

## 25W DALI+PUSH Dimming power supply



### Features

Class II, SELV, independent  
 Input Voltage 220-240VAC  
 Protections: SCP/OLP/OVP/OTP  
 Power Factor >0.95  
 Efficiency : 85%  
 Support DALI-2, Push Dimming  
 5 years warranty

### Applications

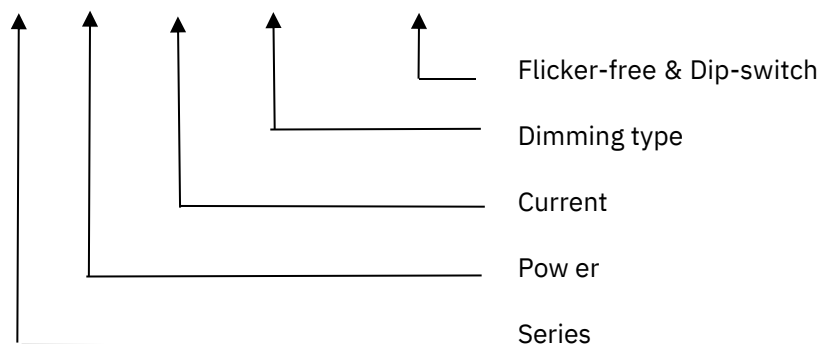
LED panel,  
 Spot light, Down light

## Description

FLS-25-700 DALI-2 LA1 is a 25W constant current LED driver with 150 to 700mA output current and a forward voltage range from 9 to 52Vdc. The output current is adjustable by DIP Switch. With it's dimensions from 160x 42 x 30mm it is easy to integrate in LED Panel, spot and down light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

## Model code

FLS-25-700 DALI-2 LA1



## Specification

	Constant Current (mA)	150mA	200mA	...	700mA
Output	Voltage Range (VDC)	9-52V 9-52V 9-37.5V			
	Unload voltage Max.	6 0VD C			
	Current Accuracy	±7%@150-350mA; ±5%@400-700mA;			
	Output HF current ripple(≥1KHz)	±10%			
	Output LF current ripple(≤120Hz)	±3%			
	SVM	≤0.4			
	Pst	≤1			
	Efficiency(Typ.)	85%			
	Input	Rated input voltage	220-240VAC		
Range of input voltage		198-264VAC			
Rated input voltage(DC)		198-280VDC			
Frequency(Hz)		0/50/60 Hz			
Displacement factor		≥0.9			
Power Factor		>0.95			
Input Current		0.2A			
Start-up time		<0.7S			
No Load Power		≤0.5W			
Standby Power		≤0.5W			
Network standby power		≤0.5W			
THD (Typ.)		<10%			
Dimming	Dimming	YES			
	Dimming mode	DALI-2 (IEC 62386-101,102,207) & Push Dimming (Corridor Function)			
	Dimming depth	1%			
	Dimming current range	1 ~100%			
Protection	Over Load Protection	103-120% YES/Latch off			
	Over Voltage Protection	>6 0VD C YES/Latch off			
	Short circuit Protection	YES/Latch off			
	Over Temperature Protection	YES/Auto Resume			
Environment	Operating Temperature	-20°C~+45°C			
	Humidity	20%-90%RH			
	Tc	80°C			
	Storage Temperature	-25°C~+60°C			
	Lifetime	>50000h,@Tc=70°C			
Surface	Dimension	160X42X30mm			

s standards	EN 61347-EN61347-2-13; EN62384; EN55015; EN61000-3-2 ; EN61000-3-3; EN 61547;		
Others	1; ErP	EU 2019/2020	
	RoHS	RoHS (2011/65/EU) (EU)2015/863	
Note	1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor.		

