



Dimming & CCT



Features:

- . European AC input (220-240VAC).
- . DALI 2.0 DT6/DT8 dimming and CCT
- . Built-in press dimming function
- . Dimming scope 1-100%
- . Protections: Short circuit / Over load / Over voltage
- . Adopt plastic case and internal glue potting.
- . Built-in lightning protection device, can meet the difference mode 1kV
- . Efficiency > 88%
- . 5 years warranty



Description:

SDL60 series is an indoor constant voltage LED DALI power supply with an input voltage range of 198-264Vac, whose efficiency is up to 88%, adopt fanless design, it's working in the temperature range of - 20 ° C to + 45° C under free air convection. It has a high power factor, ultra-low total harmonic distortion, low standby power consumption and other comprehensive protection functions, which not only greatly improve the reliability of the product, but also guarantee the product life cycle. This series of products is designed for LED lighting and is used in indoor lighting applications. They are suitable for a wide range of applications in almost any environment where LED luminaires can be installed. Comply with DALI2.0 standard (IEC 62386-101, 102, 207, 209), Innovative thermal management technology, intelligent protection of power supply life.

Model:

Model	Output voltage	Output current	Max. Output power	Output voltage precision	Total harmonic distortion (Typ.)	Power factor (Typ.)	Efficiency (Typ.)
SDL60-12VF6	12V	0-5.0A	60W	±5%	8%	0.95	85%
SDL60-24VF6/VF8	24V	0-2.5A	60W	±5%	8%	0.95	88%
SDL60-48VF6	48V	0-1.25A	60W	±5%	8%	0.95	88%

Remark: All the parameters are measured at 230VAC input, full load and 25 °C of ambient temperature if they are not specially mentioned.

IP20 Indoor LED Power Supply

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 previous 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 voltage	220 Vac		240Vac	Derating curve is shown in figure
Input voltage	198 Vac		264Vac	
Input frequency	47Hz		63Hz	
Max. Input current			0.6A	
Input inrush current			60A	230Vac/50Hz, Cold Start
Power factor	0.9	0.95		230Vac, Full Load
Total harmonic input		8%	15%	230Vac, Full Load
Leakage current			0.7mA	264Vac/50Hz
Stand-by power consumption		0.4W	0.5W	230Vac/50Hz, No Load

Output:

Parameter	SDL60-12VF6	SDL60-24VF6/VF8	SDL60-48VF6	Note
Output voltage	12.0VDC	24.0VDC	48.0VDC	
Rated output current	5.0A	2.5A	1.25A	
Output current	0.5-5A	0.25-2.5A	0.125-1.25A	
Rated output power	60W	60W	60W	
Rated output efficiency	85%	88%	88%	230Vac
Output voltage precision	±5%			
Output voltage ripple (PK- PK)	±2%			Full load (Test under 20M bandwidth)
Output current ripple (PK- PK)	---			Full load (Test under 20M bandwidth)
Rise time	<100mS			
Startup time	<680mS			230Vac
Line regulation	±1%			full load
Load regulation	±1%			

Characteristic Curve:

