

Constant Voltage LED Power Supply

SDL100-12VFP6

SDL100-24VFP6



Product description

SDL100 series is a constant voltage LED DALI driver for indoor and outdoor. Its input voltage range is 198-264Vac, with a conversion efficiency up to 93%. It adopts fanless design and works at -20°C ~ +60°C natural cooling. The temperature range of the cooling case, and has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, and all-round protection functions, which not only greatly improve the reliability of the product, but also ensure the product life cycle.

Standards

EN61347-1
EN61347-2-13
EN61547
EN55015
EN61000-3-2
EN61000-3-3
EN62384
EN62493
IEC 62386-101, 102, 207

Characteristics

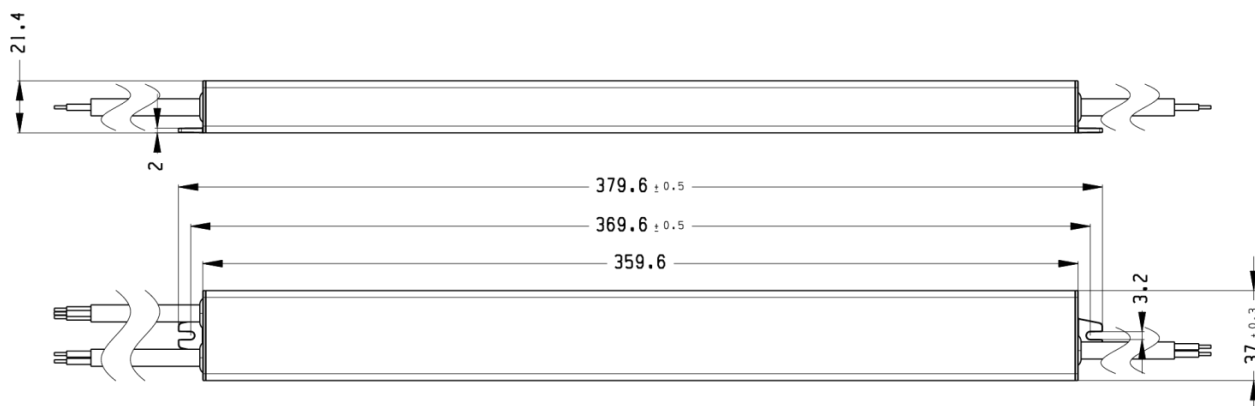
- European AC input range (220-240VAC)
- With active PFC function
- Waterproof IP67
- DALI-2.0 DT6 dimming driver
- Built-in push dimming function
- Dimming range 1-100%
- Suitable for dry indoor environments
- Protection type: short circuit/over temperature/over voltage protection
- Metal shell with glue filling inside
- Conforms to world lighting safety regulations
- Warranty 5 years

Specifications

Model		SDL100-12VFP6	SDL100-24VFP6
Output	turn on time(S)	<0.5	<0.5
	output power(W)	100	100
	output voltage(V)	12	24
	output voltage tolerance	≤±5%	≤±5%
	ripple voltage(mV)	150	200
	Line Regulation	1%	1%
	Load Regulation	3%	2%
	working current range(A)	0-8.33	0-4.16
	SVM	0.1	0.1
	Pst	0.1	0.1
	dimming type	YES	YES
	dimming range	1-100%	1-100%
	rated DC supply voltage(Vdc)	NA	NA
Input	rated supply voltage(Vac)	220-240	220-240
	voltage range(Vac)	198-264	198-264
	line frequency(Hz)	50/60	50/60
	input current(A)	0.7	0.7
	efficiency (TYPE)	92.5%@full load	93.5%@full load
	average efficiency(TYPE) 3 (TYPE)3	91.5%	92 %
	no load power consumption(W)	≤0.5W	≤0.5W
	power factor	0.95@full load	0.95@full load
	Displacement factor	0.95	0.95
	THD(typ.) THD	5.5%	5.5%
	inrush current(Ipk) (Ipk)	80A/260uS	80A/260uS
	Leakage current (mA)	0.7@240Vac 60Hz	0.7@240Vac 60Hz
	short circuit protection	hiccup mode, restart automatically after fault correction.	hiccup mode, restart automatically after fault correction.
Protection	over load protection	hiccup mode, restart automatically after fault correction.	exceed maximum rated load times 1.1
	Over voltage protection	Yes(latch off)	Yes(latch off)
	Over temperature protection	Yes(latch off)	Yes(latch off)
	surge capacity	L-N: 1KV L N-GND:2KV	L-N: 1KV L N-GND:2KV