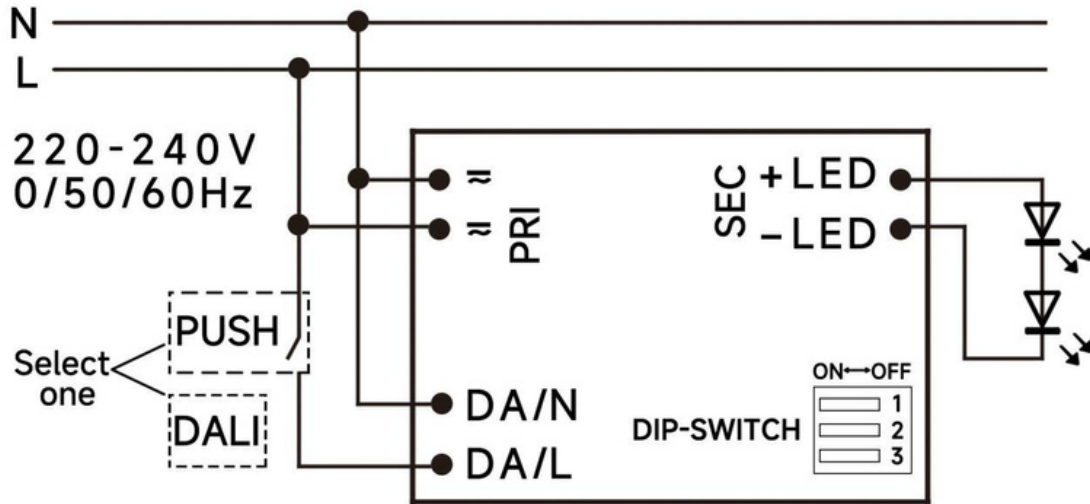
## Model list

Number	Output				Switch position				
	Current (mA) I1+I2	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3	4	
1	150mA	9-52VDC	60	7.8	--	--	ON	--	
2	200mA			10.4	ON	-	ON	--	
3	250mA			13	--	ON	ON	--	
4	300mA			15.6	ON	ON	ON	ON	
5	350mA			18.2	--	--	--	ON	
6	400mA			20.8	ON	--	--	ON	
7	450mA			23.4	--	ON	--	ON	
8	500mA			26	ON	ON	-	ON	
9	550mA			9-47.5VDC	26.1	--	--	ON	ON
10	600mA			9-43.5VDC	26.1	ON	--	ON	ON
11	650mA			9-40VDC	26	--	ON	ON	ON
*1	700mA	9-37.5VDC	26.3	ON	ON	ON			

