

Indoor LED Power Supply



Features:

- . European AC input (220-240VAC).
- . Built-in active PFC function.
- . IP20.
- . Suitable for dry environment.
- . Protections: Short circuit / Over temperature / Over voltage.
- . Adopt plastic case and internal glue potting.
- . Built-in lightning protection device, can meet the difference mode 1kV.
- . Comply with the world lighting equipment safety standards.
- . 5 years warranty.

Description:

SS150 series is an indoor constant voltage LED driver with an input voltage range of 220-240Vac, whose efficiency is up to 92%, it's working in the temperature range of - 20 ° C to + 45 ° C under free air convection. It has a high power factor, ultra-low total harmonic distortion, low standby power consumption, lightning protection and other comprehensive protection functions, which not only greatly improves the reliability of the product, but also guarantees the product life cycle. This series is designed for LED lighting and is used in indoor lighting applications. They are suitable for a wide range of applications in almost all kinds of environments where LED luminaires 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	Output voltage precision	Total harmonic distortion (Typ.)	Power factor (Typ.)	Efficiency (Typ.)
SS150-12VL	12V	0-11A	132W	±5%	5%	0.97	90%
SS150-24VL	24V	0-6.25A	150W	±5%	5%	0.97	92%
SS150-48VL	48V	0-3.12A	150W	±5%	5%	0.97	92%

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

Indoor LED Power Supply

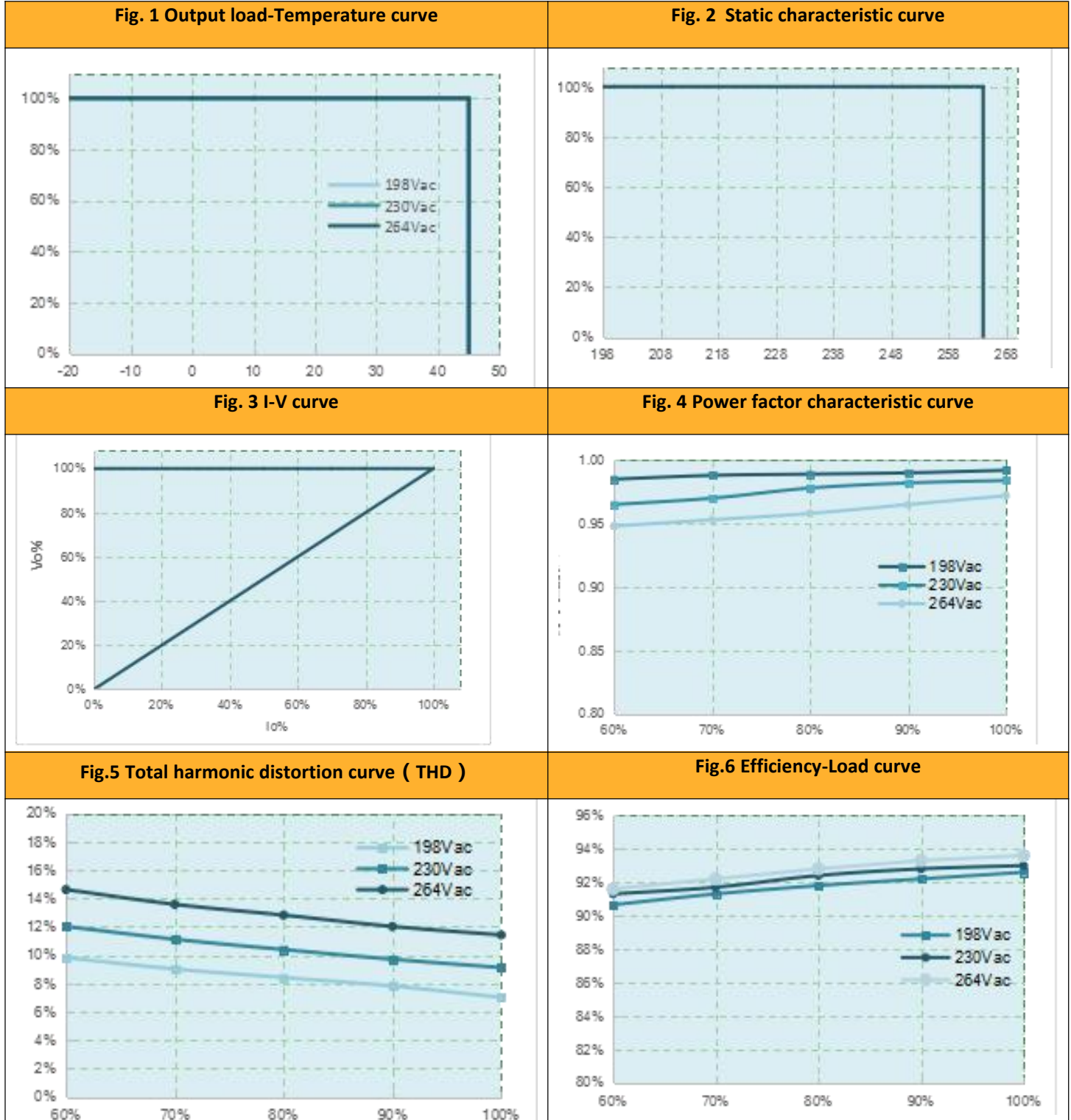
Input:

