

Constant Voltage LED Power Supply

SNS30-12VFC (Black Terminals)

SNS30-24VFC (White Terminals, Reverse Polarity)



Product description

The SNS30-12/24VFC is a constant voltage LED driver with an input rated voltage of 220-240Vac, featuring up to 90% conversion efficiency. It operates within a temperature range of -20° C to +45° C under natural cooling conditions and boasts an ultra-high power factor, low standby power consumption, and comprehensive protection functions. These features not only significantly enhance product reliability but also ensure an extended product lifecycle. This series is specifically designed for LED lighting applications, intended for indoor use, and is suitable for a wide range of environments in almost all indoor spaces where LED lighting can be installed. It complies with European safety standards for lighting equipment, ensuring the safety of both users and the lighting system during installation.

Standards

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

Characteristics

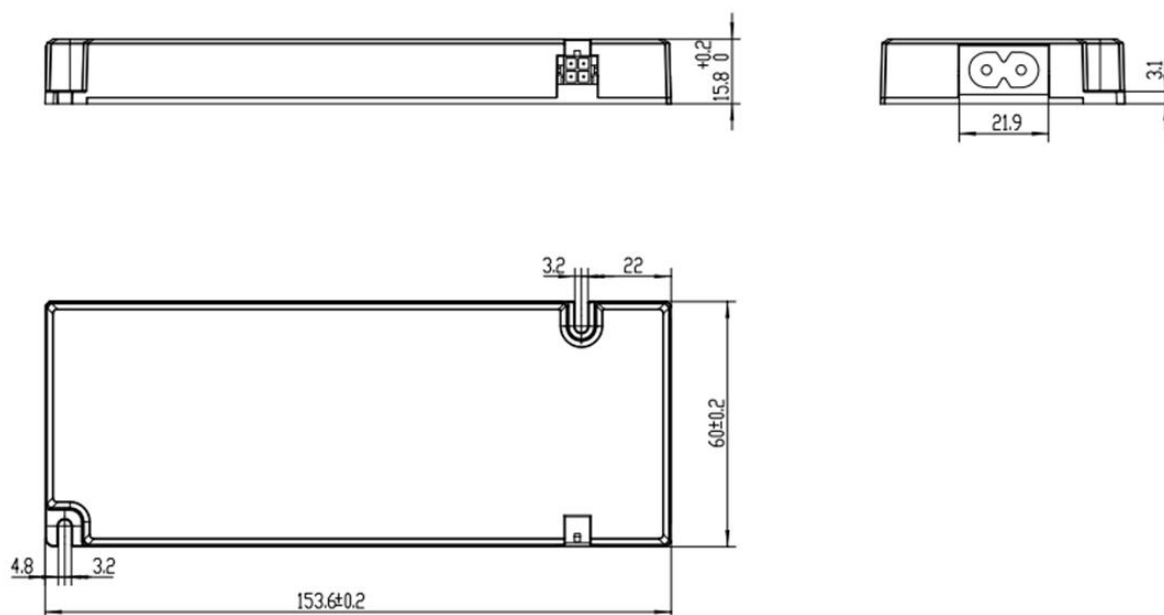
- AC input voltage range (198-264VAC)
- Waterproof rating IP20
- Suitable for various indoor applications
- Protection type: Short circuit/over temperature/over voltage/over current protection
- Comply with European lighting equipment safety regulations
- Warranty 5 years