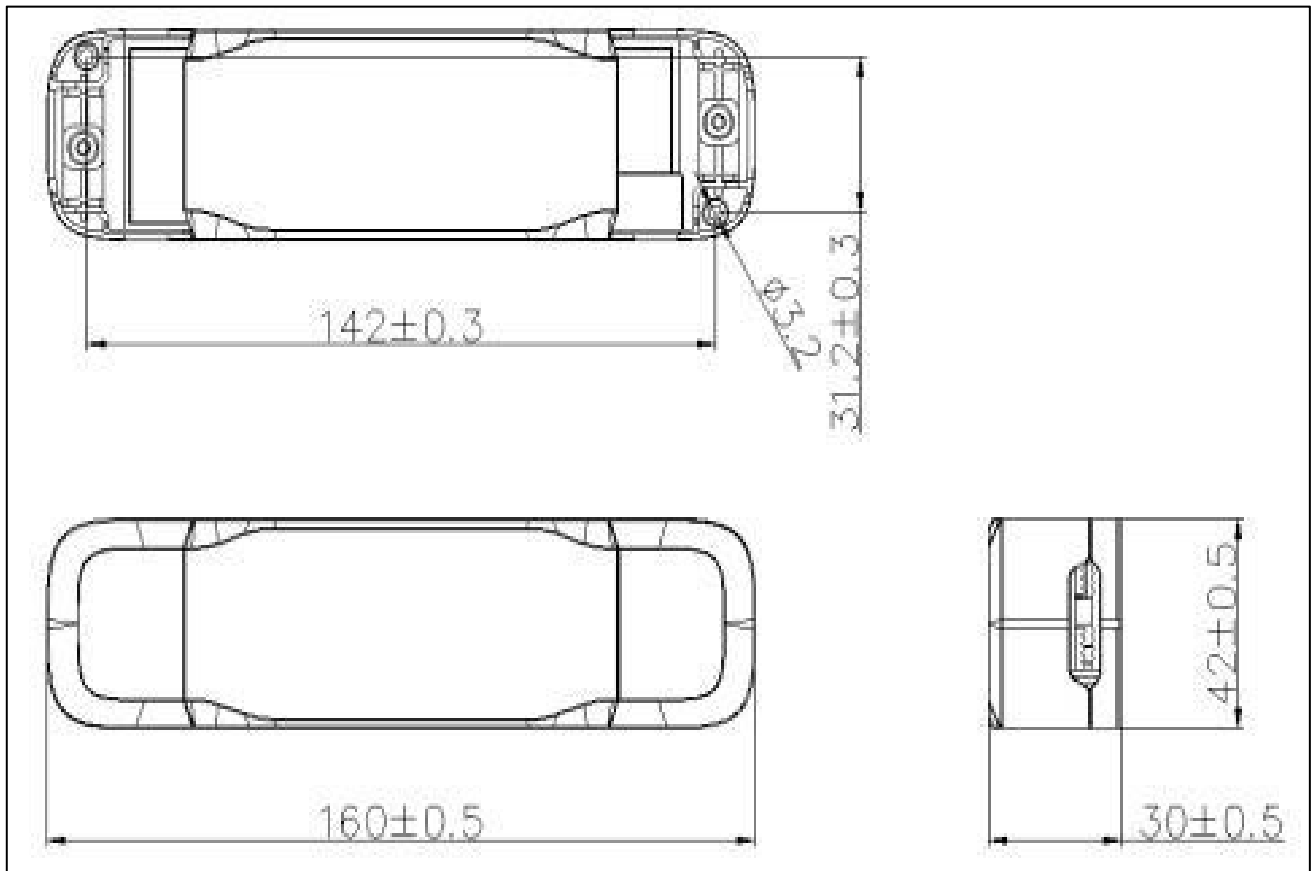
2

\* Factory default

### Wiring diagram



**2D diagram**

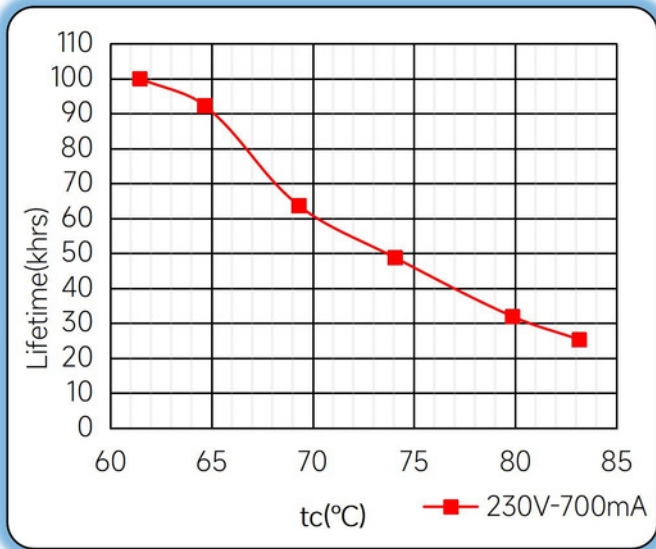


**Wiring & Connections**

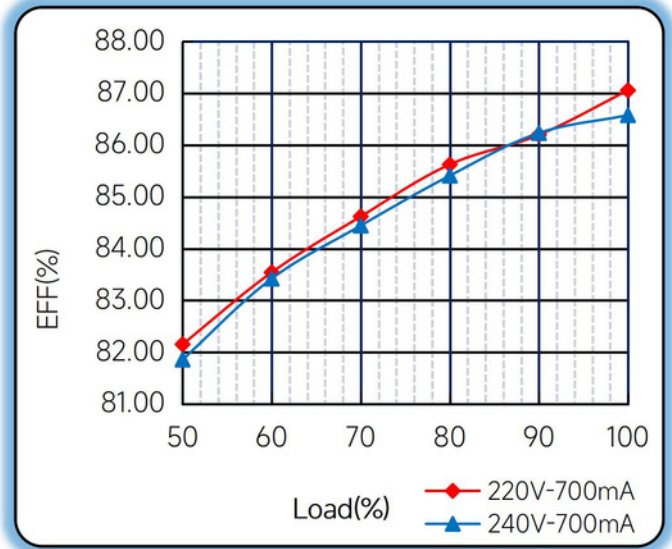
Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	8...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	8...9mm