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	
Input frequency	47Hz		63Hz	
Max. Input current			0.9A	230Vac, Full Load
Input inrush current			65A	230Vac/50Hz, Cold Start
Power factor	0.95	0.97		230Vac, Full Load
DF		0.97		230Vac, Full Load
Total harmonic input		5%	10%	230Vac, Full Load
Leakage current			0.7mA	230Vac/50Hz, Full Load
Stand-by power consumption		0.4W	0.5W	230Vac/50Hz, No Load
QTY of 16A circuit breaker which be configured with the same type power supply	5pcs (Type B circuit breakers)/ 8pcs (Type C circuit breakers) can be configured at 230 VAC.			

Output:

Parameter	SS150-12VL	SS150-24VL	SS150-48VL	Note
Output voltage	12.0VDC	24.0VDC	48.0VDC	
Rated output current	11A	6.25A	3.12A	
Output current	0-11A	0-6.25A	0-3.12A	
Rated output power	132W	150W	150W	
Rated output efficiency	90%	92%	92%	230Vac
Output voltage precision	±5%			
Output voltage ripple (PK-PK)	±2%			Full load (Test under 20M bandwidth)
Output current ripple (PK-PK)	---			Full load (Test under 20M bandwidth)
Startup time	500mS			230V ac
Line regulation	±1%			full load
Load regulation	±1%			--

Characteristic Curve:



Indoor LED Power Supply

Protection:

Parameter		Conditions	Note
Protection	Over load	1.1-1.6 times rated load	Auto-recovery after overload removed.
	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 the input voltage and recover after restart.
	Over temperature	110 °C	Turn off the input voltage, the temperature can be restored after return 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			

Safety&EMC standard:

