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Constant Voltage LED Power Supply

AF99-147-BP

Product description

The SL150 series is an indoor constant voltage LED driver with an input voltage range of 198-264Vac, a conversion efficiency of up to 93%, a fanless design, and a working temperature range of -20°C to +45°C natural cooling and heat dissipation. It also has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, and all-round protection functions, which not only greatly improves the reliability of the product, but also guarantees the product life cycle. This series of products is designed for LED lighting and is used for indoor lighting.

Standards

EN61347-1
EN61347-2-13
EN61547
EN55015
EN61000-3-2
EN61000-3-3
EN62384
EN62493

Characteristics

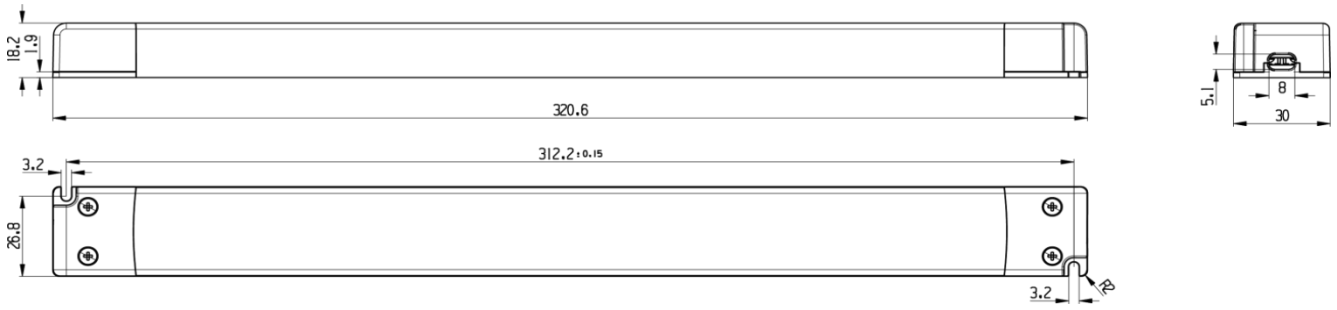
- AC input range (198-264VAC)
- With active PFC function
- IP20
- Suitable for indoor environment
- Protection type: short circuit/over temperature/over voltage protection
- Plastic housing
- Complies with world lighting equipment safety regulations
- Warranty 5 years

Specifications

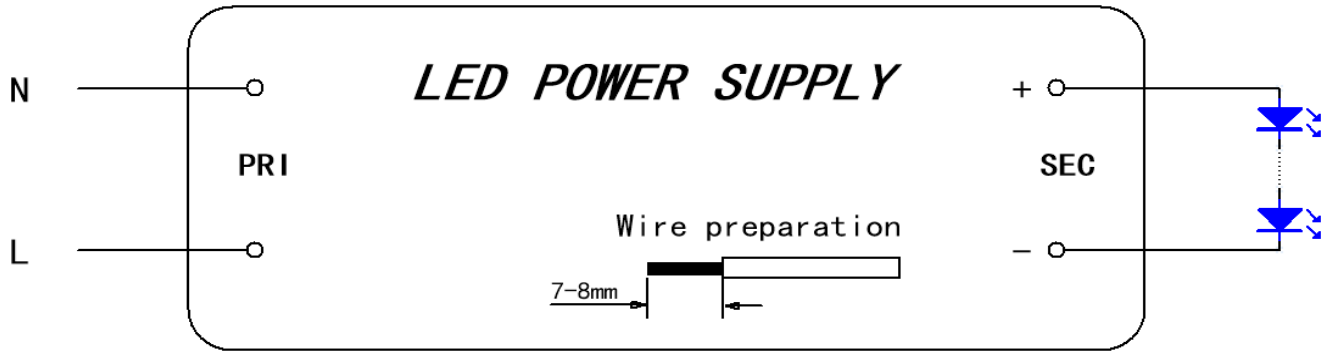
Model			SL150-24VF-1
Output	Turn on time(S)		＜0.5
	Output power(W)		150
	Output voltage(V)		24
	Output voltage tolerance		≤±5%
	Ripple voltage(mV)		400
	Line Regulation		1%
	Load Regulation		1%
	Working current range(A)		0-6.25
	SVM		<0.4
	Pst		<1.0
	Dimming type		NA
	Dimming range		NA
Input	Rated DC supply voltage(Vdc)		311-373
	Rated supply voltage(Vac)		220-240
	Voltage range(Vac)		198-264
	Line frequency(Hz)		50/60
	Input current(A)		1.0
	Efficiency (TYPE)		93.5%@full load
	Average efficiency(TYPE) 3		91.5%
	No load power consumption(W)		≤0.5W
	Power factor		0.95@full load
	Displacement factor		0.95
	THD(typ.)		10%
	Inrush current(Ipk)		80A/400uS
	Leakage current (mA)		0.7@240Vac 60Hz
Protection	Short circuit protection	hiccup mode,	restart automatically after fault correction.
	Over load protection	hiccup mode,	restart automatically after fault correction.
	Over voltage protection		Yes(latch off)
	Over temperature protection		Yes(Auto startup)
	Surge capacity		L-N: 1KV