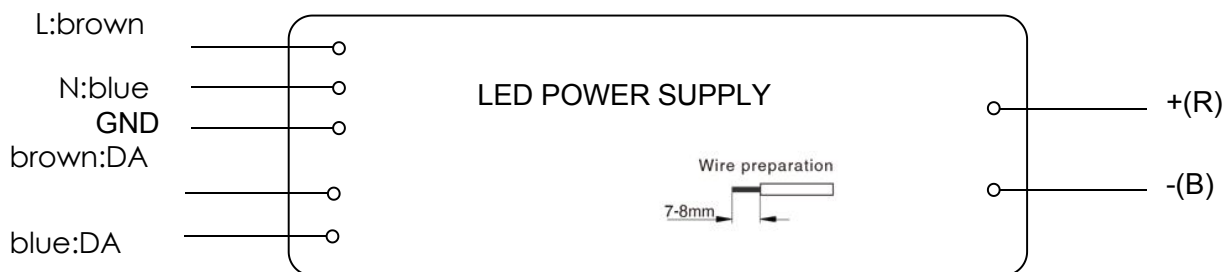
	Withstand voltage	Input-Output: 3000V/5mA/1min Input-gnd:1500V/5mA/1min	Input-Output: 3000V/5mA/1min Input-gnd:1500V/5mA/1min
Ambient and Life	Ta(C)	-20...60(see derating curve)	-20...60(see derating curve)
	Tc max.(C)	max.80	max.80
	Storage Temperature(C)	-30...80	-30...80
	ambient humidity range	5%...85%RH, Not condensing	5%...85%RH, Not condensing
	nominal life-time(hrs)	50'000@Ta	50'000@Ta
Other	dimensions (L×W×H)(mm) 尺寸	379.6x37x21.4	379.6x37x21.4
	weight(g)	600	600
	casing material	metal	metal
	housing colour	Aluminum	Aluminum
	type of protection	IP67	IP67
	protection class	class I	class I
	certificate 认证		
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)

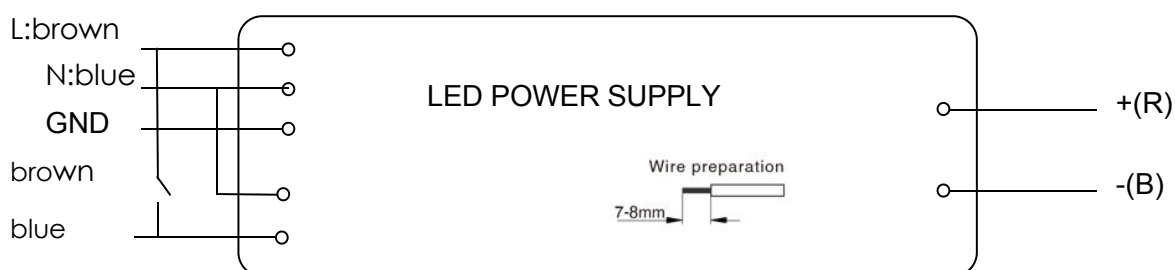


Wiring Diagram

DALI diagram



PUSH diagram



AC	H05RN-F 3*0.75mm ²
dali	H05RN-F 2*0.75mm ²
DC	SVT16AWG(FOR 12V)/ SVT18AWG(FOR 24V)

