Constant Voltage LED Power Supply
SL60-12/24/48VF



Product description

The SL60 series is an indoor constant voltage LED driver with an input voltage range of 198-264Vac, a conversion efficiency of up to 90%, a fanless design, and a working temperature range of -20°C to +45°C natural cooling and heat dissipation. It also 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 guarantees the product life cycle. This series of products is designed for LED lighting and is used for indoor lighting. It is suitable for various application environments in almost all indoor places where LED lamps can be installed. It complies with the world's lighting equipment safety regulations and ensures the safety of users and lighting systems during installation.

Standards

EN61347-1
EN61347-2-13
EN61547
EN55015
EN61000-3-2
EN61000-3-3
EN62384
EN62493

Characteristics

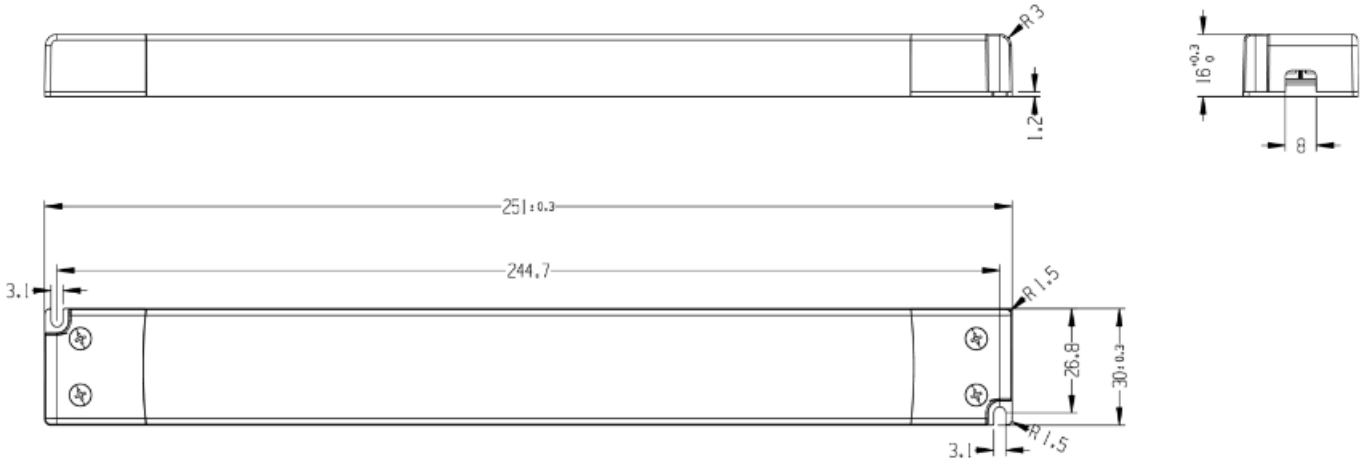
- AC input range (198-264VAC)
- With active PFC function
- IP20
- Suitable for indoor environment
- Protection type: short circuit/over temperature/over voltage protection
- Plastic housing
- Complies with world lighting equipment safety regulations
- Warranty 5 years