Specifications

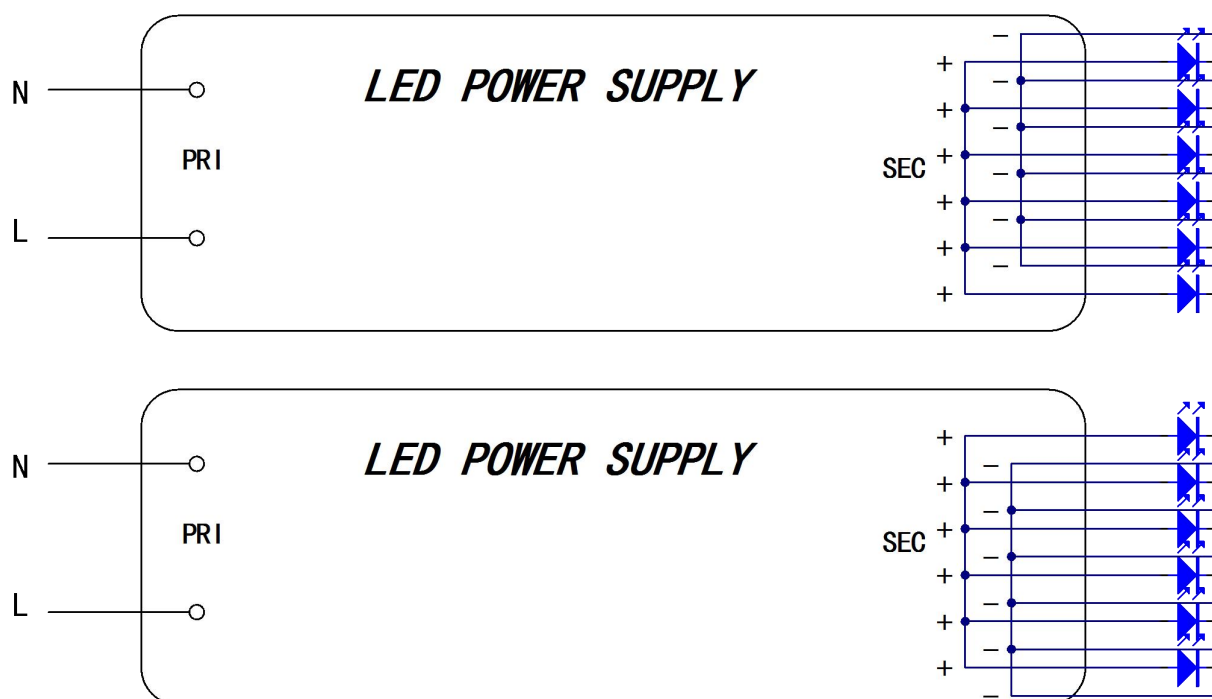
Model		SNS30-12VFC	SNS30-24VFC
Output	Turn on time(S)	<0.5	
	Output power(W)	30	
	Output voltage(V)	12	24
	Output voltage tolerance	$\leq \pm 5\%$	
	Ripple voltage	$\leq 2\%$	
	Line Regulation	$\leq \pm 1\%$	
	Load Regulation	$\leq \pm 1\%$	
	Working current range(A)	0-2.5	0-1.25
	SVM	≤ 0.4	
	Pst	≤ 1	
	Dimming type	-	
	Dimming range	-	
Input	Rated DC supply voltage(Vdc)	-	
	Rated supply voltage(Vac)	220-240	
	Voltage range(Vac)	198-264	
	Line frequency(Hz)	50/60	
	Input current(A)	0.16A@230V	
	Efficiency	90.5%@230V full load	
	Average efficiency	89.0%	
	No load power consumption(W)	$\leq 0.5W$	
	Power factor	0.95@230Vfull load	
	Displacement factor	0.95	
	Total harmonic distortion(typ.)	$\leq 10\%$	
	Inrush current(lpk)	30A/200 μ S	
	Leakage current	<0.7mA	
Protection	Short circuit protection	hiccup mode ,restart automatically after fault correction.	
	Over load protection	exceed maximum rated load times 1.3 hiccup mode ,restart automatically after fault correction	
	Over voltage protection	hiccup mode ,restart automatically after fault correction	
	Over temperature protection	restart automatically after fault correction	
	Surge capacity	L-N: 1KV	
	Withstand voltage	Input-Output: 3000V/5mA/1min	
Ambient and Life	Ta(C)	-20...45	
	Tc max.(C)	max.80	
	Storage Temperature(C)	-40...80	
	Ambient humidity range	10%...85%RH, Not condensing	

	Nominal life-time(hrs)	50'000@Ta 35
	Dimensions (L×W×H)(mm)	153.6*60*15.8
Other	Weight(g)	105
	Casing material	Plastic
	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.	

Dimensions(mm)



Wiring Diagram



AC	AC 8-pin socket, Top N, Bottom L 2*0.75mm ²
DC	12V: Black connection terminals for LED lamps, 6 terminals, each max 3A, top negative, bottom positive. 24V: White connection terminals for LED lamps, 6 terminals, each max 3A, top positive, bottom negative.

