

Constant Voltage LED Power Supply

SS30-12VL SS30-24VL



Product description

SS30-12/24VL is an indoor constant voltage LED driver. Its input voltage range is 198-264Vac, with a conversion efficiency of up to 87%. It adopts a fanless design and works naturally at -20°C~+45°C. The cold heat dissipation casing has a wide temperature range, and has high power factor, 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 life cycle. This series of products is designed for LED Lighting design, designed for indoor lighting, has a high cost performance.

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

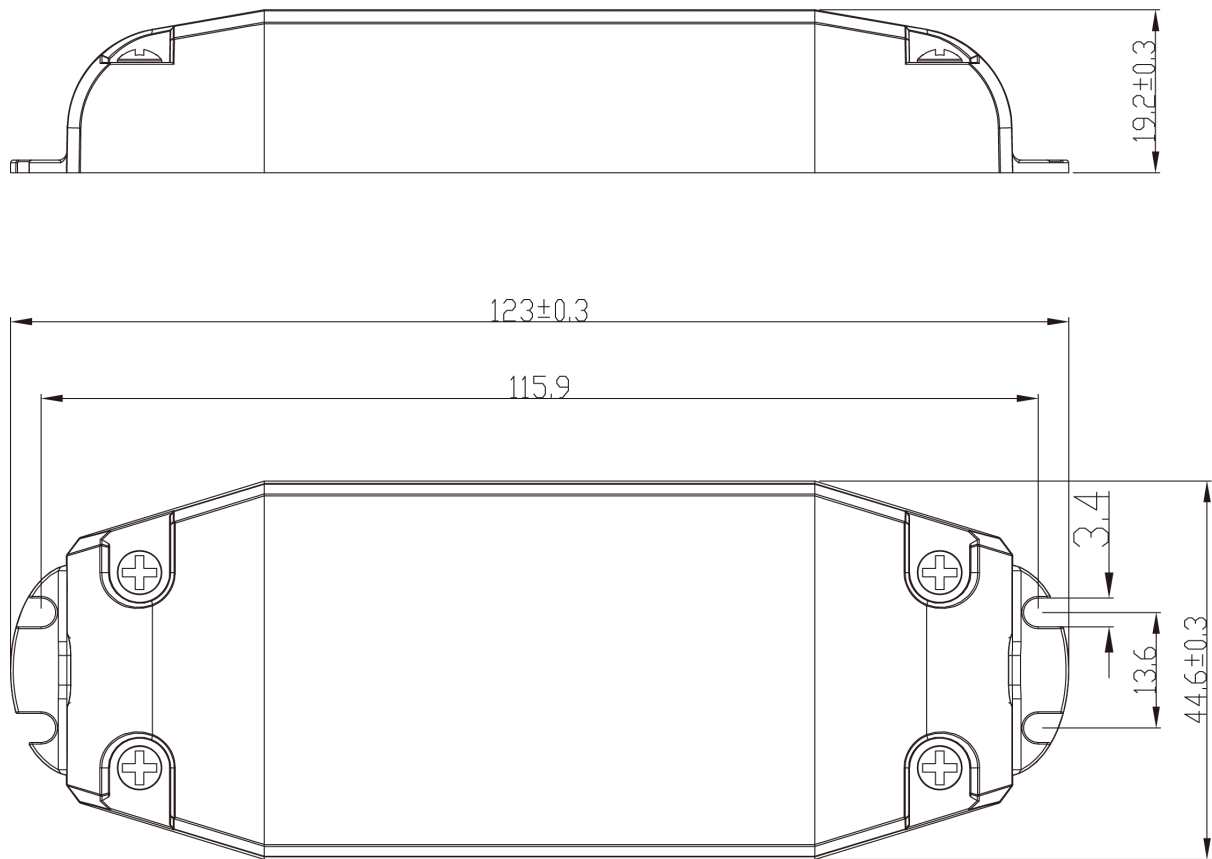
- AC input range (220-240VAC)
- IP20
- Suitable for dry indoor environments
- Protection type: short circuit/overload/open circuit protection
- Plastic shell and filled with glue inside
- Comply with world lighting equipment safety regulations
- 5 years warranty

