

# Constant Voltage LED Power Supply

SDL150-12VFP6

SDL150-24VFP6



## Product description

SDL150 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

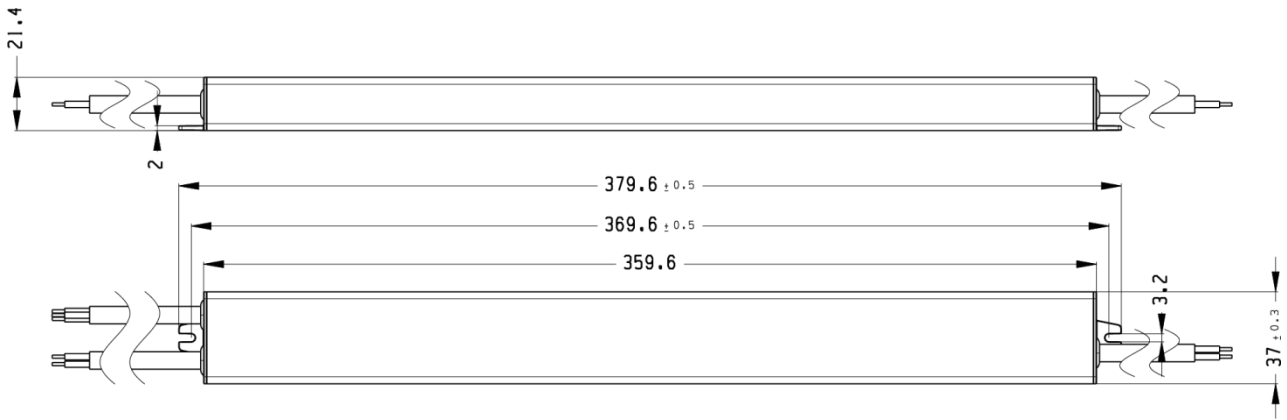
- European AC input range (220-240VAC)
- With active PFC function
- Waterproof IP67
- DALI-2.0 DT6 dimming driver
- Built-in push dimming function
- Dimming range 1-100%
- Suitable for dry indoor environments
- Protection type: short circuit/over temperature/over voltage protection
- Metal shell with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

## Specifications

Model		SDL150-12VFP6	SDL150-24VFP6	
Output	turn on time(S)	<0.5	<0.5	
	output power(W)	132	150	
	output voltage(V)	12	24	
	output voltage tolerance	≤±5%	≤±5%	
	ripple voltage(mV)	150	170	
	Line Regulation	1%	1%	
	Load Regulation	3%	2%	
	working current range(A)	0-11	0-6.25	
	SVM	0.1	0.1	
	Pst	0.1	0.1	
	dimming type	YES	YES	
dimming range	1-100%	1-100%		
Input	rated DC supply voltage(Vdc)	NA	NA	
	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)	0.9	0.9	
	efficiency (TYPE)	92.5%@full load	93.5%@full load	
	average efficiency(TYPE) 3 (TYPE)3	91.5%	92.5%	
	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	4%	4%	
	inrush current(Ipk) (Ipk)	80A/260uS	80A/260uS	
	Leakage current (mA)	0.7@240Vac 60Hz	0.7@240Vac 60Hz	
	Protection	short circuit protection	hiccup mode, restart automatically after fault correction.	hiccup mode, restart automatically after fault correction.
		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	
	Ta(C)	-20...60(see derating curve)	-20...60( see derating curve )	