**Curve for FLS-25-700 DALI-2 LA1, I<sub>o</sub>=700mA**

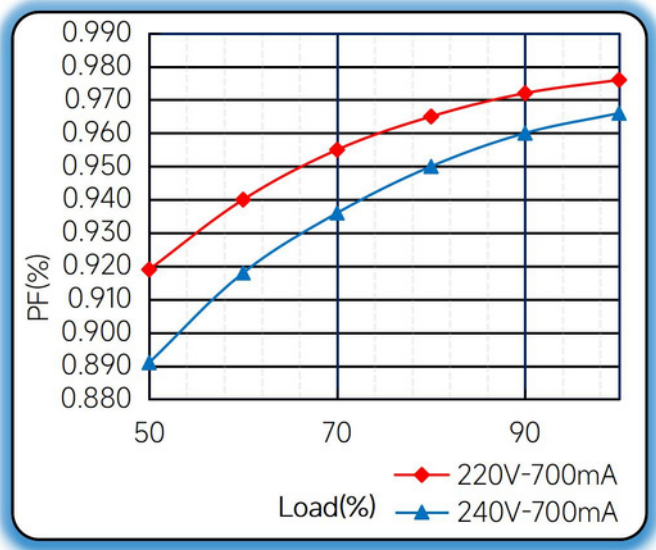
Lifetime vs. Ambient Temperature Curve



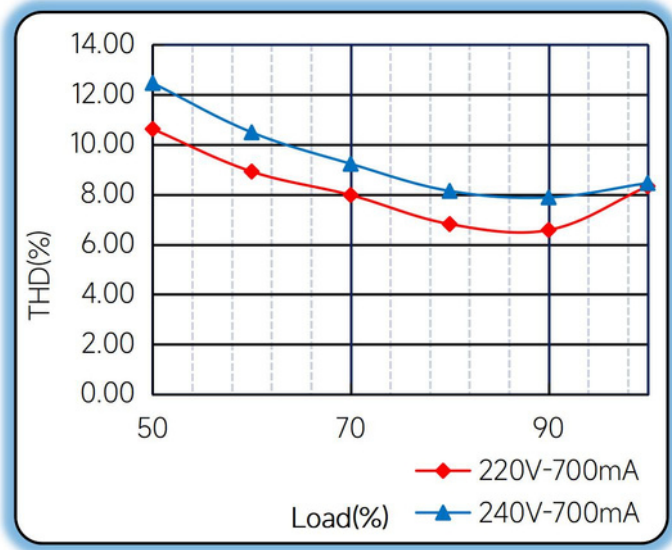
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



