Constant Voltage LED Driver

SS150-12VL
SS150-24VL
SS150-48VL

Product description

The SS150-12/24/48VL is a constant-voltage LED driver for indoor use. Its input voltage range is 198-264Vac, and it boasts up to 90% conversion efficiency. Featuring a fanless design and an operating temperature range of -20°C to +45°C with natural cooling, it also offers high power factor, low total harmonic distortion, low standby power consumption, and comprehensive protection features, significantly enhancing product reliability and ensuring a long product lifecycle.

Standards

EN61347-1:2015
EN 61347-2-13:2014+A1
EN62493:2015
AS/NZS 61347.2.13
EN 61347-2-13:2014 +A1
EN61347-1:2015

Characteristics

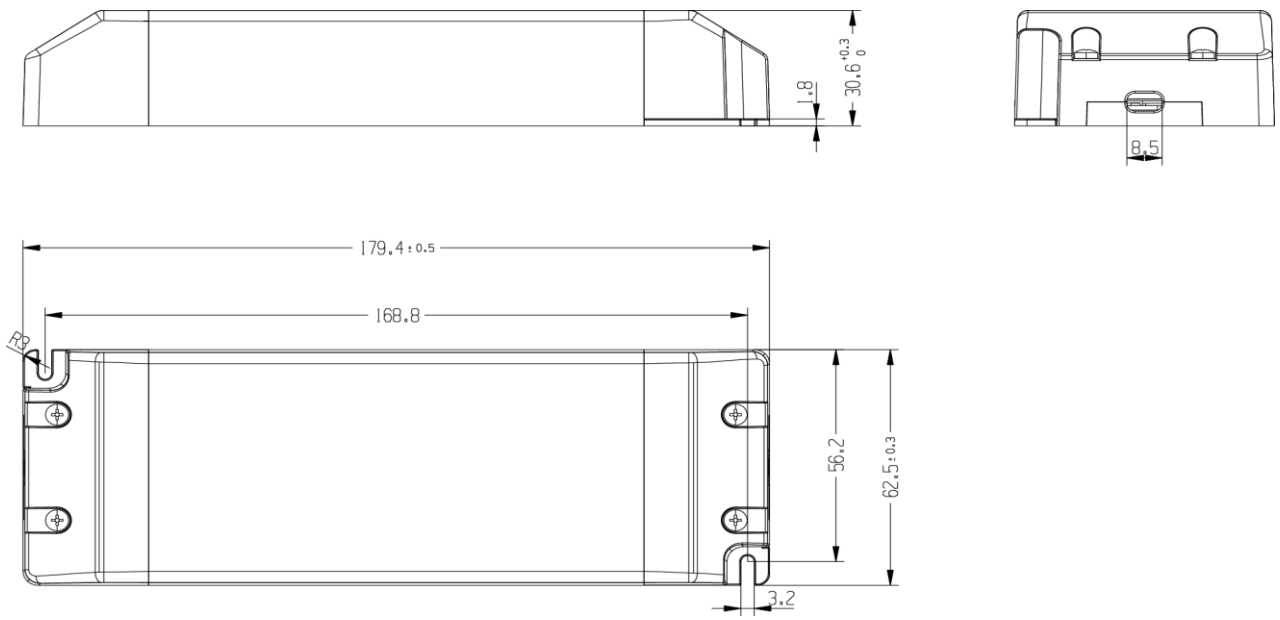
- AC input range (220-240VAC)
- IP20
- Suitable for dry indoor environments
- Protection types: short circuit, overload, and open circuit
- Plastic housing with internal glue
- Complies with global lighting safety regulations
- 5-year warranty

