



# LED POWER SUPPLY DATASHEET

## SP100-12VLT

### DESCRIPTION

SP100 is triac dimmable and constant voltage product, with high cost performance. Open circuit, short circuit, overload and over heat protection, Built-in active PFC function. Compliance to safety and EMC certification, Lifetime more than 5 years.



### Input

Items	Conditions	Request	Note
Input voltage	Ta	220-240Vac	--
Input frequency		50Hz	--
Input current	25°C, rated input voltage, output with max. rated power	< 1A	--
Input power		<120W	--
Efficiency		85%	--
Inrush current	25°C, rated input voltage	<75A	Peak
PF	25°C, rated input voltage, output with max. rated power	≥0.9	--
It's necessary to add a switch between electricity and Led power to reach the newest ErP regulations			

### Temperature and others

Items	Conditions	Request	Note
Operation temp.	--	-20-45°C	--
Relative humidity	--	45%-85%	--
Max. case temp.	--	90°C	--
Lifetime	Max.Ta, rated input voltage, output with max. rated power	30,000hr	--
Working noise	25°C, rated input voltage, output with rated power, mute box background noise <30dB, pickup 10cm distance from products	<35dB	--

### Protection

Items	Conditions	Request	Note
Open circuit	Ta, rated input voltage, no load	--	--
Over load	Ta, 0.94-1.06 times of input voltage, 1.6 times of output rated power	Yes	--
Short circuit	Ta, 0.94-1.06 times of input voltage	Yes	--
Over temperature	Ta, 0.94-1.06 times of input voltage, temperature detected pointed more than 115 degree	Yes	--
Output over voltage	Ta, 0.94-1.06 times of input voltage, output voltage is 1.5 times of rated one	Yes	--
Auto recovery	Overload, Short circuit, over heat revocation	Yes	--
Latch off	over heat re-start after cut off	--	--

### Output

Items	Conditions	Request	Note
Startup time	25°C, rated input voltage, output with max. rated power	--	@230V
Rated output voltage and precision	Ta, rated input voltage, output with rated power	12V±5%	<13V
Output current range	Ta, rated input voltage	2-8.33A	--
Output voltage wave	25°C, rated input voltage, output with max. rated power	<300mV	Vp-p
Output overload	25°C, rated input voltage, output with 2 times LED load	yes	--
Output current and precision	Ta, rated input voltage, output with rated power	--	--
Rated output voltage range	Ta, rated input voltage	--	--
Output current wave	25°C, rated input voltage, output with max. rated power	--	Ip-p
Dimming mode	leading or trailing edge dimmers	TRIAC	--
Dimming range	--	10%-100%	@230V

### Mechanical, mounting and wiring mode

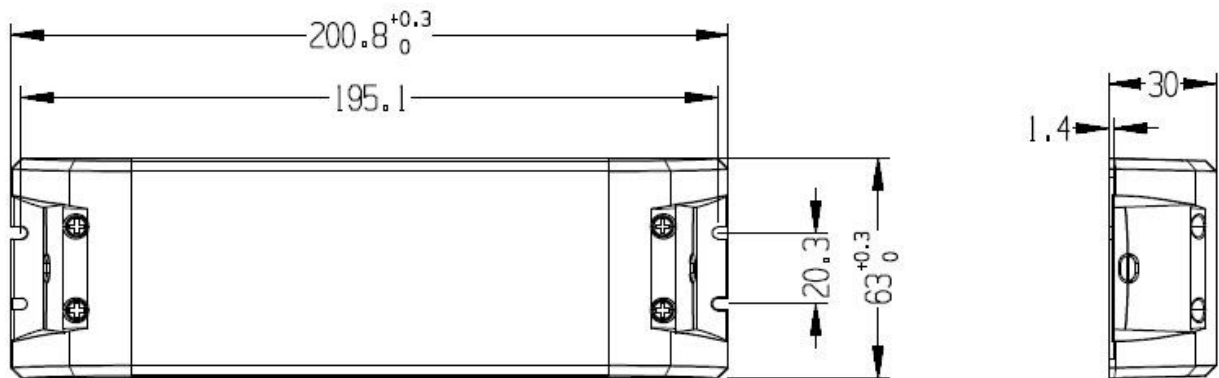
Items	Conditions
Case material and size	Plastic
Mounting ways	Independent
Insulation type	Class II
IP grade	IP20
Input cables dimension	H05VVH2-F 2x1.0mm²
Output cables dimension	H05VVH2-F 2x1.0mm²
Output cables length	2000mm

### Standard

Items	Conditions
Safety	IEC61347-1、IEC61347-2-13 (with lamps IEC60598)
Harmonic	IEC61000-3-2
EMI	IEC55015
EMS	IEC61547



Dimensions(mm)



Wiring Diagram

