

Constant Voltage LED Power Supply

The SL100 series is an indoor constant voltage LED driver with an input voltage range of 198-264Vac, a conversion efficiency of up to 93%, 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 allround 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.



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

Standards:

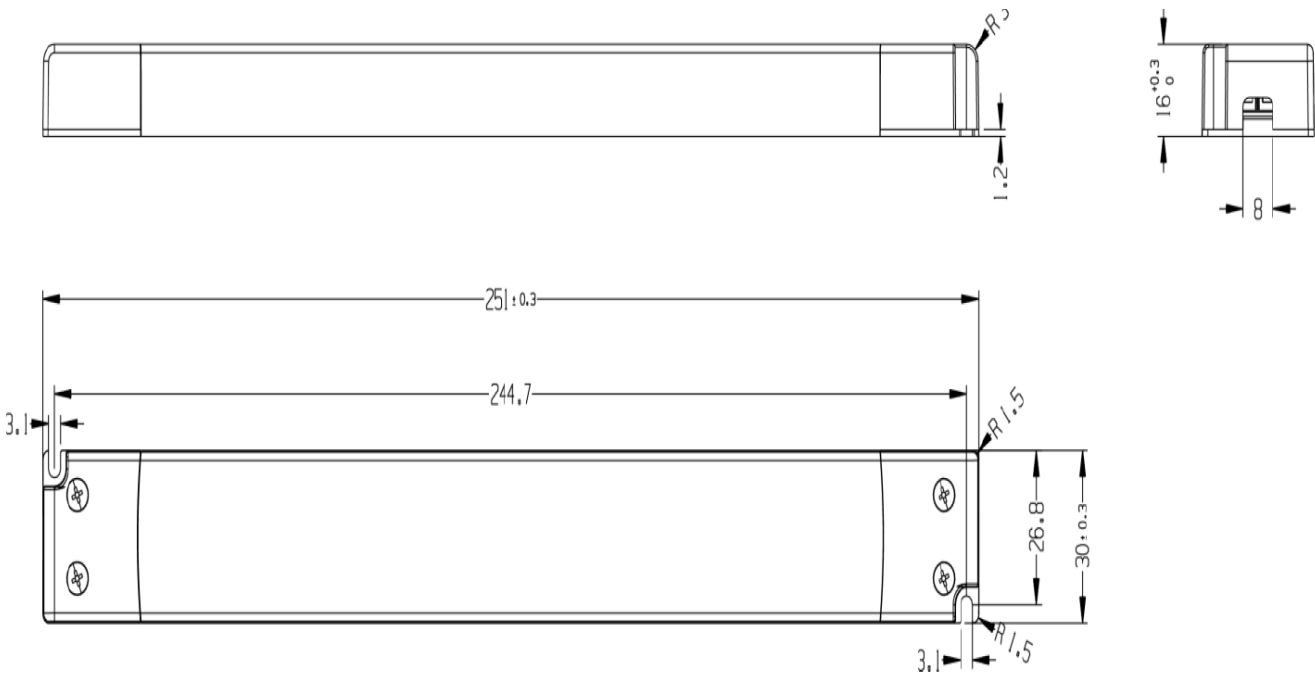
EN61347-1
EN61347-2-13
EN61547
EN55015
EN61000-3-2
EN61000-3-3
EN62384
EN62493

Device Selection Guide

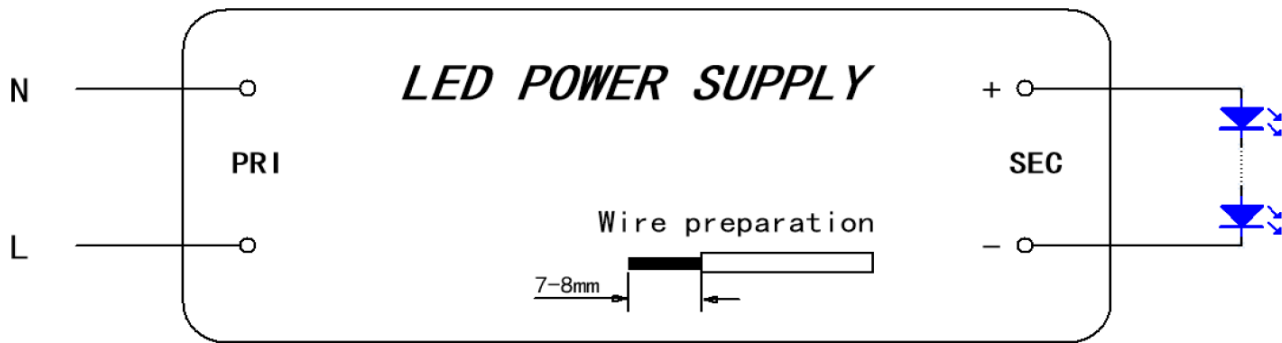
Model		SL100-12VF	SL100-24VF	SL100-48VF
Output	Turn on time(S)	0.5		
	output power(W)	100		
	output voltage(V)	12	24	48
	output voltage tolerance	5%		
	ripple voltage(mV)	<2%		
	Line Regulation	1%		
	Load Regulation	2%		
	working current range(A)	0-8.33	0-4.17	0-2.08
	SVM	<0.4		
	Pst	<1.0		
	Dimming 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)	0.5		
	Efficiency (TYPE)	91.5%@full load	93.5%@full load	93.5%@full load
	no load power consumption(W)	0.5W		
	power factor	0.95@full load		
	Displacement factor	0.95		
	THD(typ.)	<10%@full load 230V		
	inrush current(Ipk)	65A/220us		
	Leakage current	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(latch off)		
	Over temperature protection	Yes(restart)		
	surge capacity	L-N: 1KV		
	Withstand voltage	Input-Output: 3000V/5mA/1min		
Ambient and Life	Ta(C)	-20...45		
	Tc max.(C)	max.90		
	Storage Temperature(C)	-30...80		
	ambient humidity range	5%...85%RH, Not condensing		
	nominal life-time(hrs)	50'000@Ta 35		

