

Features



- . European AC input / (220-240VAC)
- . Built-in active PFC function
- . IP20
- . Suitable for dry environment
- . Protections: Short circuit / Over voltage / Over temperature
- . Adopt plastic shell and internal glue potting
- . Built in lightning protection device can meet the requirements of
~1 2KV / CM 4kV



Compliance to worldwide safety regulations for lighting
3 years warranty

Description :

SS150 series is an indoor constant voltage power supply. Its input voltage range is 220-264Vac, with the high efficiency up to 90%, fanless design, working in the temperature range of - 20 ° C to + 45 ° C under free air convection. It has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, with all-round protection functions such as lightning protection and waterproof function, which not only greatly improves the reliability of the product, but also ensures the life cycle of product. This series are designed for LED lighting such as road lighting, floodlights, stage lighting and advertising lights etc, suitable in almost all kinds of applications where LED lamps can be installed. The product designed completely in accordance with world's lighting equipment safety regulations to ensure the safety of both user and luminaire system during installation.

Model

Model	Output voltage	Output current	Max. Output power	Current tolerance	Total harmonic distortion (Typ.)	Power factor (Typ.)	Efficiency (Typ.)
SS150-12VL	12V	0-11A	132W	±5%	4%	0.95	90%
SS150-24VL	24V	0-6.25A	150W	±5%	4%	0.95	92%

Remark: All parameters NOT specially mentioned are measured at 230VAC input, full load and 25 °C of ambient temperature

Input

Parameter	Min. value	Typical value	Max. value	Note
Rated input voltage	220 Vac		240Vac	The derating curve is shown in the figure
Input voltage	198 Vac		264Vac	
Input frequency	47Hz		63Hz	
Max. Input current			0.5A	230Vac , Full Load
Input inrush current			60A	230Vac/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	SS150-12VL	SS150-24VL	Note
Output voltage	12VDC	24VDC	
Rated output current	11A	6.25A	
Output current	0-11A	0-6.25A	
Rated output power	132W	150W	
Rated output efficiency	90%	92%	230Vac
Output current tolerance	±5%		Full load (Test under 20M bandwidth)
Output voltage ripple (PK-PK)	±3%		
Output current ripple (PK-PK)	--		
Rise time	100mS		230Vac
Startup time	300mS		230Vac
Line regulation	±1%		full load
Load regulation	±1%		