Specifications

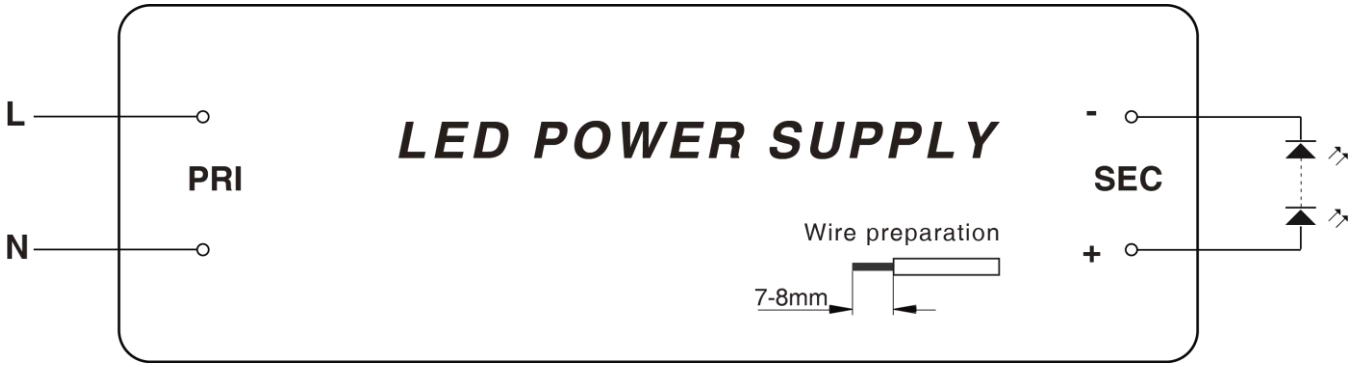
Model		SS150-12VL	SS150-24VL	SS150-48VL
Output	turn on time(S)		<0.5S	
	output power(W)	132	150	150
	output voltage(V)	12	24	48
	output voltage tolerance		5%	
	ripple voltage(mV)		3%	
	Line Regulation		1%	
	Load Regulation		1%	
	working current range(A)	0-11	0-6.25	0-3.125
	SVM		≤0.4	
	Pst		≤1	
	dimming type		NA	
	dimming range		NA	
Input	rated DC supply voltage(Vdc)		NA	
	rated supply voltage(Vac)		220-240	
	voltage range(Vac)		198-264	
	line frequency(Hz)		50/60	
	input current(A)		<0.9	
	efficiency (TYPE)	90%@full load,230Vac	92%@full load,230Vac	92%@full load,230Vac
	average efficiency(TYPE) (TYPE)	89%	90%	90%
	no load power consumption(W)		≤0.5W	
	power factor		0.95@full load	
	Displacement factor		0.95	
	THD(typ.)		10%	
	inrush current(Ipk)		70A/240uS	
	Leakage current (mA)		0.7mA@240Vac 60Hz	
	short circuit protection		hiccup mode, restart automatically after fault correction.	
	over load protection		hiccup mode, restart automatically after fault correction. exceed maximum rated load times 1.1~1.6	
	over voltage protection		NA	
	Over temperature protection		NA	

Protection	surge capacity	L-N: 1KV
	Withstand voltage	Input-Output:3750V/5mA/1min
Ambient and Life	Ta(℃)	-20…45(See derating curve)
	Tc max.(℃)	max.90
	Storage Temperature(℃)	-40...+80℃
	ambient humidity range	5%...85%RH, Not condensing
	nominal life-time(hrs)	50'000@Ta35℃
Other	dimensions (L×W×H)(mm)	179.4mm*62.5mm*30.6mm
	weight(g)	420
	casing material	Plastics
	housing colour	White
	type of protection	IP20
	protection class	Class II
	certificate	CE,TUV,SAA,RCM
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 model's 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 for H03VVH2-F 2×0.75mm²
DC	Terminal block for H05VVH2-F 2×1.0mm²

