

Constant Current LED Power Supply SDS26-700IL



Product description

SDS26-700IL is a constant current DALI dimmable led driver providing different current 160/200/250/300/350/400/450/500/550/600/650/700mA. Output current can be adjustable by DIP switch, meeting DALI standard IEC62386. DALI dimming/Touch DIM (Push DIM) smooth curve, no flicker. Its input voltage 220-240Vac, with high efficiency 87%. It operates in the temperature range of -20°C~+45°C natural cooling and cooling casing, and has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption and comprehensive protection functions. It not only greatly improves product reliability, but also ensures product life cycle.

Standards

EN61347-1:2015
EN 61347-2-13:2014+A1
AS/NZS61347.2.13
EN 61347-2-13:2014 +A1
EN61347-1:2015
IEC62386

Characteristics

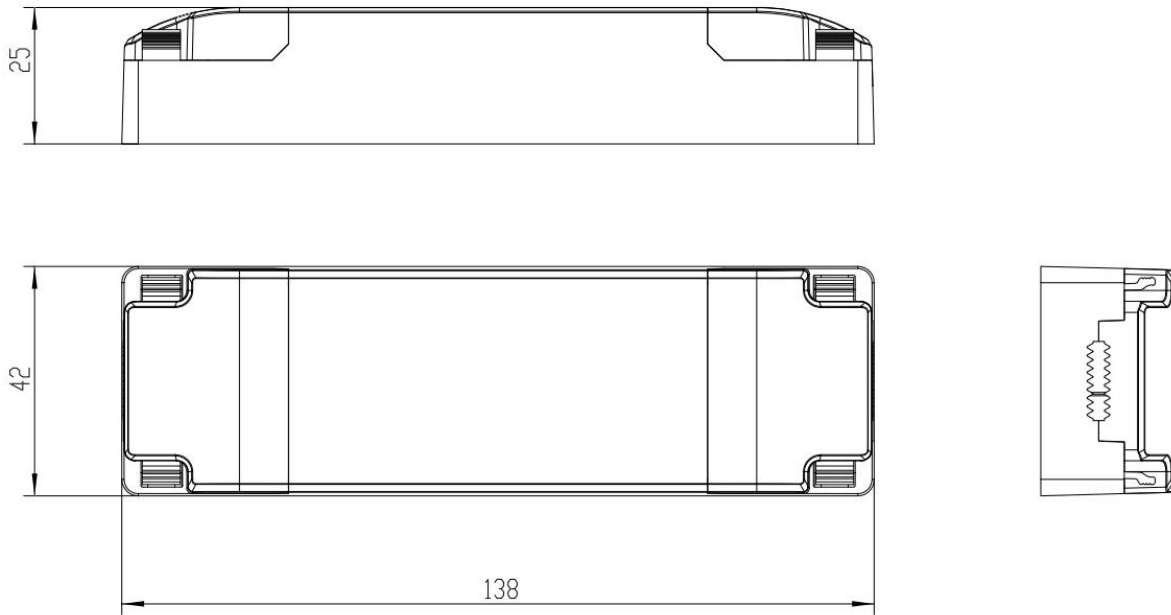
- 12 level current dip switch
- with PFC function
- IP20
- suitable for indoor light, eg down light, spot light
- 0-100% full dimming, no visible flicker, 4K frequency PWM dimming,
- meet DALI standard IEC62386

Specifications

Model		SDS26-700IL	
Output	turn on time(S)	<0.7	
	output power(W)	26	
	output voltage(V)	20-50	
	output voltage tolerance	≤±8%	
	ripple voltage(mA)	5%	
	Line Regulation	±5%	
	Load Regulation	±5%	
	working current range(A)	0.16-0.7	
	SVM	≤0.4	
	Pst	≤1	
	dimming type	DALI2.0	
	dimming range	1-100%	
	Input	rated DC supply voltage(Vdc)	-
		rated supply voltage(Vac)	220-240
voltage range(Vac)		198-264	
line frequency(Hz)		50/60	
input current(A)		0.15	
efficiency		≥87%@full load	
average efficiency 3		86%	
no load power consumption(W)		≤0.5W	
power factor		0.95@full load	
Displacement factor		0.95	
THD(typ.) THD		10	
inrush current(Ipk)		25A	
Leakage current		5mA	
short circuit protection		hiccup mode, restart automatically after fault correction.	

