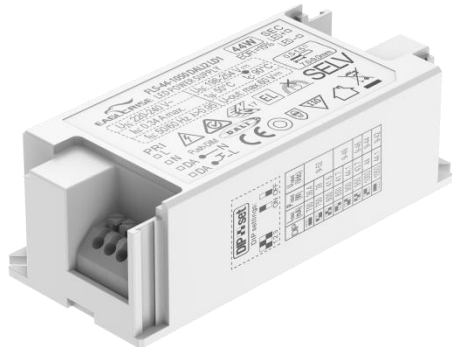


44W DALI+PUSH Dimming power supply



■ Approve



Features

- Class II, SELV, Built-in/Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: > 0.95@Full load,230V
- Efficiency: 87%@Full load,230V
- Support DALI-2, Push Dimming
- 5 years warranty

Applications

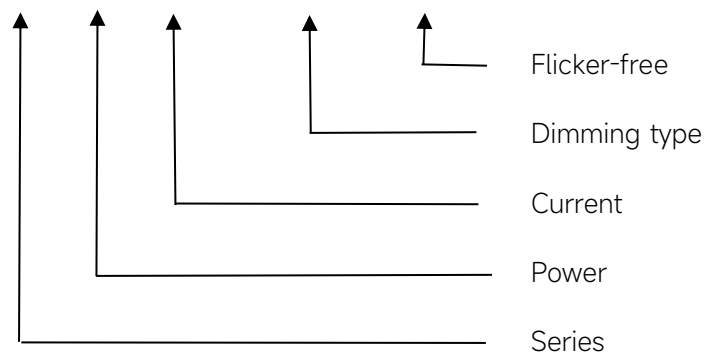
LED panel,down light,spot light

◆ Description

FLS-44-1050 DALI2 LD1 is a 44W constant current LED driver with 700 to 1050mA output current and a forward voltage range from 9 to 52Vdc. The output current is adjustable by DIP Switch. With it's dimensions from 97 x 43 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-44-1050 DALI2 LD1



◆ Specification

Output	Constant Current (mA)	700	750	800	850	900	950	1000	1050
	Voltage Range (VDC)	9-52			9-49		9-46	9-44	9-42
	Unload voltage Max.	60VDC							
	Current Accuracy	±5%							
	Output HF current ripple(≥1KHz)	±10%							
	Output LF current ripple(≤120Hz)	±3%							
	SVM	≤0.4							
	P _{st}	≤1							
	Efficiency(Typ.)	87%@Full load,230V							
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@Full load,230V							
	Input Current	0.34A							
	Start-up time	< 0.7S							
	No Load Power	≤0.5W							
	Standby Power	≤0.5W							
	THD (Typ.)	<10%@Full Load,230VAC							
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	> 60VDC							
		YES/Latch off							
Environment	Short circuit Protection	YES/Latch off							
	Over Temperature Protection	YES/Auto Resume							
	Operating Temperature	-20°C~+50°C							
	Humidity	20%-90%RH							
	T _c	90°C							
Surface	Storage Temperature	-25°C~+60°C							
	Lifetime	>50000h,@T _c =75°C							
Surface	Dimension	97X43X30mm (With side caps :131X43X30mm)							

Standards	IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13;EN61347- 1, EN61347-2- 13, EN62384;GB/T17743;EN61547 GB 19510.1,GB 19510.14;GB/T 17743,GB 17625.1;EN IEC 55015,EN IEC 61000-3-2,EN 61000-3-3		
Others	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. 3.Data are typical values obtained from test samples. 4.Switch and dimmer are not recommended to connect between this product output and luminaries.		