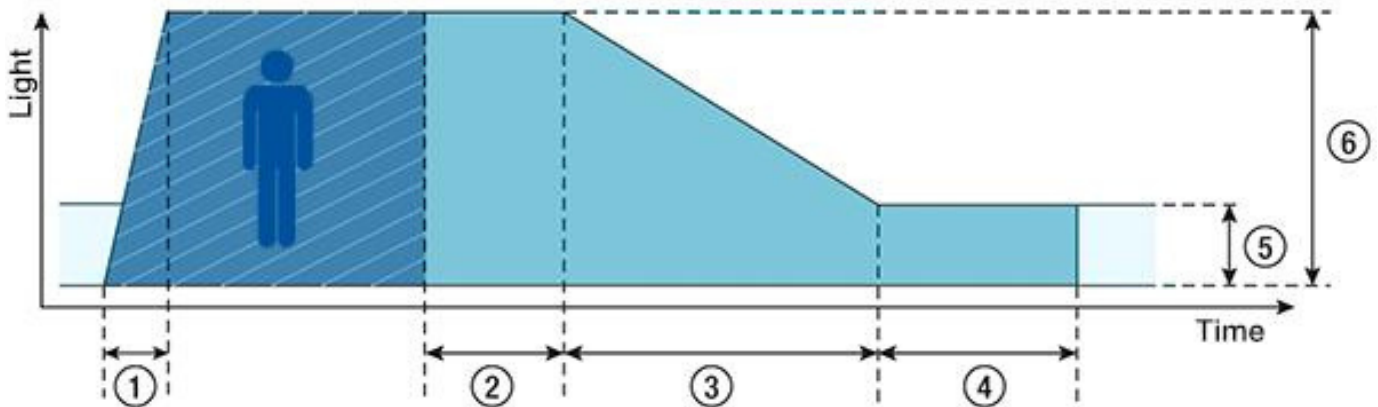
## Push dimming operation

Action	Action duration	Function
Short push	<0.5s	Turn on/off
Short push twice	<0.5s	LED on: Save current brightness level LED off: Delete saved level and turn on at 100% brightness
Short push five times	<0.5s	Quit Corridor mode
Long push	0.5-14s	Dimming up or down
Long push	15s-2mins	Syncall LED stobe 100% brightness
Long push	>2mins	Enter Corridor mode - LED keep 100% brightness for 2mins. Then brightness will turn to be 10% within 32s if no action during 2mins 100% brightness.

Note:

- 1.The factory default brightness is at 100%.
- 2.Up to 30 drivers can perform the PUSH dimming at the same time when utilizing one common push button
- 3.The maximum length of the cable from the push button to the last driver is 200 meters.

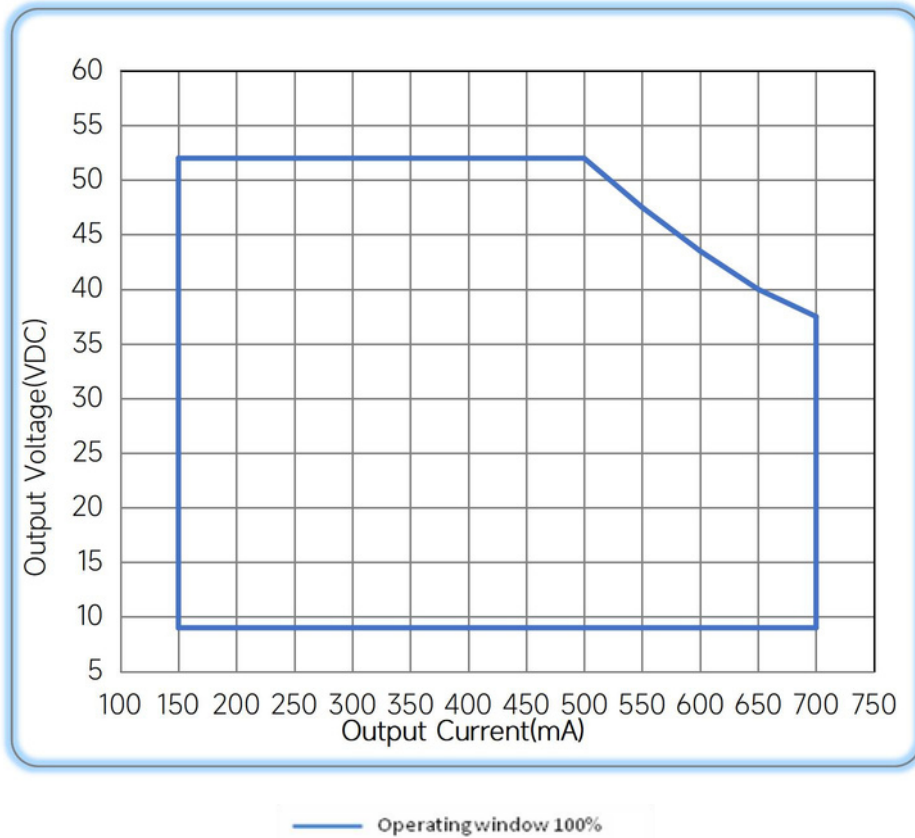
## Corridor mode



- Fade-in time(0.5s): the time that starts as soon as the presence of a person is detected. During the fade-in time the luminous intensity is faded up to the presence value.
- Run-on time(120s): the time that starts as soon as the presence of a person is no longer detected. If the presence of a person is detected again during the run-on time the run-on time is restarted from zero. If no presence is detected during the run-on time the fade time is started as soon as the run-on time expires.
- Fade time(32s): the time during which the luminous intensity is faded from the presence value to the absence value.
- Switch-off delay (Never Off): the time during which the absence value is held before the lighting is switched off. Depending on the profile selected the switch-off delay may have different values or may not be defined.
- Absence value(default: 10 %): the luminous intensity when there is no person present.
- Presence value (default: 100 %): the luminous intensity when persons are present.



### Operating window



### Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/07
Start-up time	0.5S	0.7S	A	2022/08/12