Characteristic curve

Fig. 1 Output load-Temperature curve

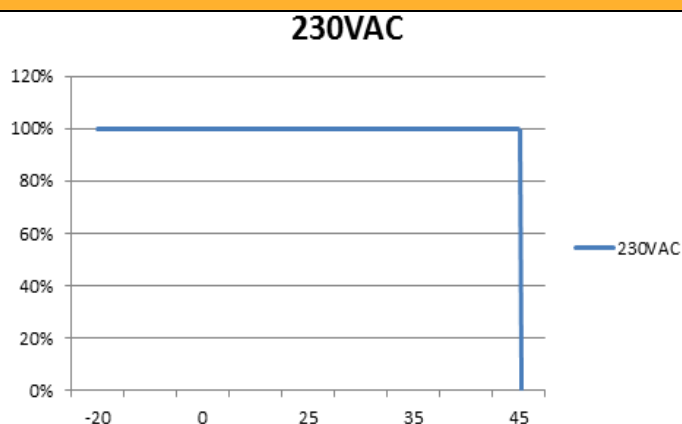


Fig. 2 Static characteristic curve

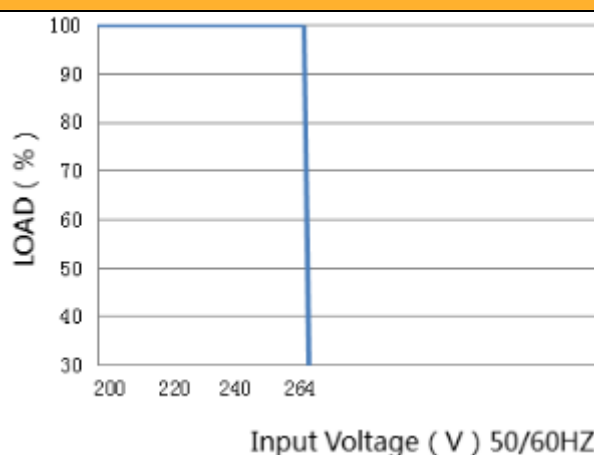


Fig. 3 I-V curve

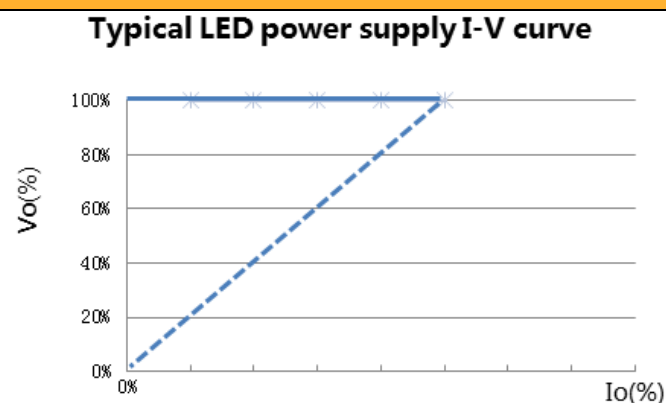


Fig. 4 Power factor characteristic curve

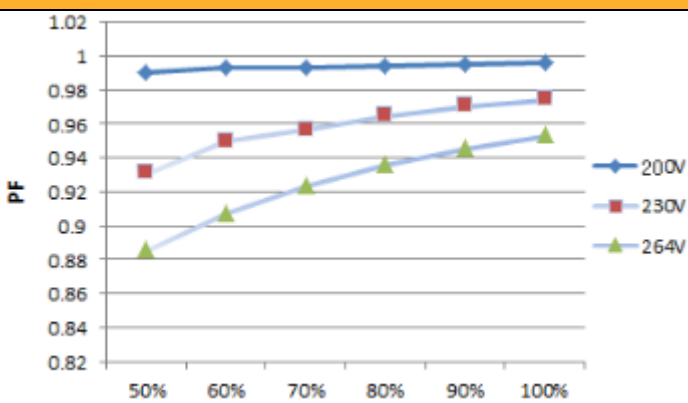


Fig.5 Total harmonic distortion curve (THD)

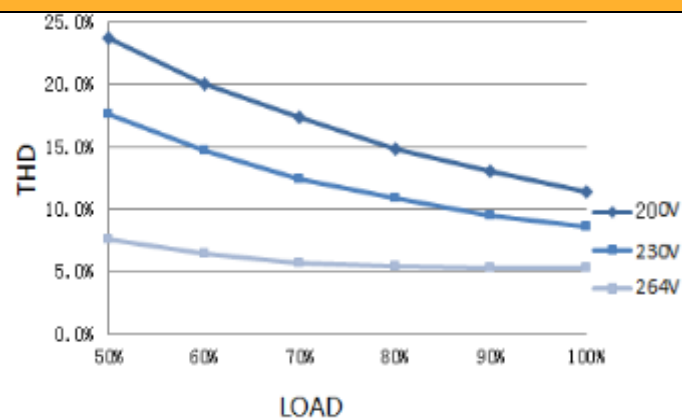
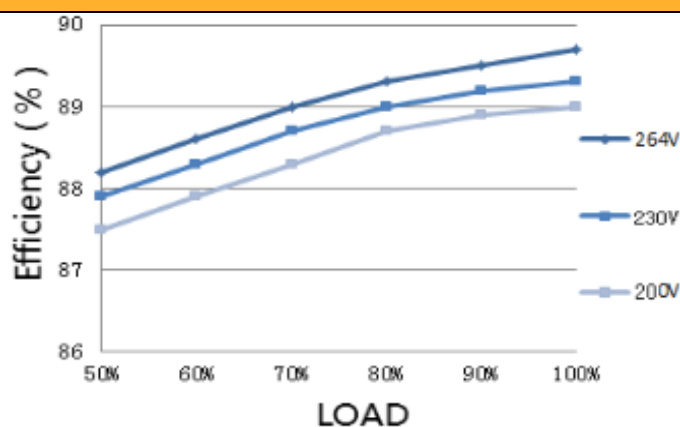


Fig.6 Efficiency-Load curve



Protection

Parameter		Conditions	Note
Protection	Over load	1.1 ~ 1.6 times rated load	Recover automatically when cancel overload
	Short circuit	Short circuit power $\leq 0.5W$	Hiccup mode, auto-recovery after short circuit removed
	Over voltage	1.5 times of rated output voltage	Turn off input voltage and restart
	Over temperature	110°C	Turn off input voltage and restart when temp drop to normal