◆ Parameter

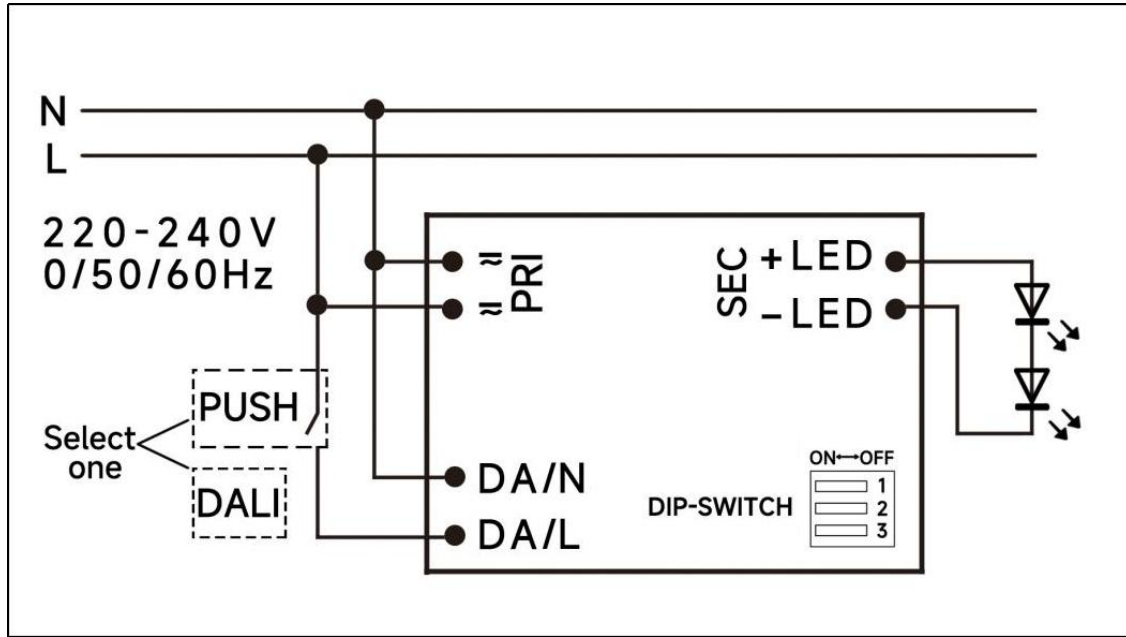
Number	Output	Switch position		
	Current(mA)	1	2	3
1	700	--	--	--
2	750	ON	--	--
3	800	--	ON	--
4	850	ON	ON	--
5	900	--	--	ON
6	950	ON	--	ON
7	1000	--	ON	ON
*8	1050	ON	ON	ON