Electrical curves

Fig. 1 Output load-Temperature curve

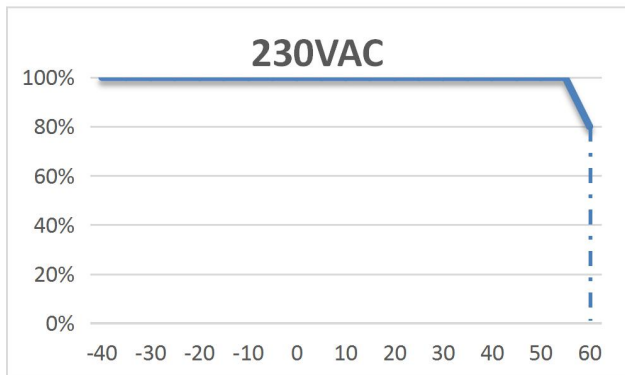


Fig. 2 Static characteristic curve

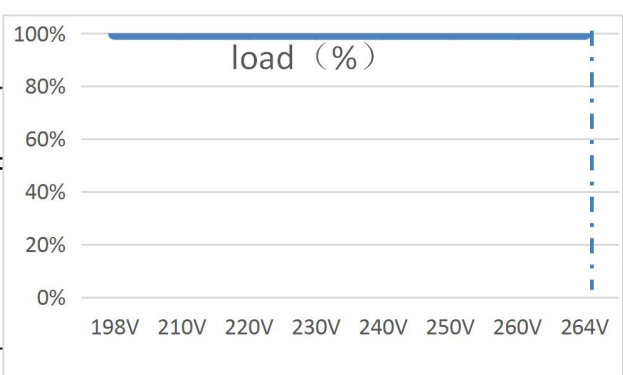


Fig. 3 I-V curve

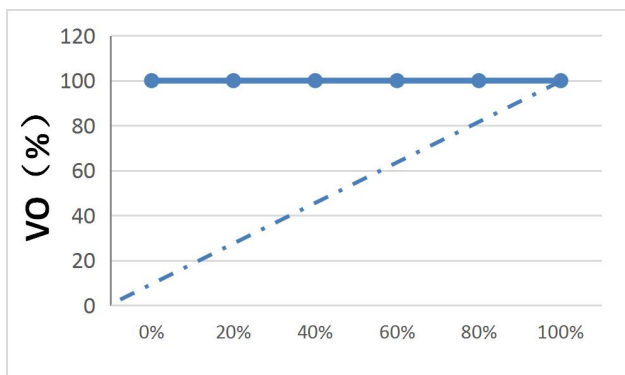


Fig. 4 Power factor characteristic curve

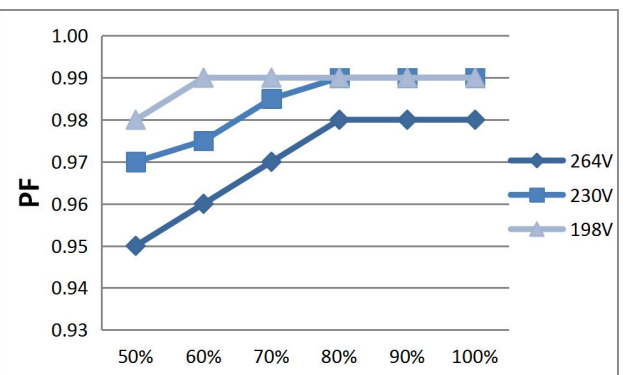


Fig.5 Total harmonic distortion curve (THD)

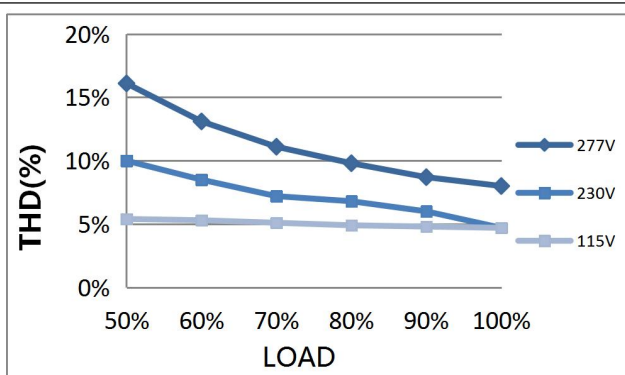
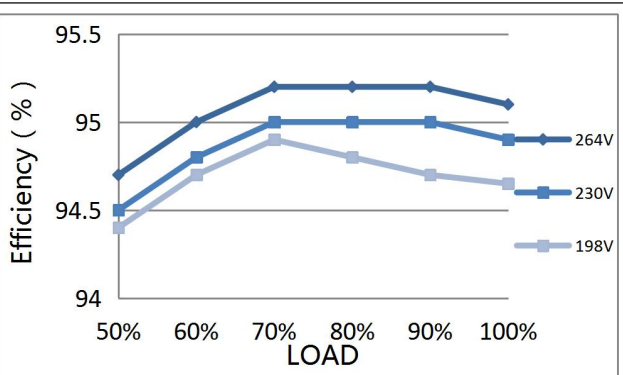


Fig.6 Efficiency-Load curve



MCBS

Model \ MCBS	B10	B13	B16	B20	C10	C13	C16	C20
SDL100-12VFP6	6	7	9	11	7	9	11	14
SDL100-24VFP6	6	7	9	11	7	9	11	14

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SDL100-12VFP6			
SDL100-24VFP6			

Revision history

Date	Rev.	Remark
2023.3.28	A0	Initial release.
2023.6.6	A1	Official release