Fig. 1 Output load-Temperature curve

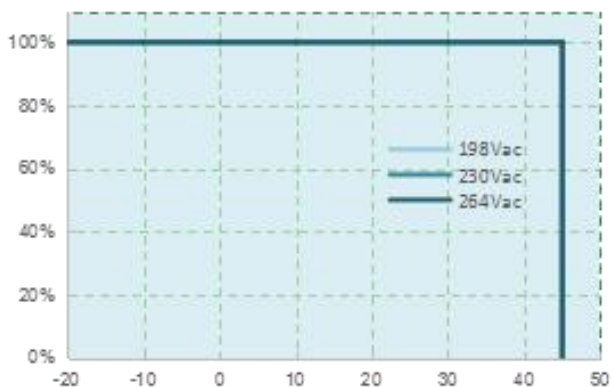


Fig. 2 Static characteristic curve

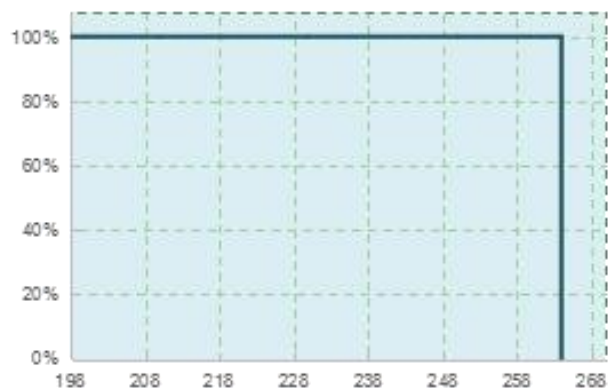


Fig. 3 I-V curve

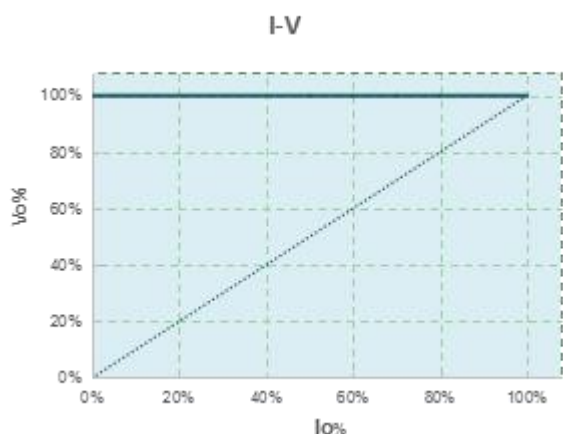


Fig. 4 Power factor characteristic curve

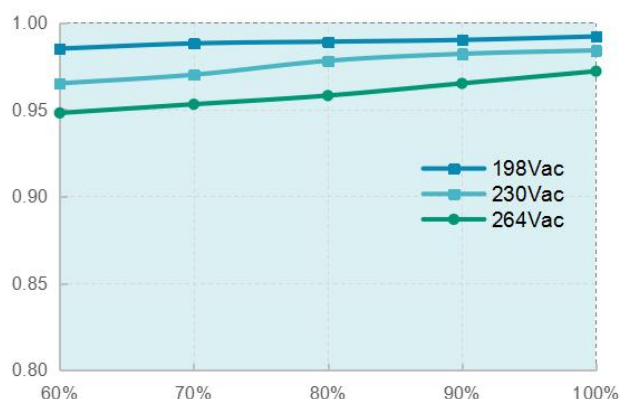


Fig.5 Total harmonic distortion curve (THD)

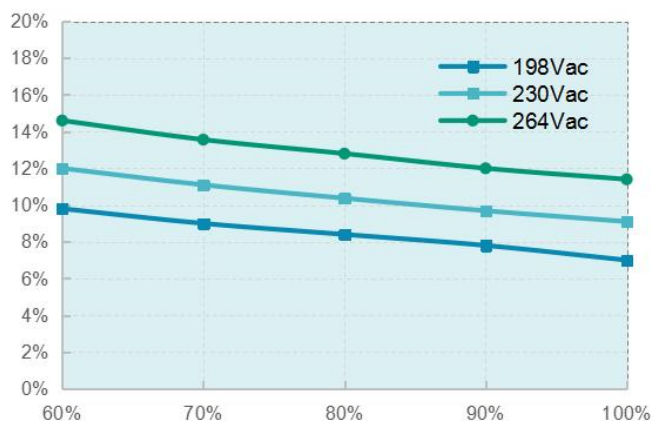
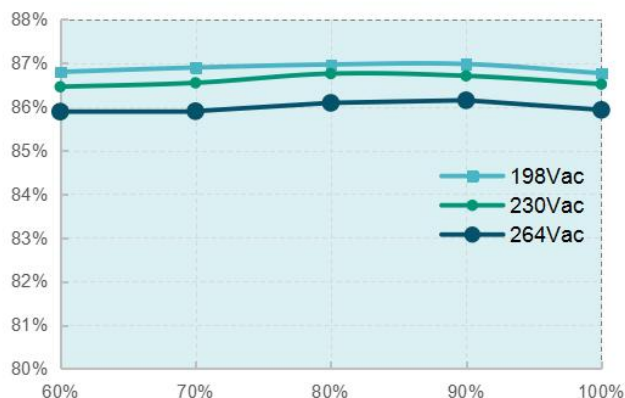


Fig.6 Efficiency-Load curve



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Protection:

Parameter		Conditions	Note
Protection	Over load	1.1-1.6 times rated load	Auto-recovery after overload removed.
	Short circuit	Short circuit power \leq 0.5W	Auto-recovery after short circuit removed.
	Over voltage	Full load, output voltage $>$ 5V	Turn off the input voltage and recover after restart.
	Over temperature	--	--

Environment Requirement:

Parameter	Min.	Typ.	Max.	Note
Working temp.	-20℃	25℃	+45℃	See Fig.2
Storage temp.	-40℃	25℃	+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 ℃ of ambient temperature if they are not specially mentioned.