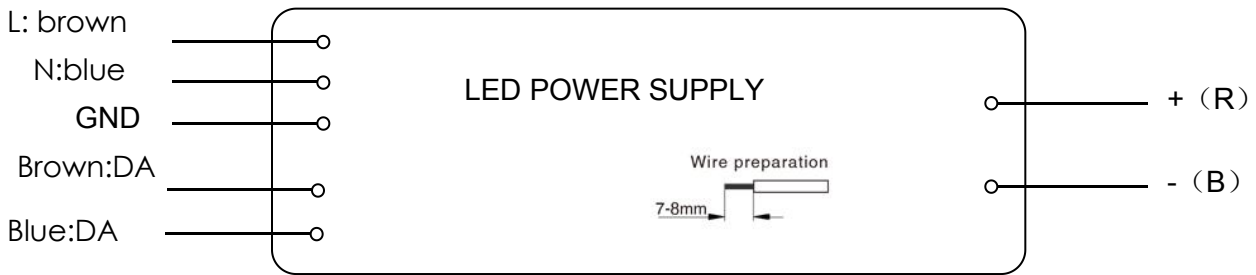
<b>Ambient and Life</b>	Tc max.(C)	max.80	max.80
	Storage Temperature(C)	-30...80	-30...80
	ambient humidity range	5%...85%RH, Not condensing	5%...85%RH, Not condensing
	nominal life-time(hrs)	50'000@Ta	50'000@Ta
<b>Other</b>	dimensions (L×W×H)(mm)	379.6x37x21.4	379.6x37x21.4
	weight(g)	600	600
	casing material	metal	metal
	housing colour	Aluminum	Aluminum
	type of protection	IP67	IP67
	protection class	class I	class I
	certificate		
<b>Note</b>	<p>1.Tolerance:includes set up tolerance, line regulation and load regulation.</p> <p>2.Tested at full load,230Vac.Refer to"Power Factor" and "EFFICIENT"curve graphs.</p> <p>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.</p> <p>4.All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature.</p> <p>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.</p>		

## Dimensions(mm)

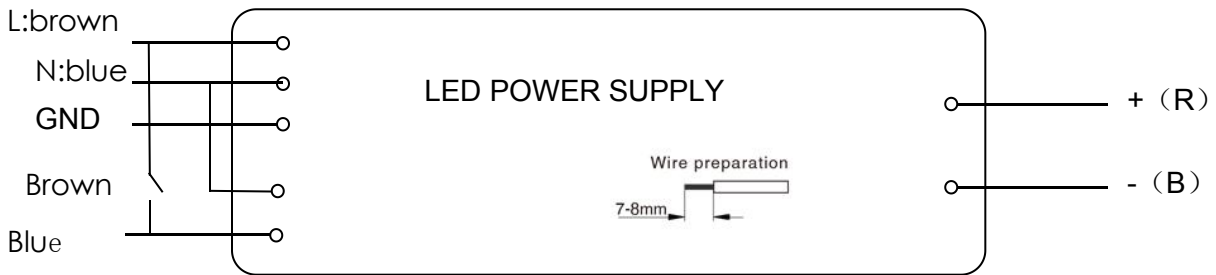


## Wiring Diagram

### DALI Diagram



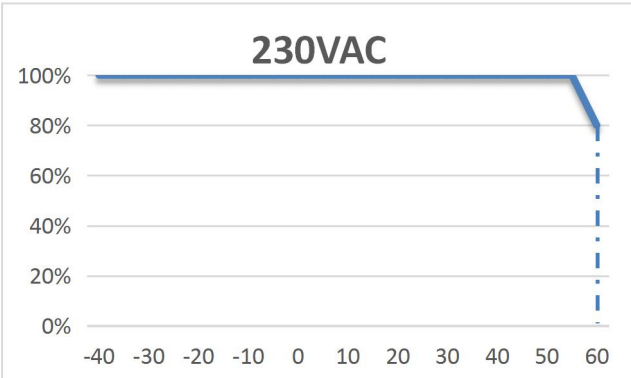
### PUSH Diagram



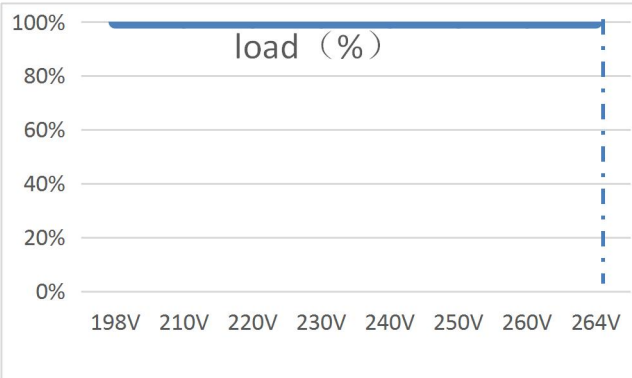
AC	H05RN-F 3*0.75mm <sup>2</sup>
dali	H05RN-F 2*0.75mm <sup>2</sup>
DC	SVT16AWG(FOR 12V)/ SVT18AWG(FOR 24V)

