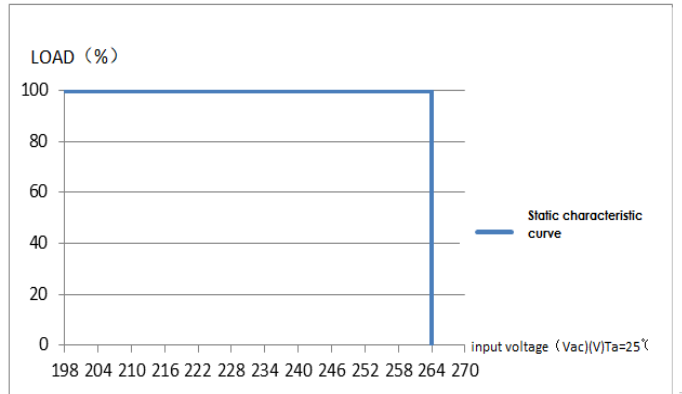


Fig. 3 I-V curve

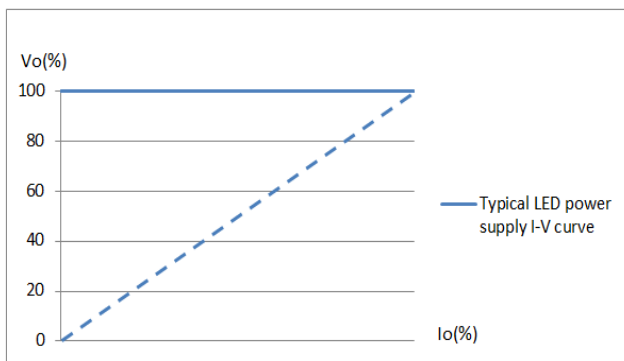


Fig. 4 Power factor characteristic curve

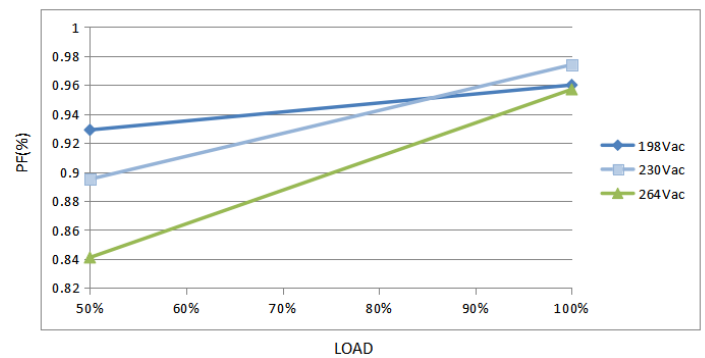


Fig.5 Total harmonic distortion curve (THD)