* Factory default

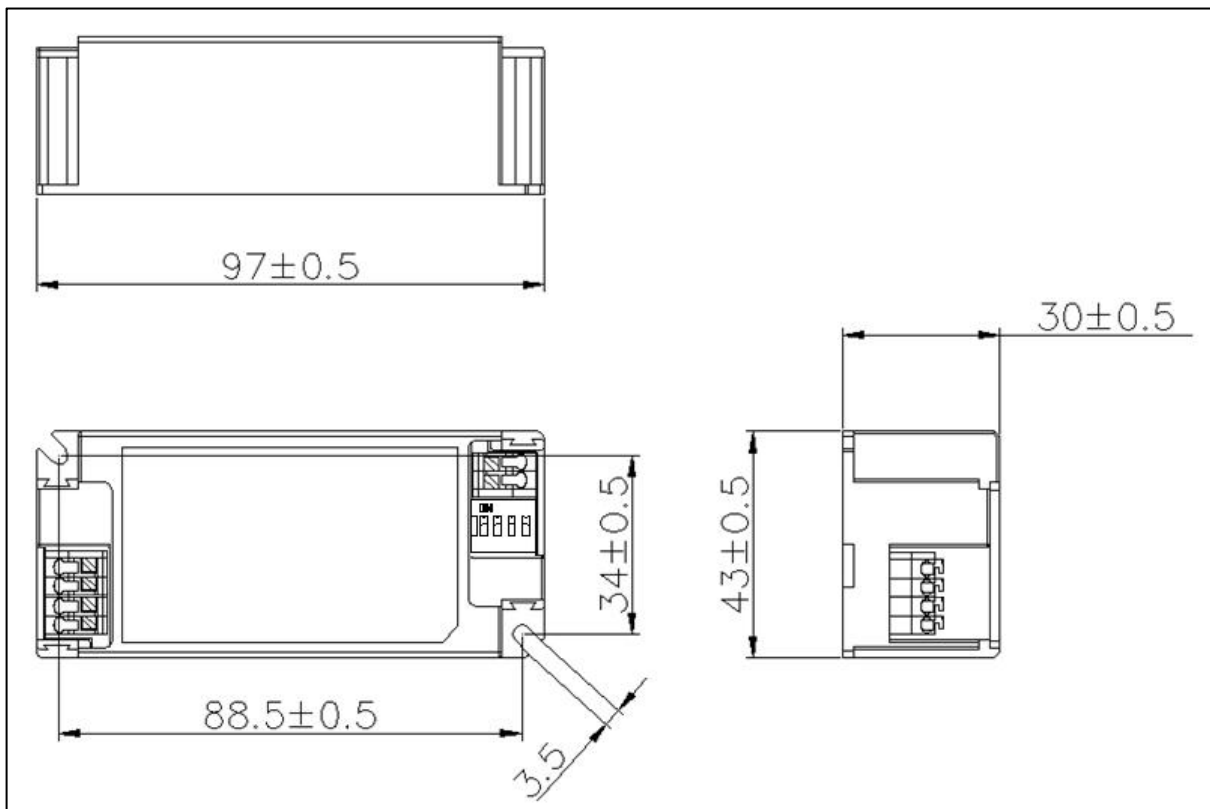
◆ Circuit Breaker

I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
6.8A	47.8μs	23pcs	37pcs	47pcs	23pcs	37pcs	47pcs