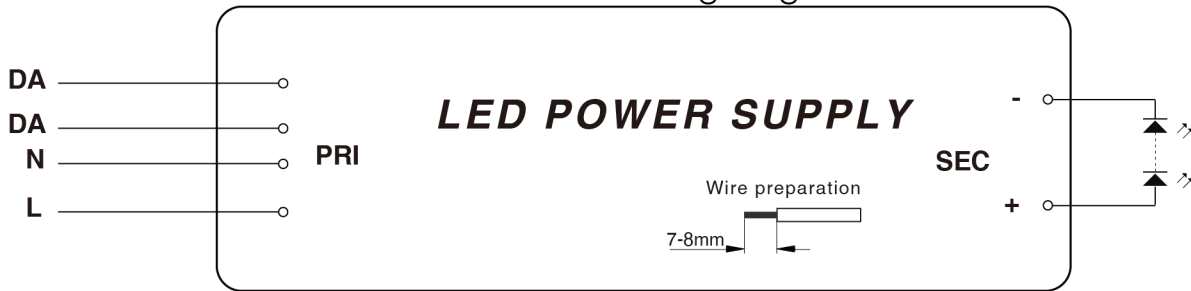
Protection	over load protection	exceed maximum rated load times 1.1
	Over voltage protection	-
	Over temperature protection	
	surge capacity	L-N: 1KV
	Withstand voltage	Input-Output: 3750V/5mA/1min
Ambient and Life	Ta(C)	-20...45
	Tc max.(C)	max.80
	Storage Temperature(C)	-40...85
	ambient humidity range	10%...90%RH, Not condensing
	nominal life-time(hrs)	50'000@Tc
Other	dimensions (L×W×H)(mm)	138*42*25
	weight(g)	110g
	casing material	Plastic
	housing colour	White
	type of protection	IP20
	protection class	class II
	certificate	
Note	<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)

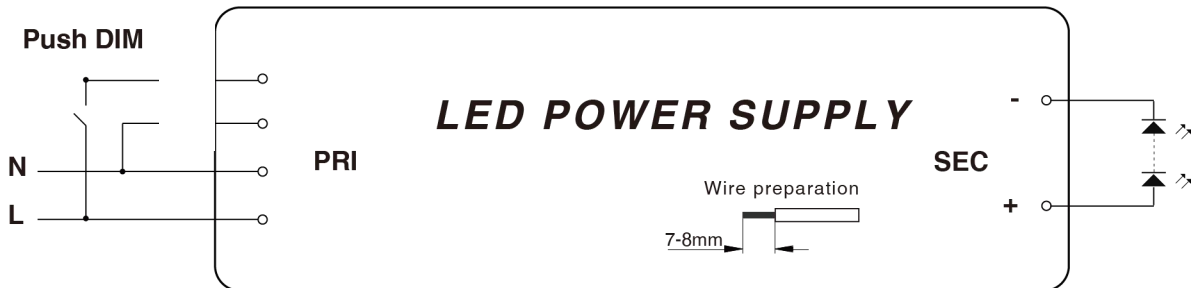


Wiring Diagram

DALI wiring diagram



Push DIM wiring diagram



AC	H03VVH2-F 2*0.75—1.5mm ²
DALI	H03VVH2-F 2*1.5mm ²
DC	H03VVH2-F 2*0.75mm ²

Push dimming, Push dimming operation like below:

Wire diagram: put DALI interface to 50/60Hz AC100~300V, put driver L,N to the DALI interface through reset switch

Short press: press the reset switch quickly and release ,the button automatically returns to disconnected state, press the button for 40~500ms;

Long press: Quickly press the reset button without release ,duration>500ms;