	Withstand voltage	Input-Output:3000V/5mA/1min
Ambient and Life	Ta(C)	-20…45
	Tc max.(C)	max.90
	Storage Temperature(C)	-30...80
	Ambient humidity range	5%...85%RH, Not condensing
	Nominal life-time(hrs)	50'000@Ta35℃
Other	Dimensions (L×W×H)(mm)	320.6x30x18.2
	Weight(g)	250
	Casing material	plastics
	Housing colour	White
	Type of protection	IP20
	Protection class	Class Ⅱ
	Certificate	TUV,CE,CCC, 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+ H03VVH2-F 2*0.75mm^2
DC	Terminal block + H03VVH2-F 2*0.75mm2 *2（for 12V）H05VVH2-F 2*1.0mm^2(for 24 and 48V)

Electrical curves

Fig. 1 Output load-Temperature curve

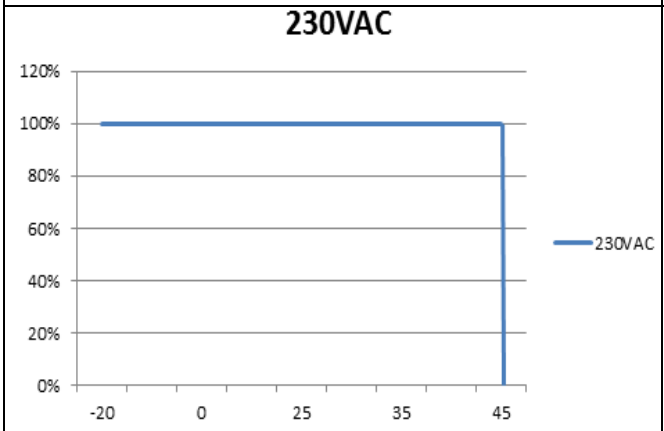


Fig. 2 Static characteristic curve

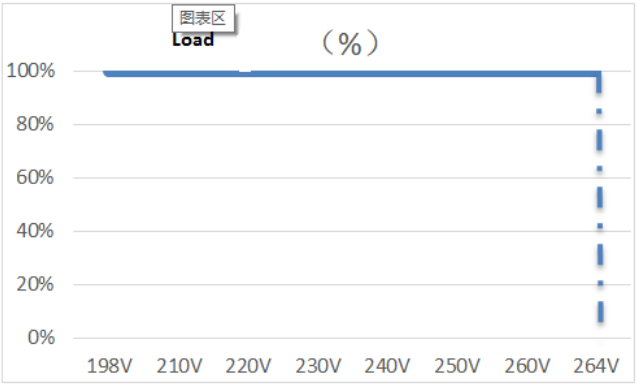


Fig. 3 I-V curve

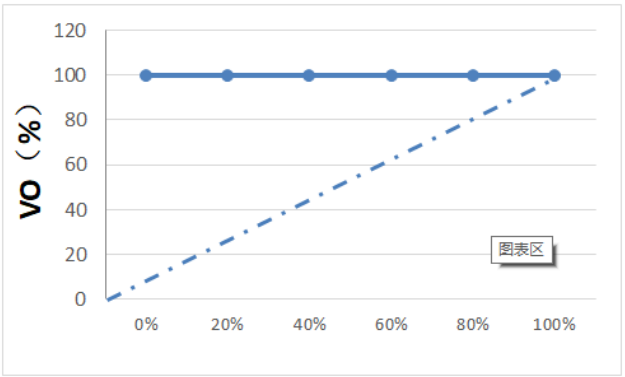


Fig. 4 Power factor characteristic curve

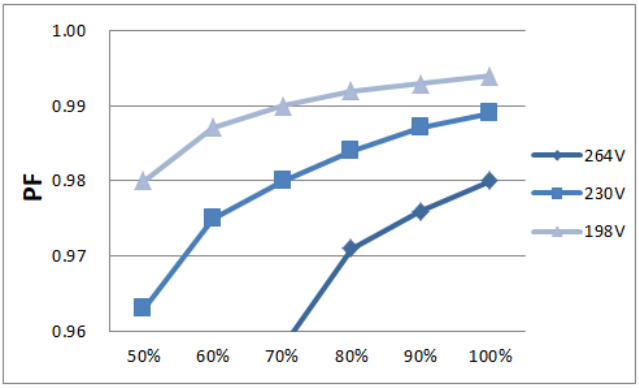


Fig.5 Total harmonic distortion curve

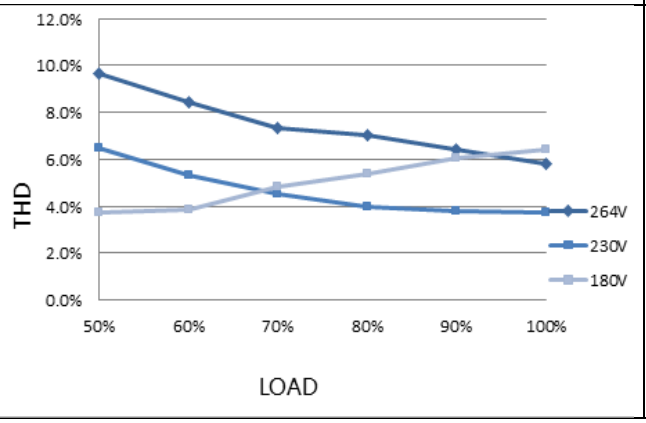


Fig.6 Efficiency-Load curve