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Constant Voltage LED Power Supply

AF99-148-BP

Product description

SL200 series is an indoor constant voltage LED driver. Its input voltage range is 198-264Vac, with a conversion efficiency up to 94.5%. It adopts fanless design and works at -20°C～+45°C with natural cooling and heat dissipation. The temperature range of the chassis, and has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, and comprehensive protection functions, which not only greatly improve the reliability of the product, but also ensure the product life cycle. This series of products is designed for LED lighting design.

Standards

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

Characteristics

- European AC input range (198-264VAC)
- With active PFC function
- Waterproof IP20
- Suitable for indoor environments
- Protection type: short circuit/over temperature/over voltage protection
- plastic shell
- Conforms to world lighting safety regulations
- Warranty 5 years

Specifications

Model		AF99-148-BP
Output	turn on time(S)	＜0.5
	output power(W)	200
	output voltage(V)	24
	output voltage tolerance	≤±5%
	ripple voltage(mV)	240
	line Regulation	1%
	load Regulation	1%
	working current range(A)	0-8.33
	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)	1.1
	efficiency (TYPE)	95%@full lc
	average efficiency(TYPE) 3	94%
	no load power consumption(W)	≤0.5W
	power factor	0.95@full load
	displacement factor	0.95
	THD(typ.) THD	4%
	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(latch off)
	surge capacity	L-N: 1KV
	Withstand voltage	Input-Output：3000V/5mA/1min
Ambient	Ta(C)	-20…45
	Tc max.(C)	max.90
	Storage Temperature(C)	-30...80

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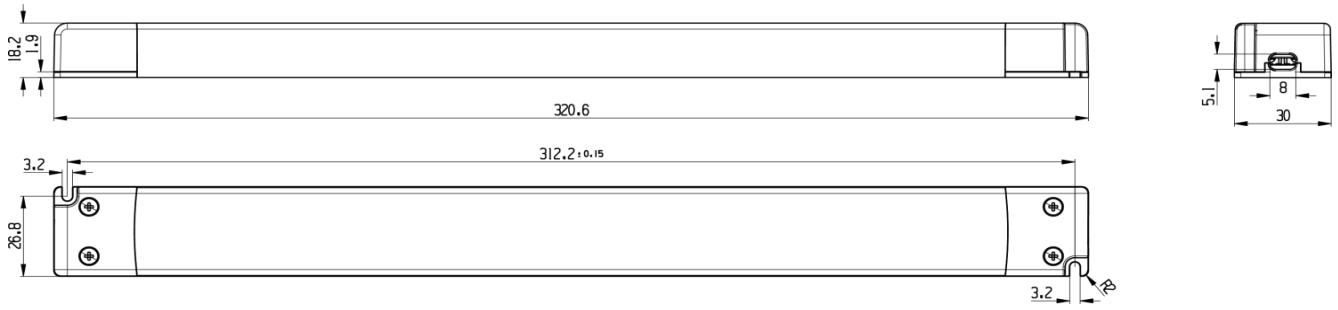
and Life	ambient humidity range	5%...85%RH, Not condensing
	nominal life-time(hrs)	50'000@Ta
Other	dimensions (L×W×H)(mm)	320.6x30x18.2
	weight(g)	320
	casing material	plastics
	housing colour	white
	type of protection	IP20
	protection class	class Ⅱ
	certificate	
Note	1.Tolerance:includes set up tolerance, 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)



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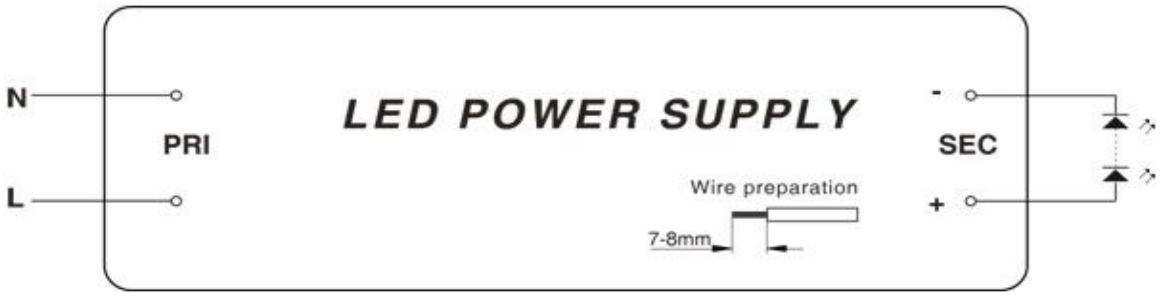
Wiring Diagram