NO.	function	operation	remark
1	memory	Turn on	Push mode, LED driver turn on, will have memory before shutdown; If it is stand by statement before turn off, it will be stand by after turn on, it defaults to max bright after short press
2	Turn on/off	Short press	If the light is bright, it will turn off after short press, if the light is off, it will turn on after short press, the brightness is the same as the status before light turn off
3	dimming	Long press	Long press the reset switch, it goes into dimming situation, long press > 500ms, it starts changing ; If the previous status is dimming to bright, the next one status is dimming to dark, release the reset switch, dimming stop, keep the previous brightness ; 1%~100% Gradient time is 3 S If long press under turn off status, the brightness will change from MIN to MAX;
4	synchronization	Long press >10S	Long press >10S, it turns to 100% output, use for multiple lamp synchronization

DIP switch settings

PIN				Iout	Vout
1	2	3	4	mA	
ON	ON	OFF	OFF	160	30-50
OFF	OFF	ON	OFF	200	30-50
ON	OFF	ON	OFF	250	20-50
OFF	ON	ON	OFF	300	20-50
ON	ON	ON	OFF	350	20-50
ON	OFF	OFF	ON	400	20-50
OFF	ON	OFF	ON	450	20-50
ON	ON	OFF	ON	500	20-50
OFF	OFF	ON	ON	550	20-47
ON	OFF	ON	ON	600	20-43
OFF	ON	ON	ON	650	20-40
ON	ON	ON	ON	700	20-38

