

IP20 Indoor LED Power Supply



Description:

SDL150 series is an indoor constant voltage LED DALI power supply, Its input voltage range of 198-264 VAC, with the high efficiency up to 93%, fan-less design, working in the temperature range of -20°C to +45°C under free air convection. It has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, with all-round protection functions, which not only greatly improves the reliability of the product, but also ensures the life cycle of product. This series is designed for LED lighting and applied to indoor lighting. It is suitable for almost kinds of application where LED lamps can be installed. Comply to DALI 2.0 standard (IEC 62386-101,102,207,209), innovative thermal management technology, intelligent protection of power supply' s life.

Model:

Model	Output voltage	Output current	Max. Output power	Output voltage precision	Total harmonic distortion (Typ.)	Power factor	Efficiency (Typ.)
SDL150-12VF6	12V	0-11A	132W	±5%	5%	0.98	92%
SDL150-24VF6/8	24V	0-6.25A	150W	±5%	5%	0.98	93%
SDL150-48VF6	48V	0-3.125A	150W	±5%	5%	0.98	93%

Remark: All the parameters are measured at 230VAC input, full load and 25 $\,^\circ \! \mathbb{C}$ of ambient temperature if not specially mentioned.



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PUSH Dimming/Chang Color Temperature Dimming: Long press Switch: Short press

Dimming Memory: When the light is switched on after turn off, return to the previously adjusted brightness level.

Brightness and color temperature are adjusted in opposite directions with each long press.

Long press for more than 15s is the synchronization function, and all devices are adjusted to 50% level. Long press again to lower the brightness (color temperature will be unified to 4500K, and long press again to lower the color temperature)



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Input:

Parameter	Min. value	Typical value	Max. value	Note
Rated input	220 Vac		240Vac	Derating curve is shown in figure
voltage				
Input voltage	198 Vac		264Vac	
Input frequency	47Hz		63Hz	
Max. Input current			0.9A	
Input inrush			75A	230Vac/50Hz, Cold Start
current				
Power factor	0.95	0.98		230Vac,Full Load
Total harmonic		5%	8%	230Vac,Full Load
input				
Leakage current			0.7mA	230Vac/50Hz,Full Load
Stand-by power		0.45W	0.5W	230Vac/50Hz,No Load
consumption				

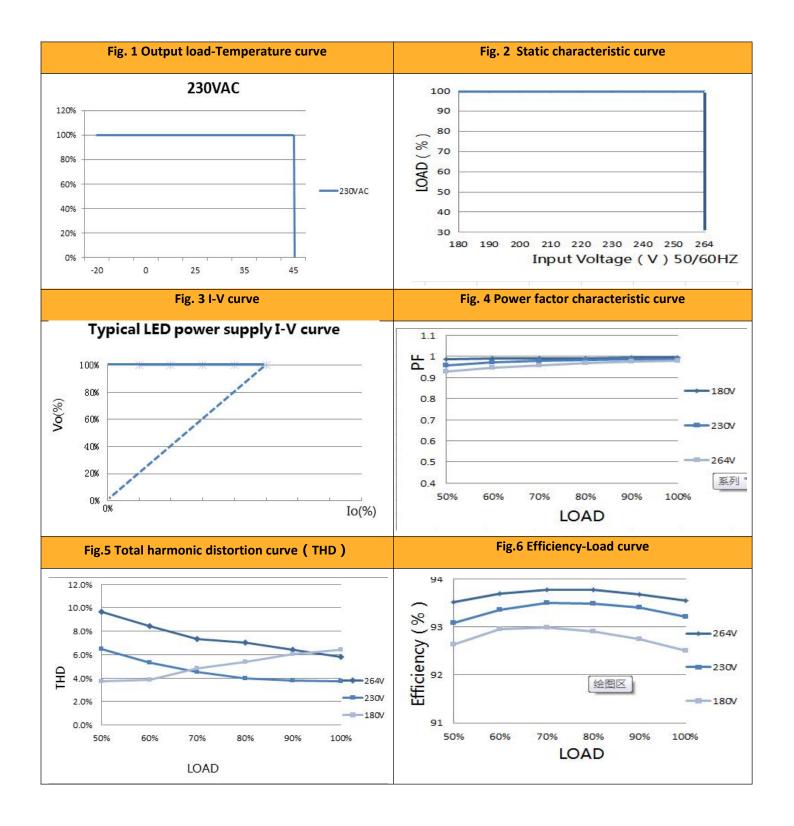
Output:

Parameter	SDL150- 12VF6	SDL150- 24VF6/8	SDL150- 48VF6	Note
Output voltage	12.0VDC	24.0VDC	48.0VDC	
Rated output current	11A	6.25A	3.125	
Output current	1.1-11A	0.625-6.25A	0.3125- 3.125A	
Rated output power	132W	150W	150W	
Rated output efficiency	92%	93%	93%	230Vac
Output voltage precision	±5%			
Output voltage ripple (PK- PK)		±3%		Full load (Test under 20M bandwidth)
Output current ripple(PK- PK)				Full load (Test under 20M bandwidth) 230Vac
Rise time		100mS		
Startup time	500mS			230Vac
Line regulation	ne regulation ±1%			full load
Load regulation	±1%			



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Characteristic Curve:





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Protection:

Parameter		Conditions	Note
	Over load	1.1-1.6 times rated load	Auto-recovery after overload removed.
	Short circuit	Short circuit power≤0.5W	Hiccup mode, auto-recovery after short circuit removed.
Protection	Over voltage	1.5 times of rated output voltage	Turn off the input voltage and recover after restart.
	Over temperature	110 °C	Turn off the input voltage, the temperature can be restored
			after return to normal.

Environment Requirement:

Parameter	Min.	Тур.	Max.	Note	
Working temp.	-20°C	25°C	+45℃	See Fig.1	
Storage temp.	-40°C	25°C	+85℃		
Working humidity	10%RH		90%RH		
Storage humidity	5%RH		95%RH		
IP grade			IP20		
Cooling mode	Natural cooling				

Remark: All the parameters are measured at 25 $^{\circ}$ C of ambient temperature if they are not specially mentioned.



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Safety&EMC standard:

Certificate		Safety standards	Certification	Note
UL/CUL				
TUV		EN61347-1:2015		
		EN 61347-2-13:2014+A1	\checkmark	
		EN62493:2015		
SAA		AS/NZS		
		61347.2.13	N	
ССС				
CE		EN 61347-2-13:2014 +A1	\checkmark	
		EN61347-1:2015		
Safety	test	Qualification	Note	
	Input to	3750Vac/5mA Max/60s	Reinforced insulation, no breakdown, no flasho	
	output			
Dielectric compressive strength	Primary to		Basic insulation, no breakdown, no flasho	
compressive strength	ground			
	Secondary to		Functional insulation, no breakdown, no	
	ground		flashover	
Insulation resistance	Input to	≥10MΩ	Test voltage : 500Vdc	
	output			
Grounding resistance			25A/1min	
Leakage current		≤0.75mA	264Vac	
EMI/EMS item		Standard/Level	Data	
Conduction CE		EN55015		
Radiation RE		EN55015		
Harmonics		EN IEC 61000-3-2	Class C	

Others:

Parameters	Condition	note
Lifetime	30,000 hours	230Vac , full load, TC. 75℃
MTBF	200,000 hours	230Vac, full load, TA. 25°C (MIL-HDBK-217F)
TC	85℃	
Warranty	5 years	
Weight	300 g	
Dimensions	336.6mm * 30mm * 18.2mm	L x W x H



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Mechanical Specification (Unit : mm)