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

Indoor LED Power Supply

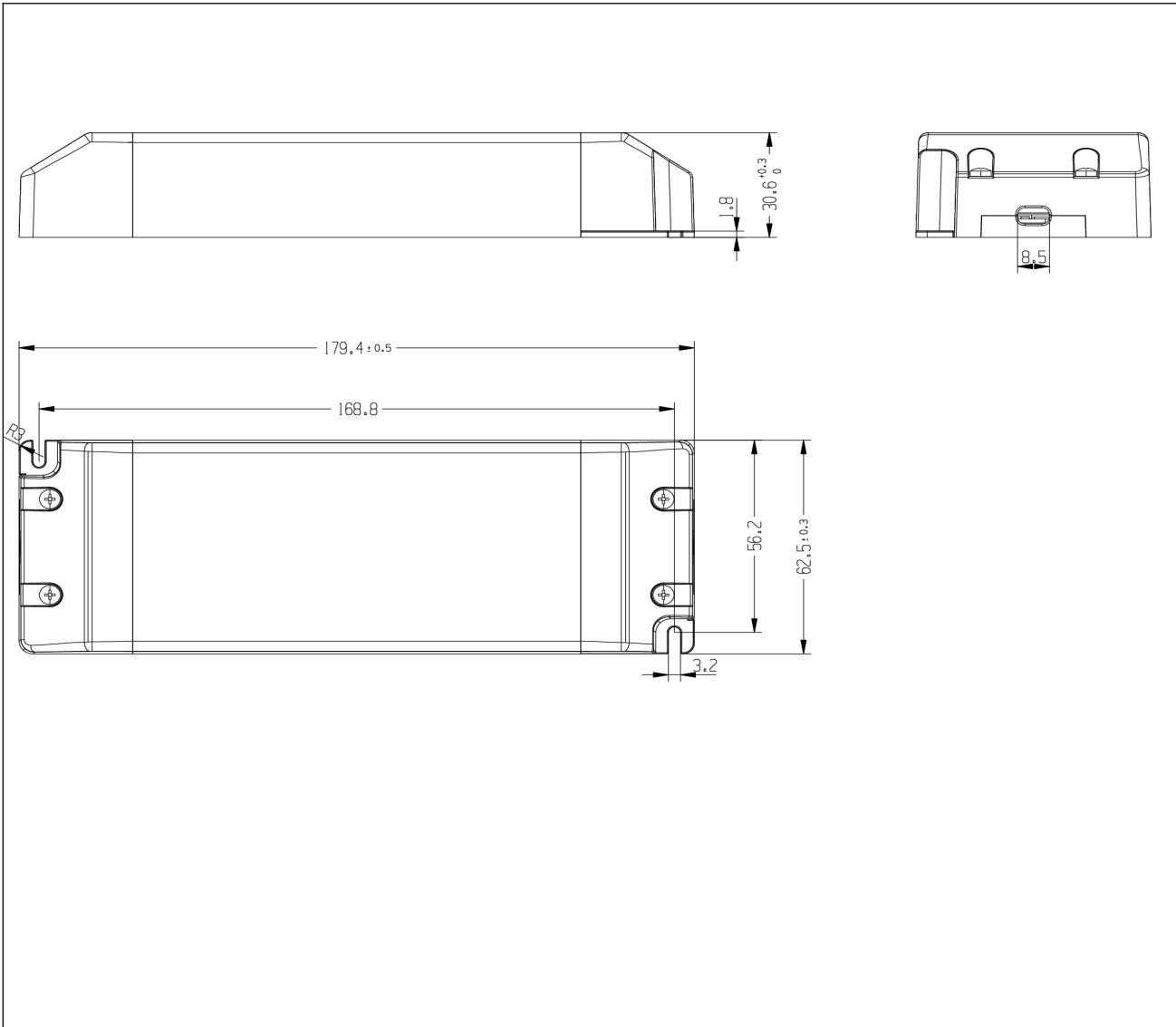
Safety test		Qualification	Note
Dielectric compressive strength	Input to output	3750Vac/5mA Max/60s	Reinforced insulation, no breakdown, no flashover
	Primary to ground	---	Basic insulation, no breakdown, no flashover
	Secondary to ground	---	Functional insulation, no breakdown, no flashover
Insulation resistance	Input to output	≥10MΩ	Test voltage : 500Vdc
Grounding resistance		---	25A/1min
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	50,000 hours	230Vac, full load, case Temp. 75°C
MTBF	200,000 hours	230Vac, full load, environment Temp. 25°C (MIL-HDBK-217F)
TC	90°C	
Warranty	5 years	
Weight	420g	
Dimensions	179.4mm * 62.5mm * 30.6mm	L x W x 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