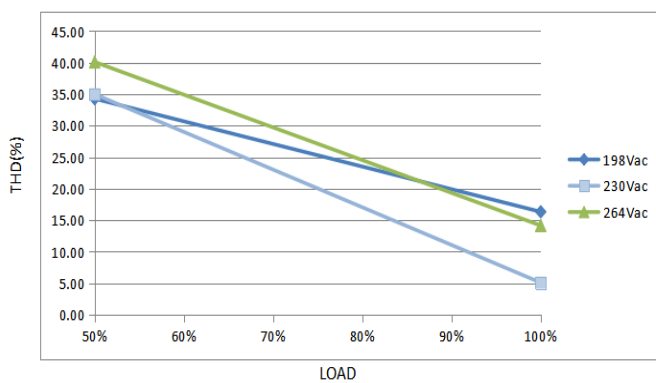


Fig.6 Efficiency-Load curve

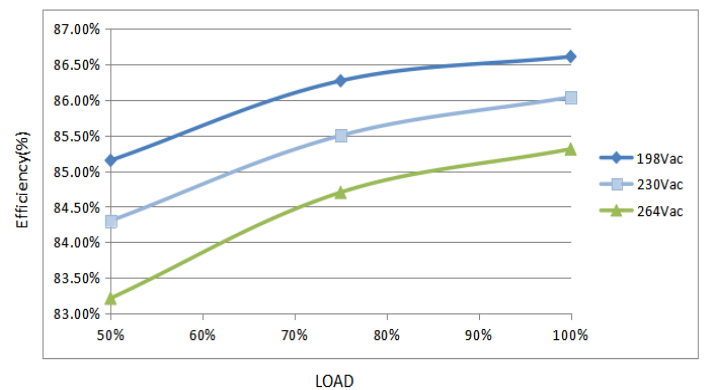


Fig. 1 Output load-Temperature curve

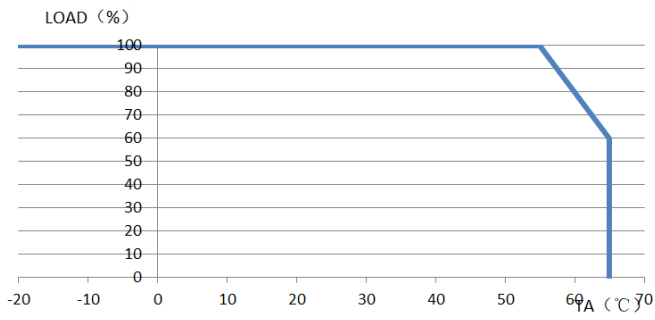


Fig. 2 Static characteristic curve

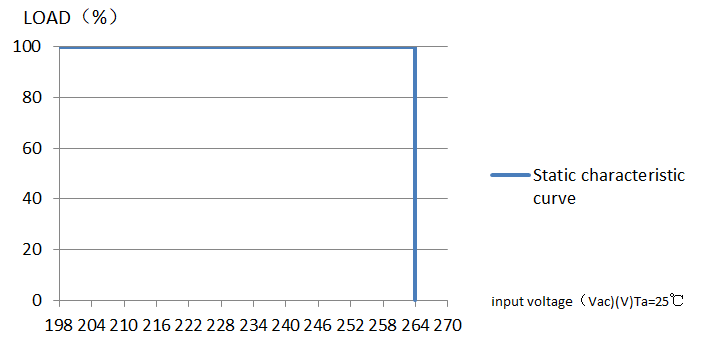


Fig. 3 I-V curve

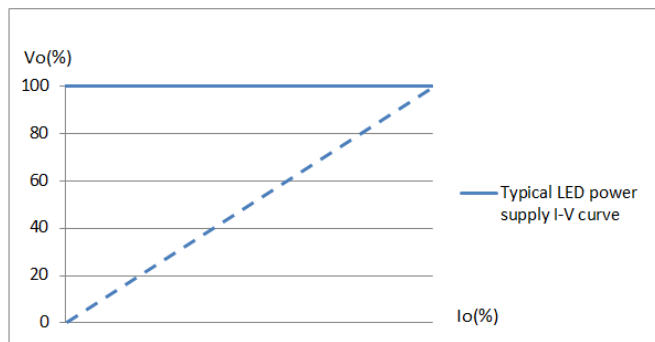


Fig. 4 Power factor characteristic curve

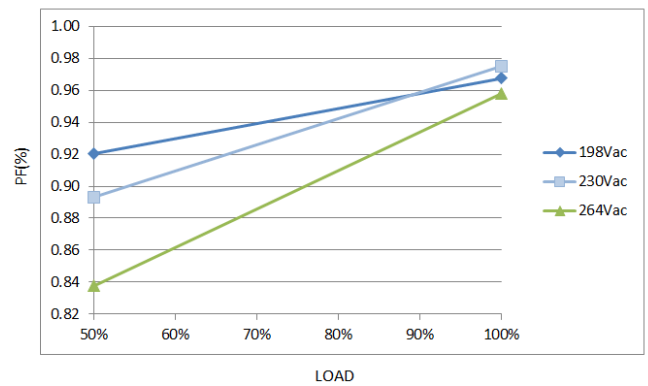


Fig.5 Total harmonic distortion curve (THD)

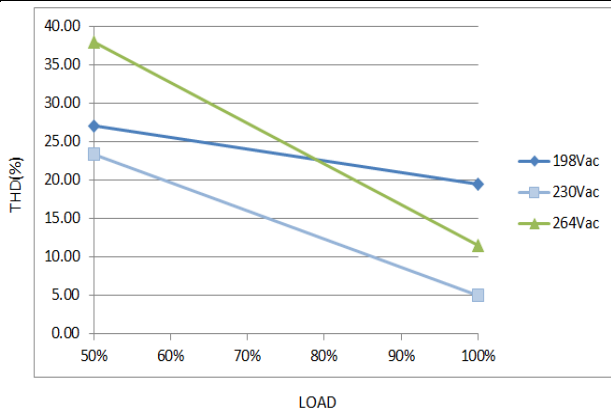
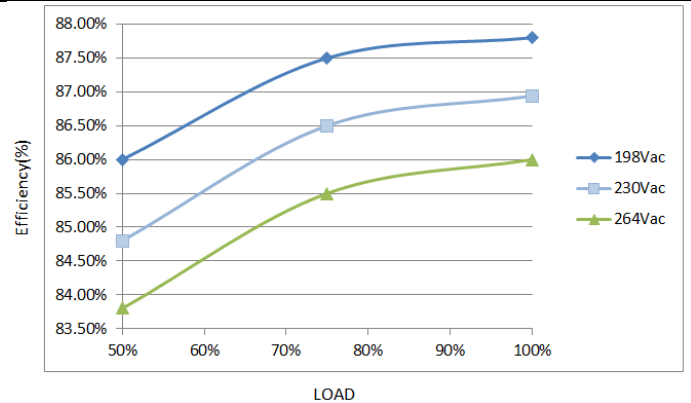


Fig.6 Efficiency-Load curve



MCBS

Model \ MCBS	B10	B13	B16	B20	C10	C13	C16	C20
SPF35-12VSP	24	31	38	48	40	53	65	81
SPF35-24VSP	24	31	38	48	40	53	65	81

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SPF35-12VSP			
SPF35-24VSP			

Revision history

Date	Rev.	Remark
2023.3	A1	Initial release.