Specifications

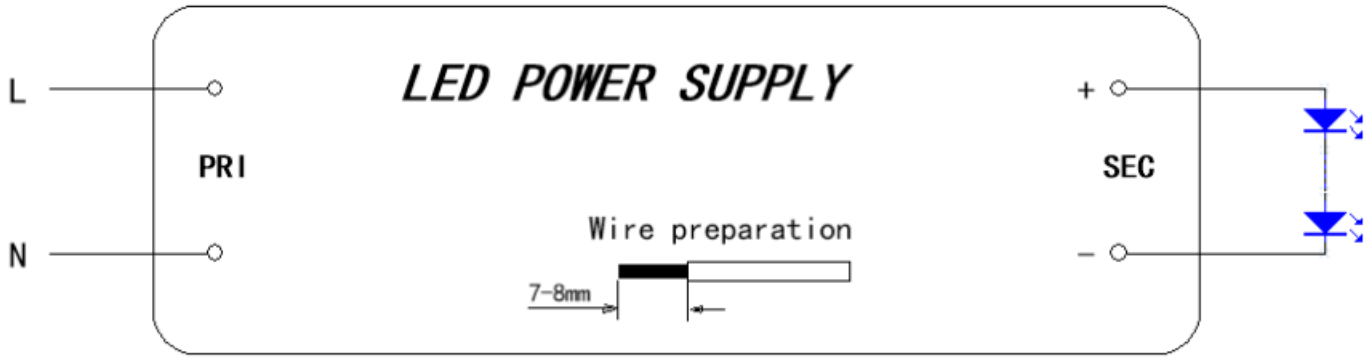
Model		SL60-12VF	SL60-24VF	SL60-48VF
Output	turn on time(S)	<0.5	<0.5	<0.5
	output power(W)	60	60	60
	output voltage(V)	12	24	48
	output voltage tolerance	≤±5%	≤±5%	≤±5%
	ripple voltage(mV)	300	360	480
	Line Regulation	1%	1%	1%
	Load Regulation	1%	1%	1%
	working current range(A)	0-5	0-2.5	0-1.25
	SVM	<0.4		
	Pst	<1.0		
	dimming type	NA		
	dimming range	NA		
Input	rated DC supply voltage(Vdc)	311-373		
	rated supply voltage(Vac)	220-240		
	voltage range(Vac)	198-264		
	line frequency(Hz)	50/60		
	input current(A)	0.32		
	efficiency (TYPE)	89%@full load	90%@full load	91%@full load
	average efficiency(TYPE) 3 (TYPE)3	88%	88%	89%
	no load power consumption(W)	≤0.5W		
	power factor	0.95@full load		
	Displacement factor	90%@full load	0.95	
	THD(typ.)	10%		
	inrush current(Ipk)	50A/365uS		
	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	Yes()		
	Over temperature protection	Yes()		
	surge capacity	L-N: 1KV		
	Withstand voltage	Input-Output: 3000V/5mA/1min		

Ambient and Life	Ta(℃)	-20…45
	Tc max.(℃)	max.85
	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)	251*30*16
	weight(g)	165
	casing material	plastics
	housing colour	white
	type of protection	IP20
	protection class	Class II
	certificate	ENEC, TUV, CE
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	Terminal block for H03VVH2-F 2*0.75mm²
DC	Terminal block for H03VVH2-F 2*0.75mm²