Safety&EMC standard:

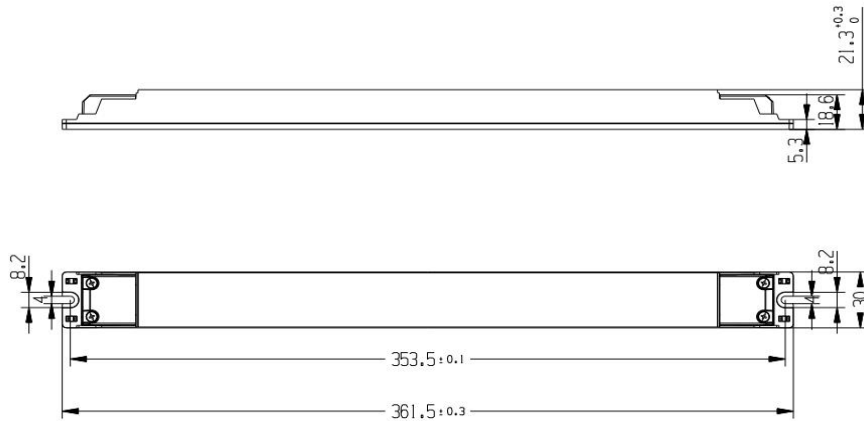
Certificate		Safety standards	Certification	Note
UL/CUL		---		
TUV		EN61347-1:2015 EN 61347-2-13:2014+A1 EN62493:2015	√	
SAA		AS/NZS 61347.2.13		
CCC		---		
CE		EN 61347-2-13:2014 +A1 EN61347-1:2015	√	
Safety test		Qualification	Note	
Dielectric compressive strength	Input to output	3750Vac/5mA Max/60s	Reinforced insulation, no breakdown, no flashover	
	Primary to ground	---	Basic insulation, no breakdown, no flashover	
	Secondary to ground	---	Functional insulation, no breakdown, no flashover	
Insulation resistance	Input to output	≥10MΩ	Test voltage : 500Vdc	
Grounding resistance		---	---	
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:

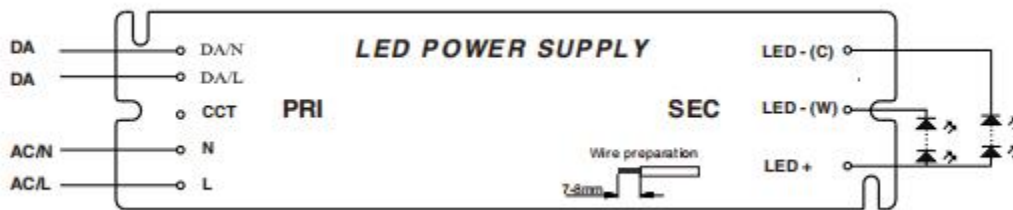
Parameters	Condition	note
Lifetime	50,000 hours	230Vac,full load, Tc 80℃
MTBF	200,000 hours	230Vac,full load, Ta 25℃ (MIL-HDBK-217F)
TC	85℃	
Warranty	5 years	
Weight	230 g	±10g
Dimensions	361.5mm * 30mm * 21.3mm	L x W x H

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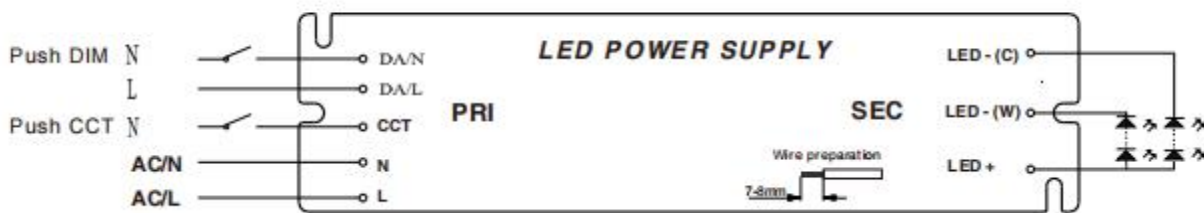
Mechanical Specification (Unit : mm)



DAI dimming connection diagram



PUSH dimming connection diagram



Remark :

AC input cable	Terminal + H03WH2-F 2*0.75mm ²
DC output cable	Terminal + H05WH2-F 2*0.75mm ² ; Terminal + H05WH2-F 2*1.0mm ²