# Electrical curves

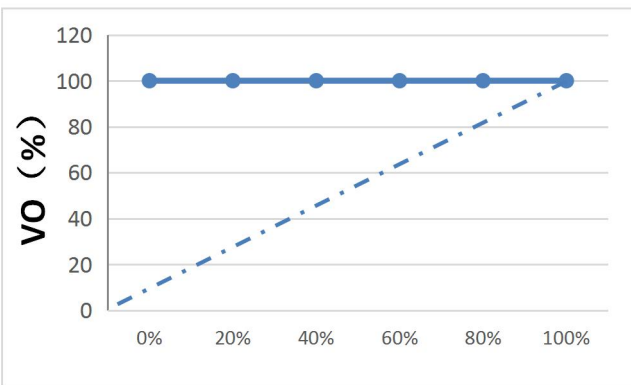
**Fig. 1 Output load-Temperature curve**



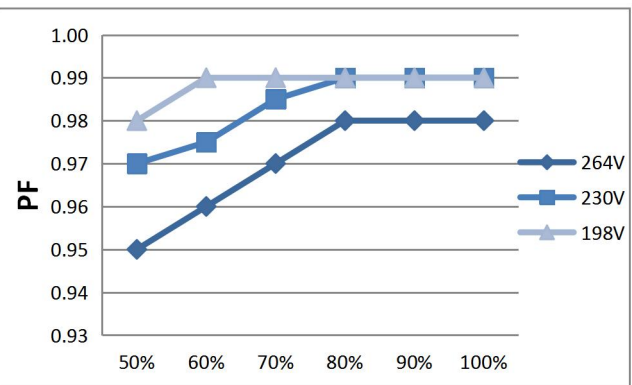
**Fig. 2 Static characteristic curve**



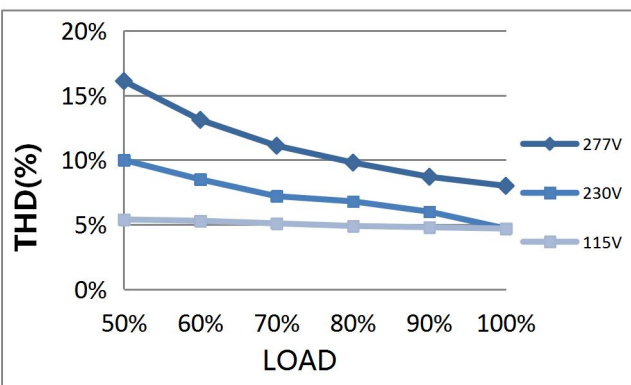
**Fig. 3 I-V curve**



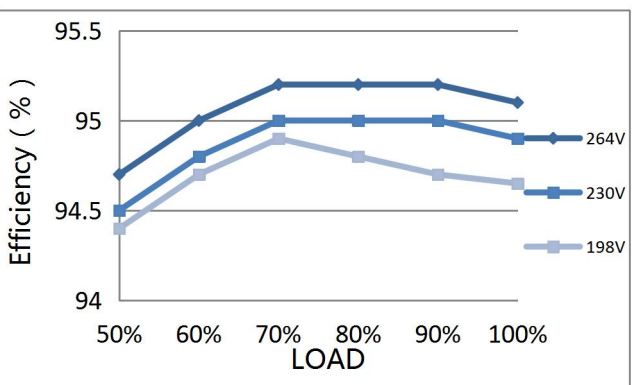
**Fig. 4 Power factor characteristic curve**



**Fig.5 Total harmonic distortion curve (THD)**



**Fig.6 Efficiency-Load curve**



## MCBS

MCBS Model	B10	B13	B16	B20	C10	C13	C16	C20
SDL150-12VFP6	4	6	7	9	5	7	9	11
SDL150-24VFP6	4	6	7	9	5	7	9	11

## Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SDL150-12VFP6			
SDL150-24VFP6			

## Revision history

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