Environment Requirement

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

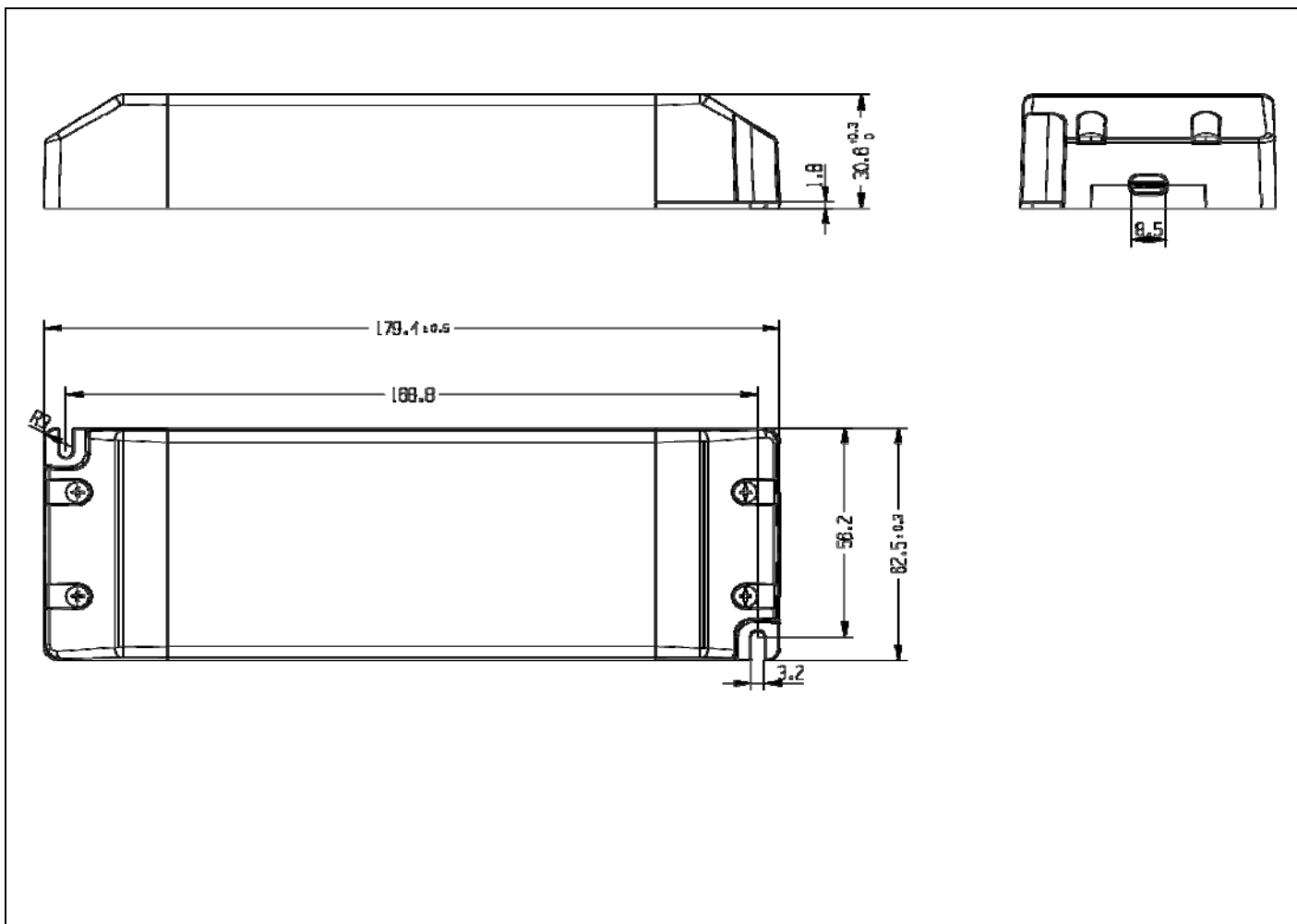
Certificate		Safety standards	Certification	Note
UL/CUL				
TUV		EN61347-1:2015 EN 61347-2-13:2014+A1 EN62493:2015		
SAA		AS/NZS 61347.2.13		
CCC				
CE		EN 61347-2-13:2014 +A1 EN61347-1:2015		
Safety test		Technical indexes	Note	
Dielectric strength	Input to output	3750Vac/5mA Max/60s	Reinforced insulation, no breakdown, no flashover	
	Primary to ground	--	Basic insulation, no breakdown, no flashover	
	Secondary to ground	--	Functional insulation, no breakdown, no flashover	
Insulation resistance	Input to output	$\geq 10M\Omega$	Test voltage : 500Vdc	
Grounding resistance		--	25A/1min	
Leakage current		$\leq 0.75mA$	264Vac	
EMI/EMS item		Standards	Basis	
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, TC. 75°C
MTBF	200,000hours	230Vac, full load, 25°C(MIL-HDBK-217F)
TC	90°C	
Warranty	3 years	
Weight	520g	
Dimensions	179.4mm*62.5mm*30.6mm	L x Wx H

Indoor LED Power Supply

Mechanical Specification (Unit : mm)



Remark :

AC input cable	Terminal block , H03VVH2-F 2×0.75mm ²
DC output cable	Terminal block, H05VVH2-F 2×1.0mm ²