Other	dimensions (L×W×H)(mm)	251x30x16
	weight(g)	140
	casing material	Plastics
	housing colour	White
	type of protection	IP20
	protection class	class II
	Certificate	CE,ENEC pending
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 models 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 + recommended wire dimension H03VVH2-F 2*0.75mm ²
DC	Terminal block + recommended wire dimension H05VVH2-F 2*1.0mm ² for 12V and 24V H03VVH2-F 2*0.75mm ² (for 48V)

Electrical curves

Fig. 1 Output load-Temperature curve

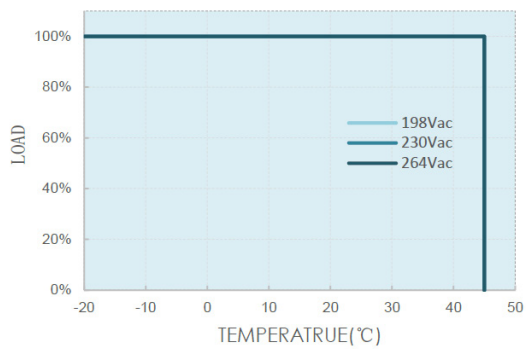


Fig. 2 Static characteristic curve

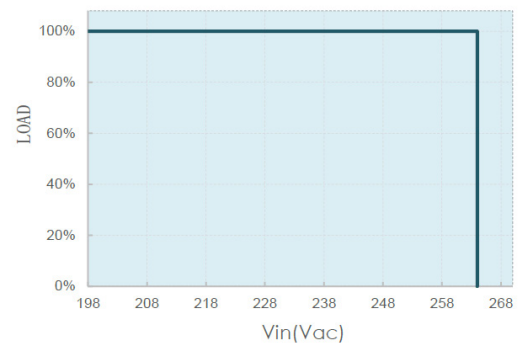


Fig. 3 I-V curve

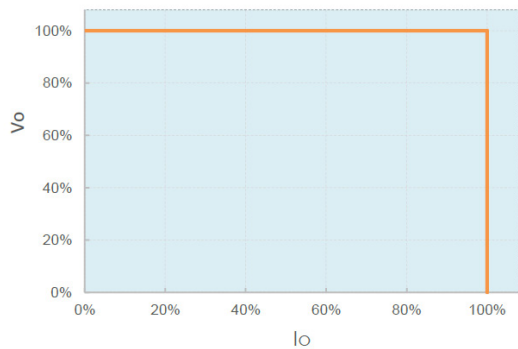


Fig. 4 Power factor characteristic curve

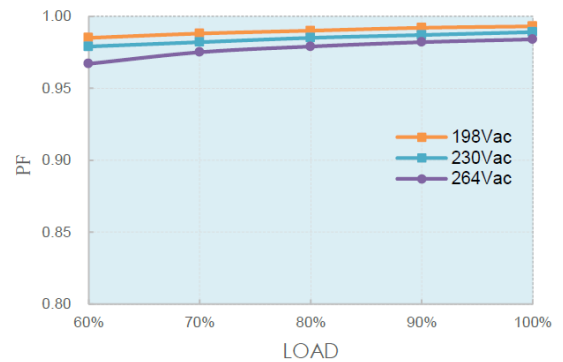


Fig.5 Total harmonic distortion curve(THD)

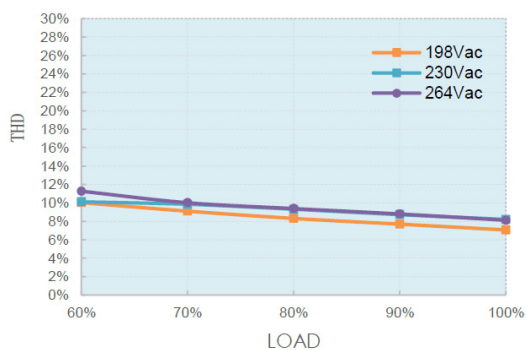
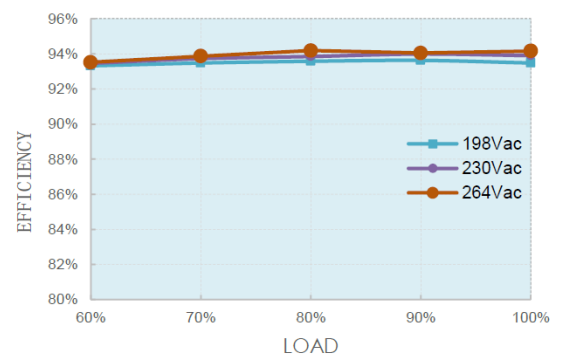


Fig.6 Efficiency-Load curve



MCBS

Model \ MCBS	B10	B13	B16	B20	C10	C13	C16	C20
SL100-12/24/48VF	8	10	13	16	10	13	15	19

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SL100-12/24/48VF			