Specifications

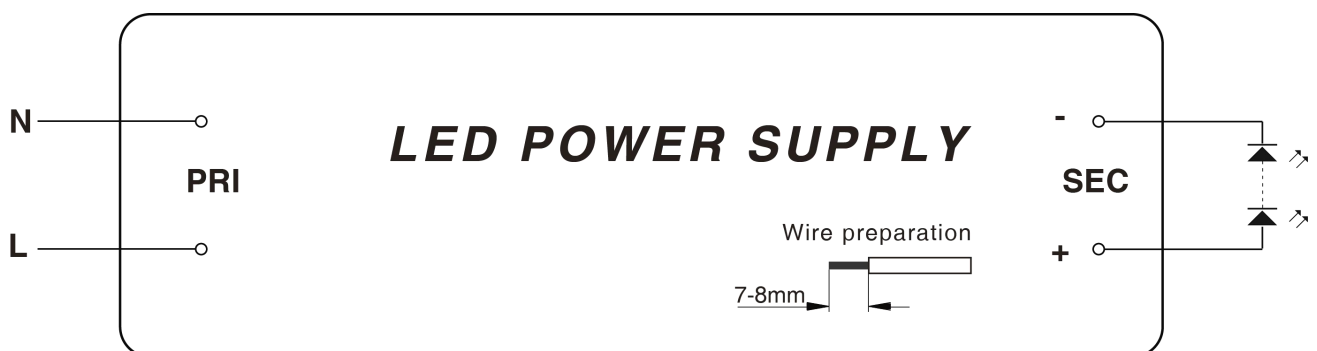
Model		SS30-12VL	SS30-24VL
Output	Turn on time(S)	<0.5S	
	Output power(W)	30	
	Output voltage(V)	12	24
	Output voltage tolerance	5%	
	Ripple voltage(mV)	3%	
	Line Regulation	1%	
	Load Regulation	1%	
	Working current range(A)	0-2.5	0-1.25
	SVM	≤0.4	
	Pst	≤1	
	Dimming type	NA	
	Dimming range	NA	
Input	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)	<0.5	
	Efficiency (TYPE)	86%@full load,230Vac	88%@full load,230Vac
	Average efficiency(TYPE) (TYPE)	84.5%	86.5%
	No load power consumption(W)	≤0.5W	
	Power factor	0.95@full load	
	Displacement factor	0.95	
	THD(typ.) THD	8%	
	Inrush current(Ipk) (Ipk)	20A/150uS	
	Leakage current (mA)	0.7mA@240Vac 60Hz	
	Short circuit protection	hiccup mode, restart automatically after fault correction.	
	Over load protection	hiccup mode, restart automatically after fault correction.	
	Over voltage protection	NA	
	Over temperature protection	IC detect	

Protection	Surge capacity	L-N: 1KV
	Dielectric strength level	Input-Output: 3750V/5mA/1min
Ambient and Life	Ta(°C)	-20...45(See derating curve)
	Tc max.(°C)	max.80 °C
	Storage Temperature(°C)	-40...+80°C
	Ambient humidity range	5%...85%RH, Not condensing
	Nominal life-time(hrs)	50'000@Ta
Other	Dimensions (L×W×H)(mm)	123mm * 44.6mm * 19.2mm
	Weight(g)	88
	Casing material	Plastics
	Housing colour	White
	Type of protection	IP20
	Protection class	Class II
	Certificate	CE, TUV
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 block H03VVH2-F 2×0.75mm ²
DC	Terminal block H03VVH2-F 2×0.75mm ²