Electrical curves

Fig. 1 Output load-Temperature curve

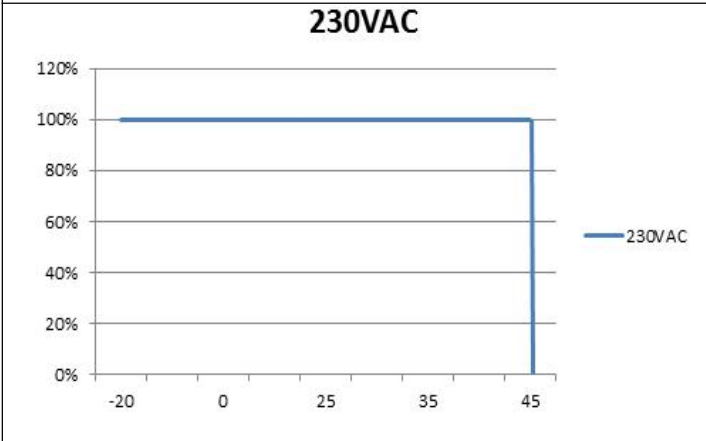


Fig. 2 Static characteristic curve

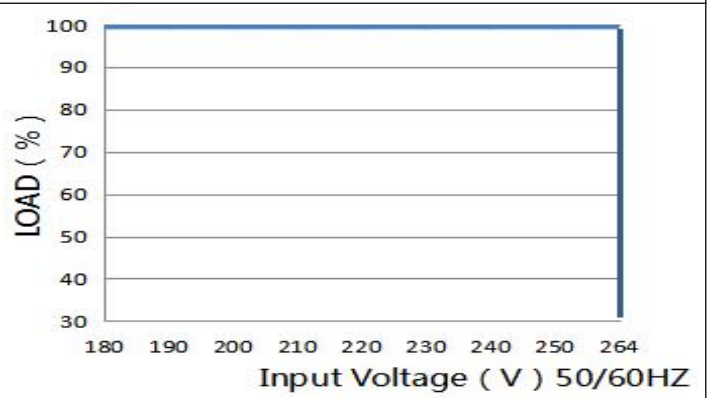


Fig. 3 Dimming curve

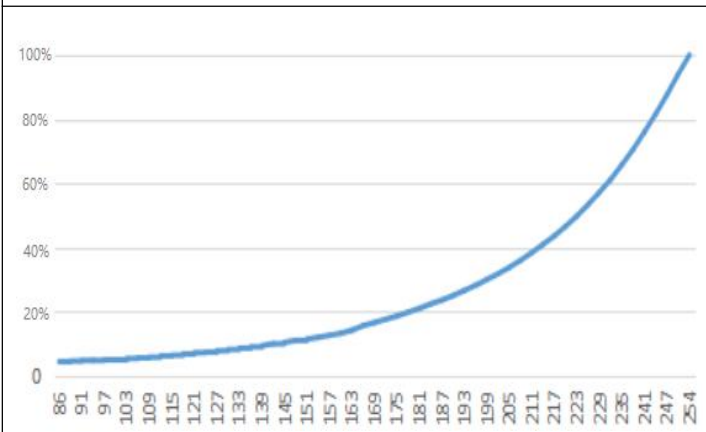


Fig. 4 Power factor characteristic curve

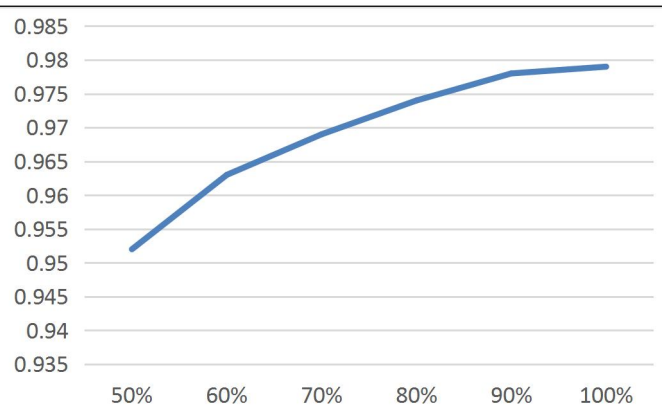


Fig.5 Total harmonic distortion curve (THD)

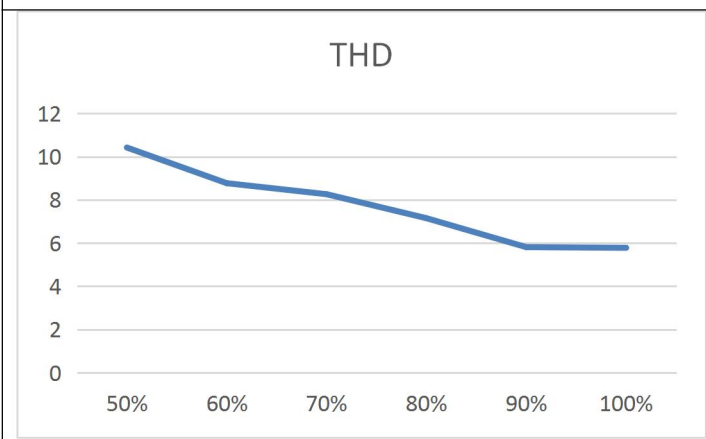
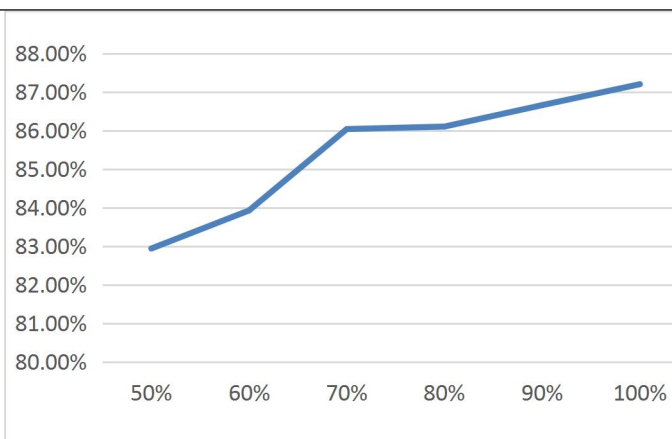


Fig.6 Efficiency-Load curve



MCBS

MCBS Model	B10	B13	B16	B20	C10	C13	C16	C20
SDS26-700IL	18	25	30	39	32	42	52	64

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SDS26-700IL			

Revision history

Date	Rev.	Remark
2023.3.22	V0.01	Initial release.
2023.6.15	V0.02	Official release
2023.10.25	V0.03	Change dimming range from 0-100% to 1-100%