Electrical curves

Fig. 1 Output load-Temperature curve

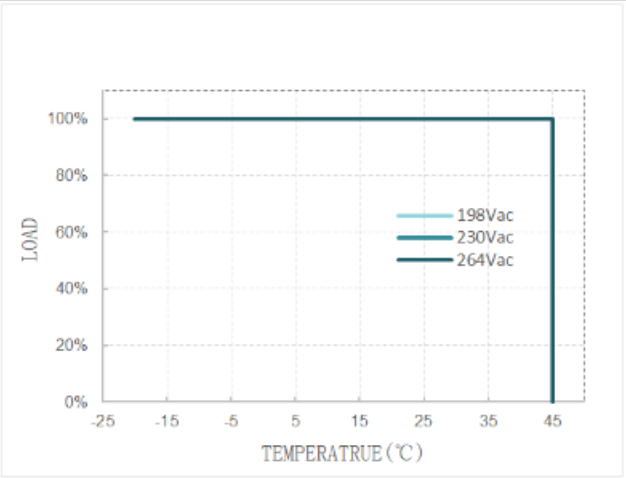


Fig. 2 Static characteristic curve

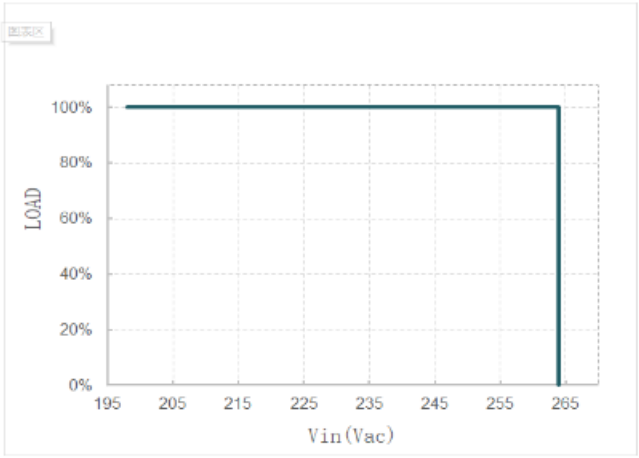


Fig. 3 I-V curve

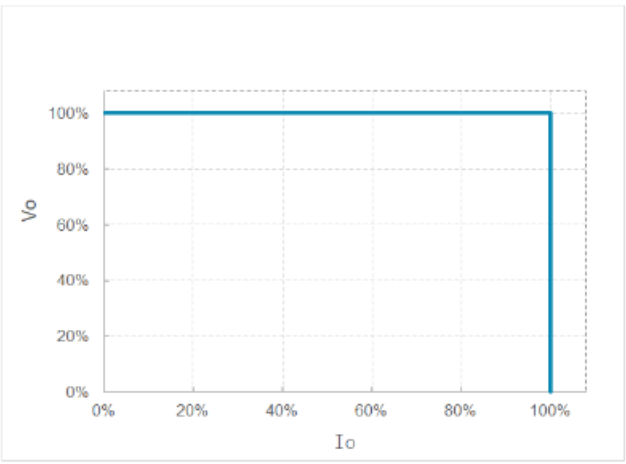


Fig. 4 Power factor characteristic curve

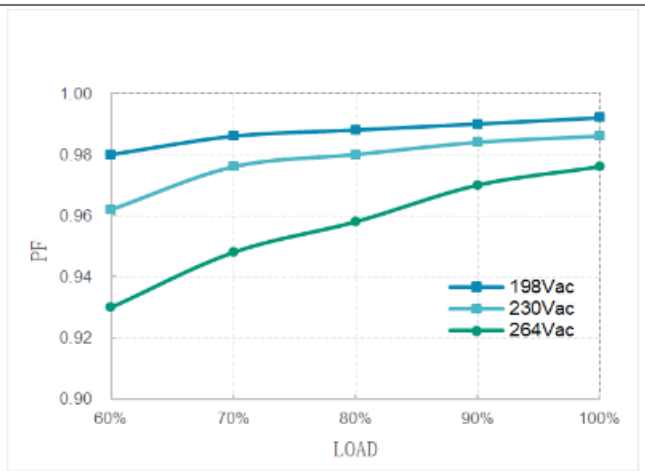


Fig.5 Total harmonic distortion curve

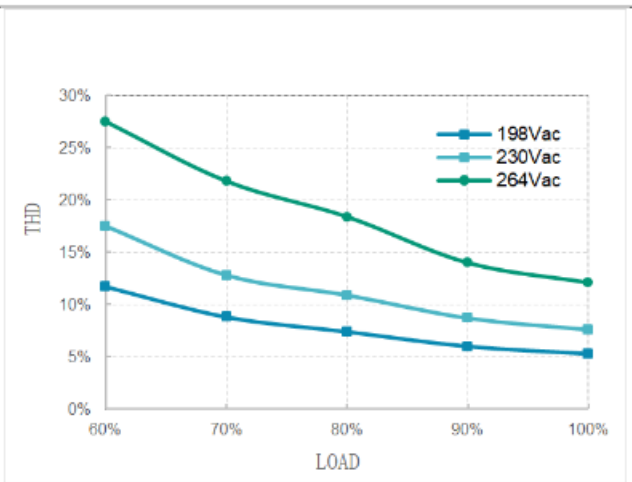
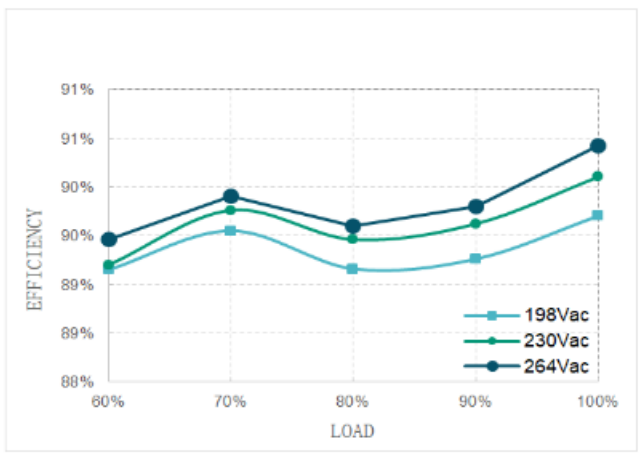


Fig.6 Efficiency-Load curve



MCBS

MCBS / Model	B10	B13	B16	B20	C10	C13	C16	C20
SL60-12/24/48VF	16	20	25	31	19	24	30	38

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SL60-12/24/48VF			

Revision history

Date	Rev.	Remark
2025.02.06	A0	Initial release
2025.06.20	A1	Official release
2025.09.19	A2	Add 12V