Electrical curves

Fig. 1 Output load-Temperature curve

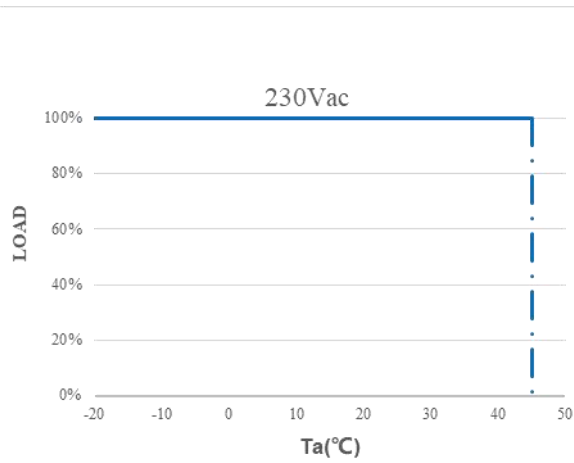


Fig. 2 Static characteristic curve

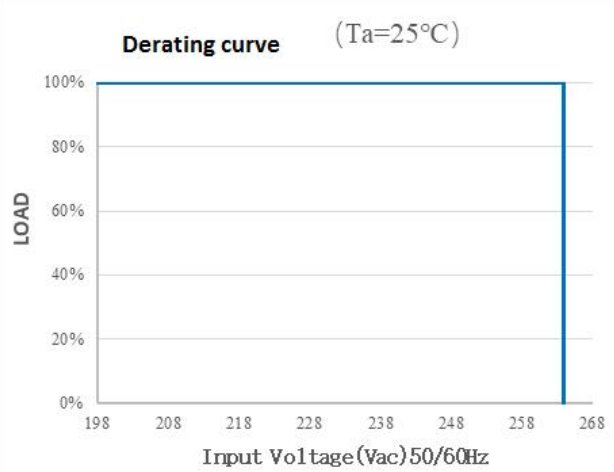


Fig. 3 I-V curve

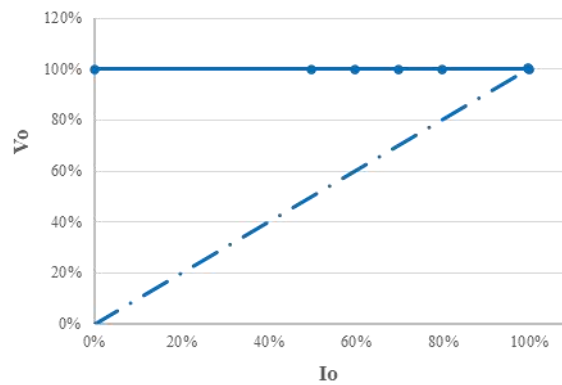


Fig. 4 Power factor characteristic curve

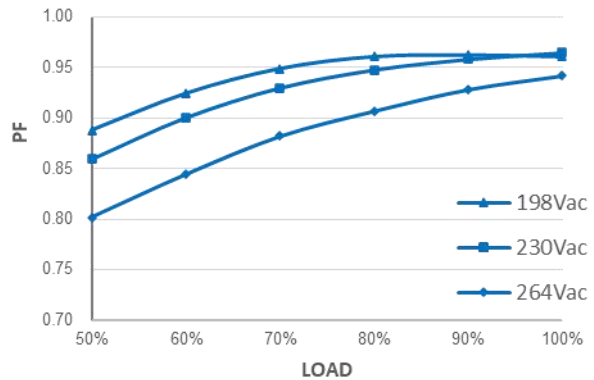


Fig.5 Total harmonic distortion curve (THD)

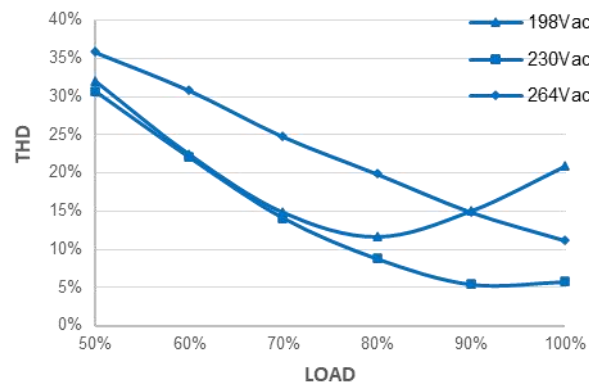
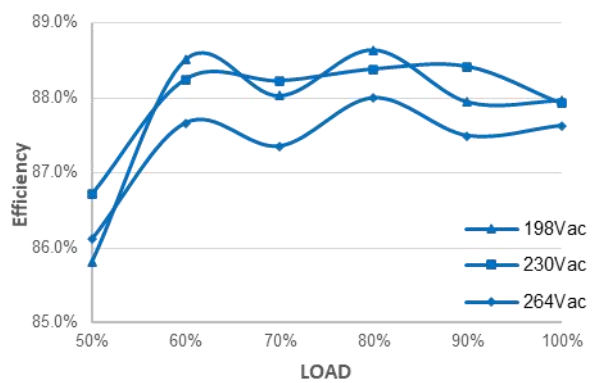


Fig.6 Efficiency-Load curve



MCBS

MCBS Model	B10	B13	B16	B20	C10	C13	C16	C20
SS30-12/24VL	29	38	46	58	36	47	58	73

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Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SS30-12/24VL			

Revision history

Date	Rev.	Remark
2021.5.24	A1	Initial release.
2023.11.22	A3	Format update