AC	Terminal H03VVH2-F 2*0.75mm^2
DC	Terminal H03VVH2-F 2*1.0mm^2

Electrical curves

Fig. 1 Output load-Temperature curve

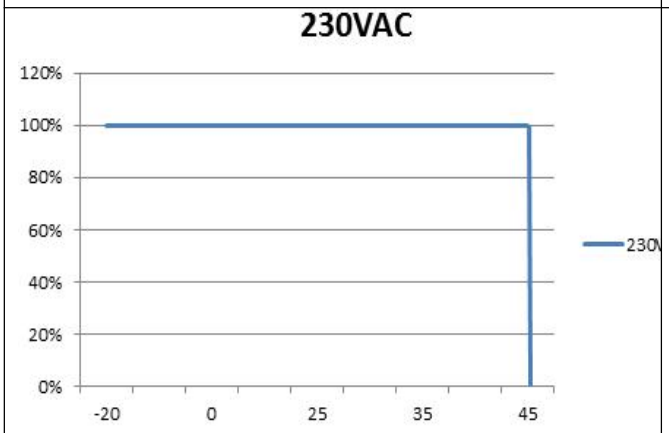


Fig. 2 Static characteristic curve

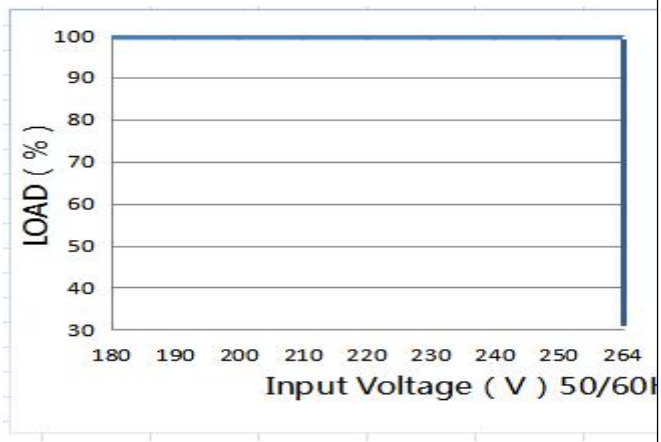


Fig. 3 I-V curve

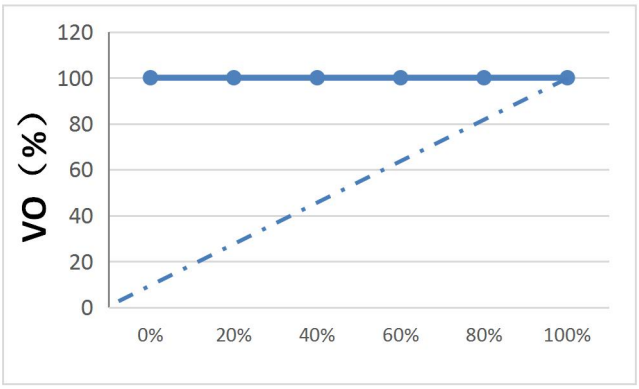


Fig. 4 Power factor characteristic curve

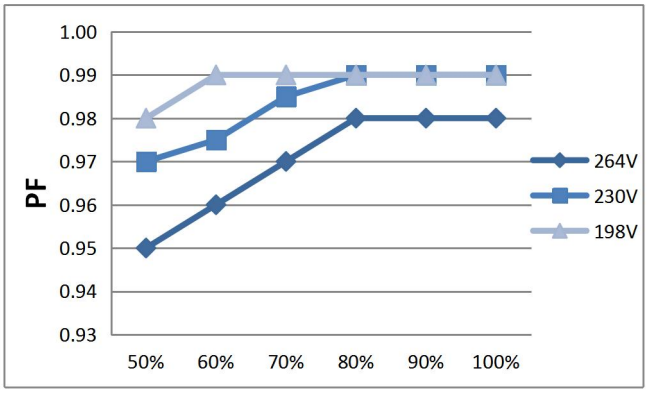


Fig.5 Total harmonic distortion curve（THD）

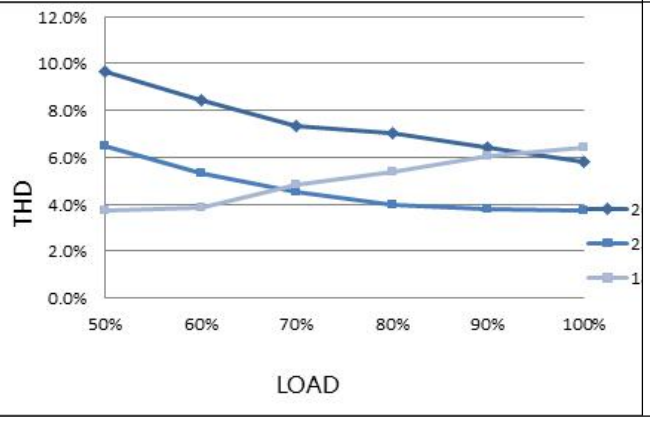


Fig.6 Efficiency-Load curve