Electrical curves

Fig. 1 Output load-Temperature curve

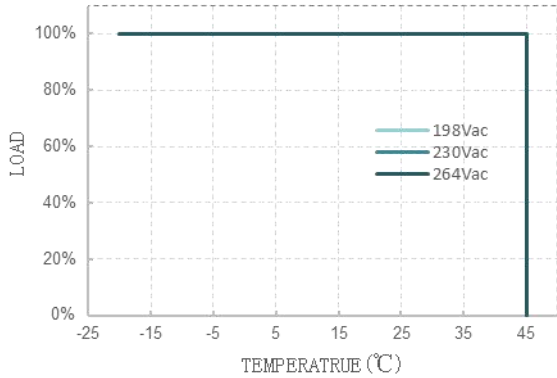


Fig. 2 Static characteristic curve

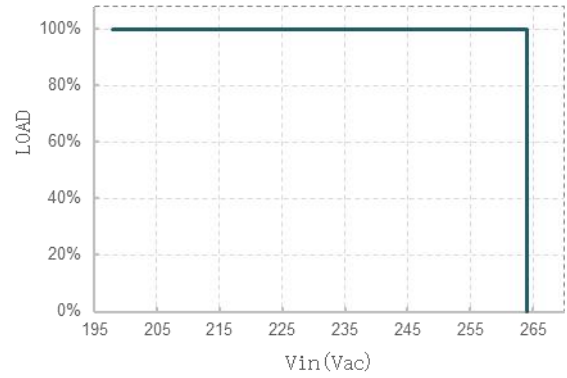


Fig. 3 I-V curve

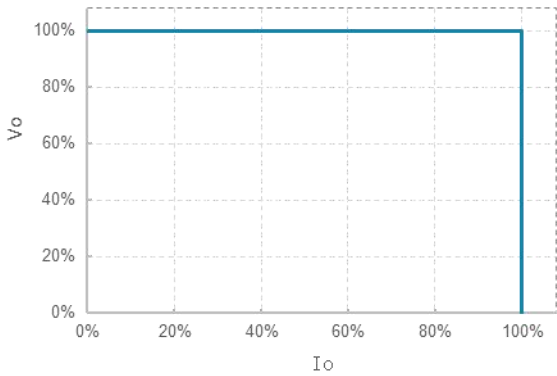


Fig. 4 Power factor characteristic curve

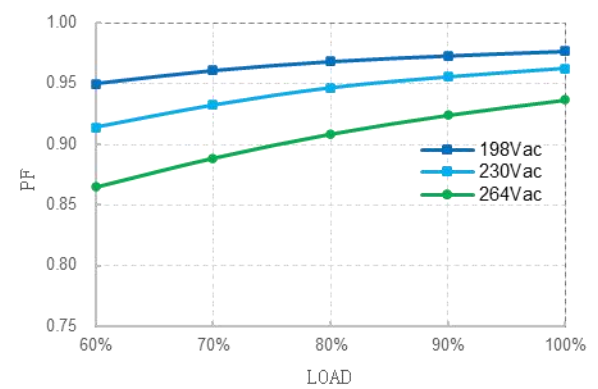


Fig.5 Total harmonic distortion curve (THD)

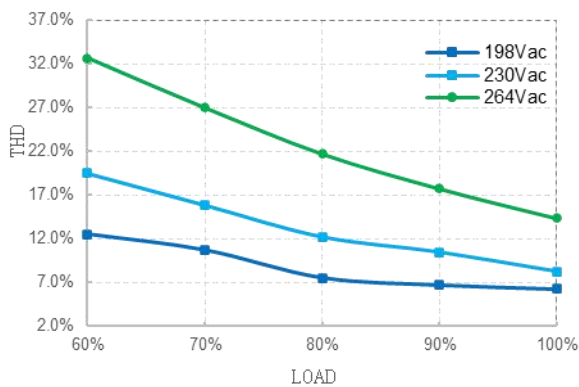
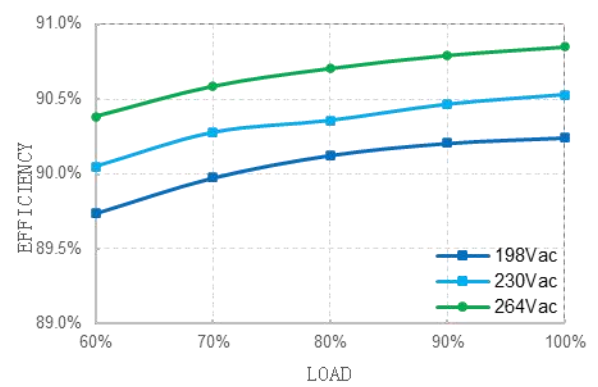


Fig.6 Efficiency-Load curve



MCBS

Model \ MCBS	B10	B13	B16	B20	C10	C13	C16	C20
SNS30-12/24VFC	33	43	53	67	40	52	64	80

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SNS30-12/24VFC			

Revision history

Date	Rev.	Remark
2026.01.29	A0	Initial release.