Electrical curves

Fig. 1 Output load-Temperature curve

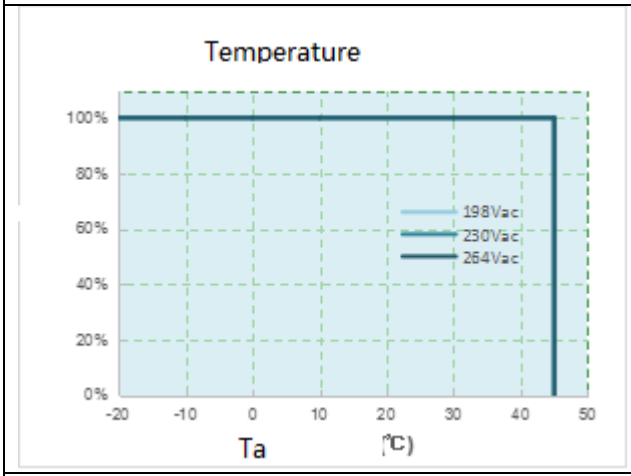


Fig. 2 Static characteristic curve

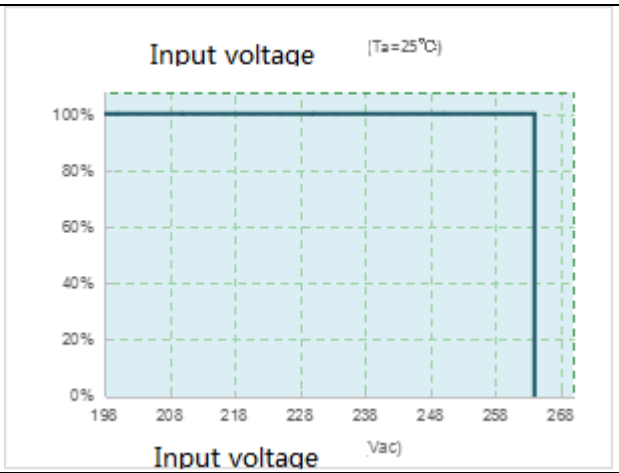


Fig. 3 I-V curve

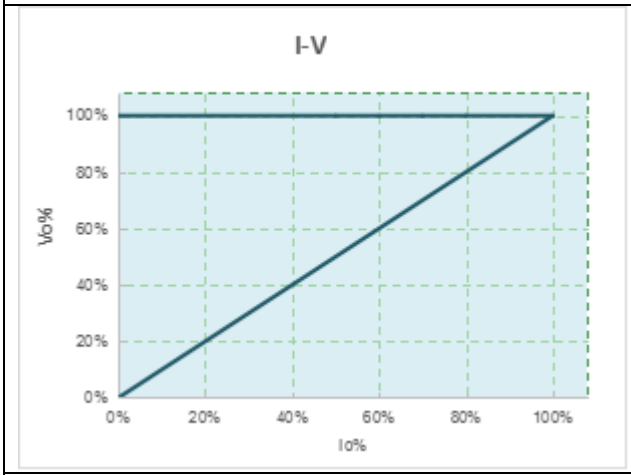


Fig. 4 Power factor characteristic curve

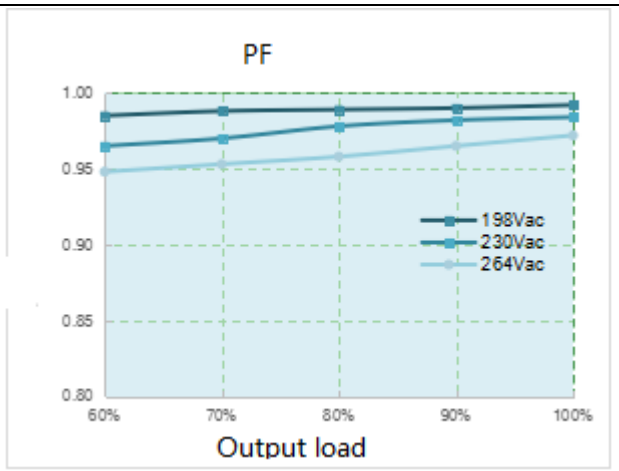


Fig.5 Total harmonic distortion curve

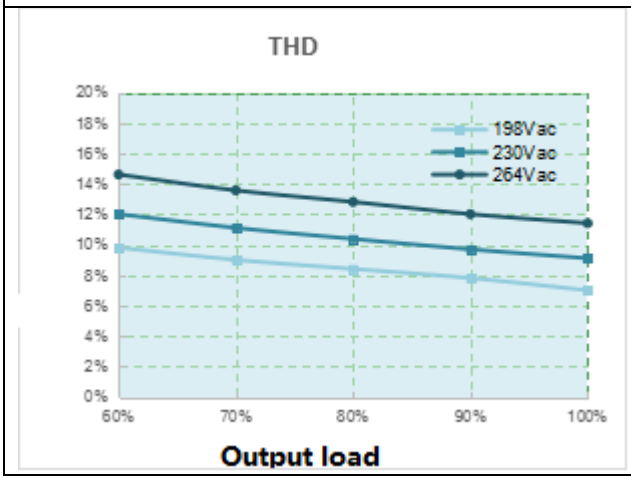
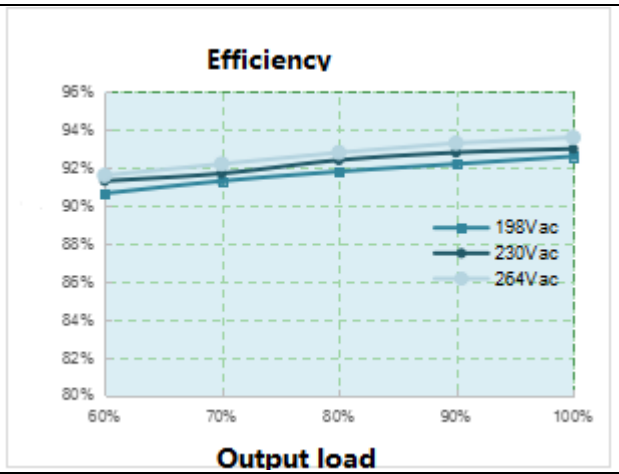


Fig.6 Efficiency-Load curve



MCBS

MCBS / Model	B10	B13	B16	B20	C10	C13	C16	C20
SS150-12/24/48VL	4	6	7	9	8	10	13	16

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Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SS150-12/24/48VL			

Revision history

Date	Rev.	Remark
2021.12.11	A1	Initial release.
2022.6.15	A2	Add SVM,PST
2023.2.2	A3	Add 48V
2023.11.22	A4	Format update
2025.10.11	B1	Lifetime Ta update