

IP20 LED Power Supply





Features

European AC input (198-264VAC)

- . Built-in active PFC function
- IP20
- . Suitable for dry environment
- . Protections: Short circuit / Over voltage / Over temperature
- . Adopt plastic case and internal glue potting
- . Built-in lightning protection device, it can satisfy DM 1kV
- . Comply with the world lighting equipment safety standards.
- . 3 years warranty

Description:

SL100 series is an indoor constant voltage LED power supply, rated input voltage AC 198-264Vac ,with a maximum conversion efficiency of 94% and fan free design, works temperature range of -20 ° C to +45 ° C under free air convection, and has ultra-high power factor, ultra-low THD, low standby power consumption, all-round protection function, not only greatly improves the reliability of products, but also ensures the life cycle of products. This series for LED Lighting design, applied to indoor lighting design. Suitable for almost any indoor location where LED Lighting can be installed in a variety of applications. Comply with the world lighting equipment safety specifications, also ensure the safety of users and lighting system during installation.

Model:

Model	Output Voltage	Output Current	Max. Output Power	Output Voltage Precision	THD (Typ.)	Power Factor (Typ.)	Efficiency (Typ.)
SL100-12VF-1	12V	0-8.33A	100W	±5%	4%	0.95	94%
SL100-24VF-1	24V	0-4.17A	100W	±5%	4%	0.95	93%

Remark: All the parameters are measured at 230VAC input, full load and 25 °C of ambient temperature if they are not specially mentioned.



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Input:

Parameter	Min. Value	Typical Value	Max. Value	Note
Rated input voltage	220 Vac		240Vac	Derating curve is shown in figure.
Input voltage	198 Vac		264Vac	Defaulting curve is shown in figure.
Input frequency	47Hz		63Hz	
Max. Input current			0.7A	230Vac,Full Load
Input inrush current			60A	30Vac/50Hz,cold start
Power factor	0.96	0.97		230Vac,Full Load
Total harmonic input		4%	5%	230Vac,Full Load
Leakage current			0.7mA	230Vac/50Hz,Full Load
Stand-by power consumption		0.4W	0.5W	230Vac/50Hz,No Load

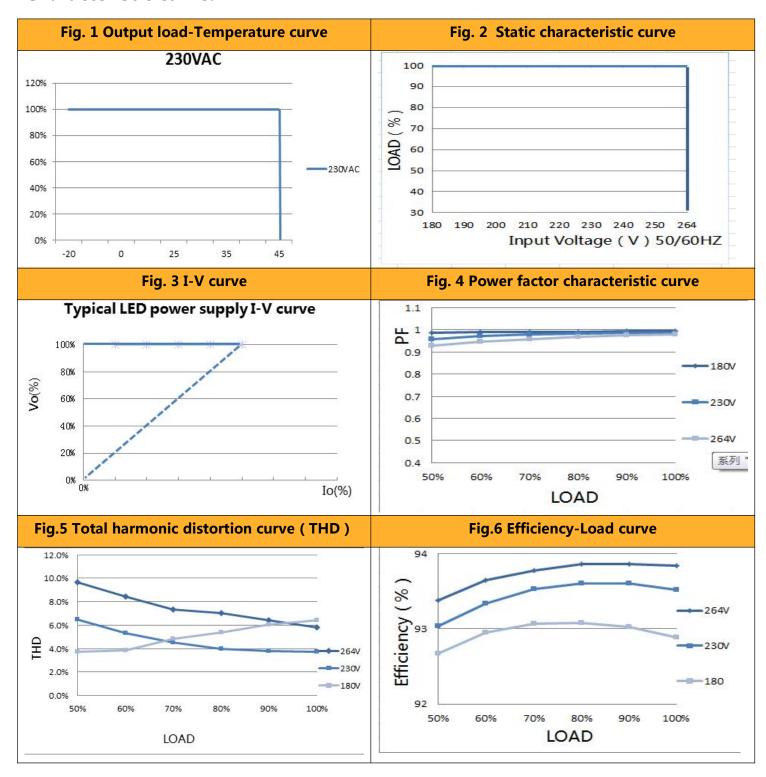
Output:

Parameter	SL100-12VF-1	SL100-24VF-1	Note
Output voltage	12.0VDC	24.0VDC	
Rated output current	8.33A	4.17A	
Output current	0-8.33A	0-4.17A	
Rated output power	100W	100W	
Rated output efficiency	94%	93%	230Vac
Output voltage precision	±	5%	
Output voltage ripple (PK-PK)	±	3%	Full load (Test under 20M bandwidth)
Output current ripple (PK-PK)			Full load (Test under 20M
Rise time	10	0mS	bandwidth) 230Vac
Startup time	30	0mS	230Vac
Line regulation	±1%		full load
Load regulation	±1%		



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Characteristic curve:





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Protection:

Parameter		Conditions	Note	
	Over load	1.1 ~ 1.6 times rated load	Auto-recovery after overload removed	
Short circuit		Short circuit power≤0.5W	Hiccup mode, auto-recovery after short circuit removed	
	Over voltage	1.5 times of rated output voltage	Auto-recovery after over voltage removed	
Protection	Over temperature	110℃	Hiccup mode, auto- recovery after temperature return to normal value	

Environment Requirement:

Parameter	Min.	Тур.	Max.	Note
Working temp.	-20℃	25°C	+45°C	See Fig.2
Storage temp.	-40°C	25°C	+85℃	
Working humidity	10%RH		90%RH	
Storage humidity	5%RH		95%RH	
IP grade			IP20	
Cooling mode	Natural cooling			

Safety&EMC standard:

Certificate	Safety standards	Certification	Note
UL/CUL			
	EN61347-1:2015		
TUV	EN 61347-2-13:2014+A1		
	EN62493:2015		
SAA	AS/NZS 61347.2.13		
ссс			
	EN 61347-2-13:2014 +A1		
CE	EN61347-1:2015		



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Safety	Test	Qualification	N	lote	
Dielectric	Input to output	3750Vac/5mA Max/60s		ntion, No breakdown, o arc	
Compressive	Primary to ground		Basic insulation, N	o breakdown, No arc	
Strength	Secondary to ground		Functional insulation, No breakdown		
Insulation resistance	Input to output	≥10MΩ	Test volta	ige : 500Vdc	
Grounding Resistance		25A/1min	25A/1r	min	
Leakage Current		≤0.75mA	264Vac		
EMI	/EMS Item	Standard/Level	Data		
Conduction CE		EN55015			
Radiation RE		EN55015			
Harmonics		EN IEC 61000-3-2		Class C	

Others:

Parameters	Condition	Note
Lifetime	30,000 hours	230Vac,Full Load, Max TC75℃
MTBF	200,000 hours	230Vac,Full Load,TA 25 ℃
5.	200,000 110415	(MIL-HDBK-217F)
TC	90℃	
Warranty	3 years	
Weight	520g	
Dimensions	320.6mm * 30mm * 18.2mm	LxWxH



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