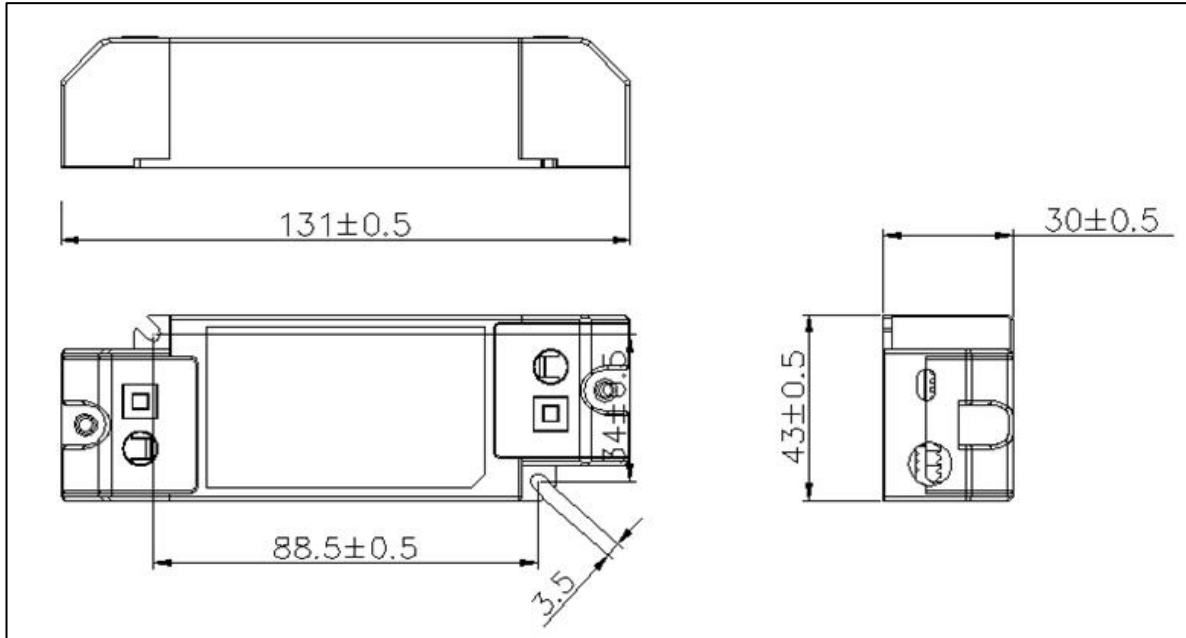
◆ **Wiring diagram**



◆ **2D diagram**



With side caps



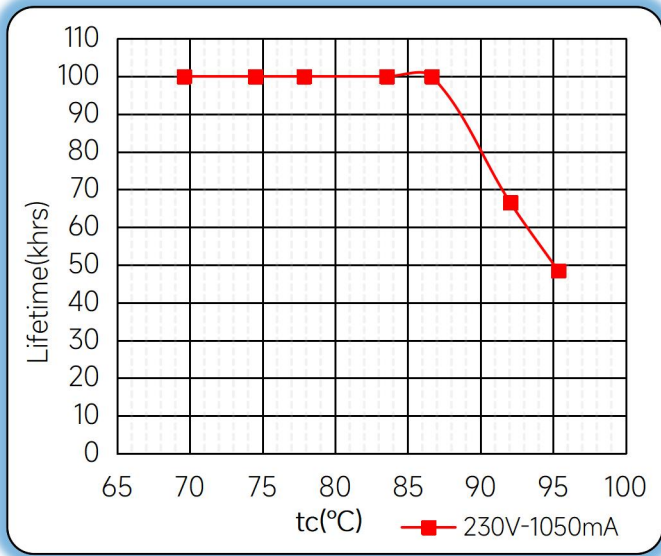
coding:1320211709

◆ Wiring & Connections

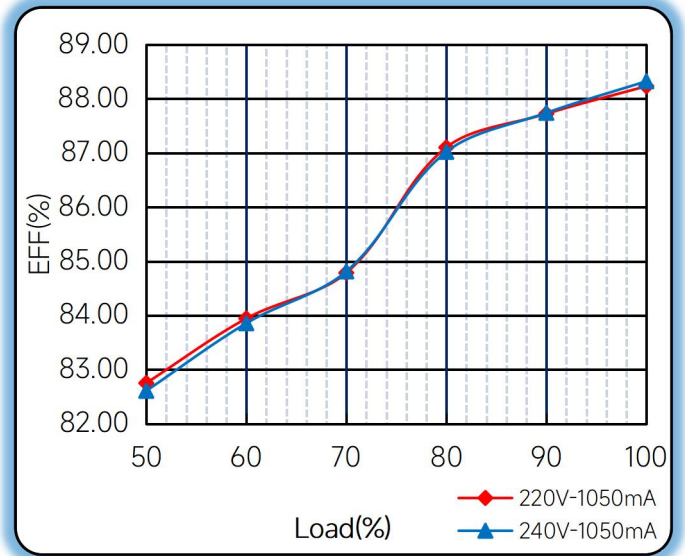
Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ **Curve for FLS-44-1050 DALI-2 LD1, $I_o=1050mA$**

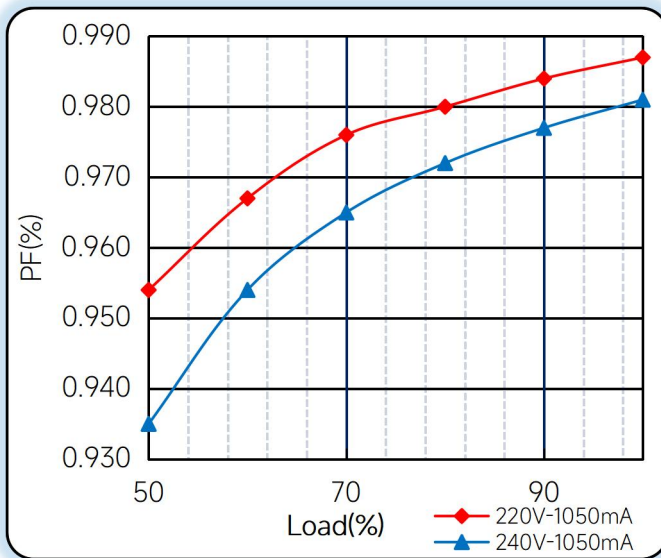
Lifetime vs. Temperature Curve



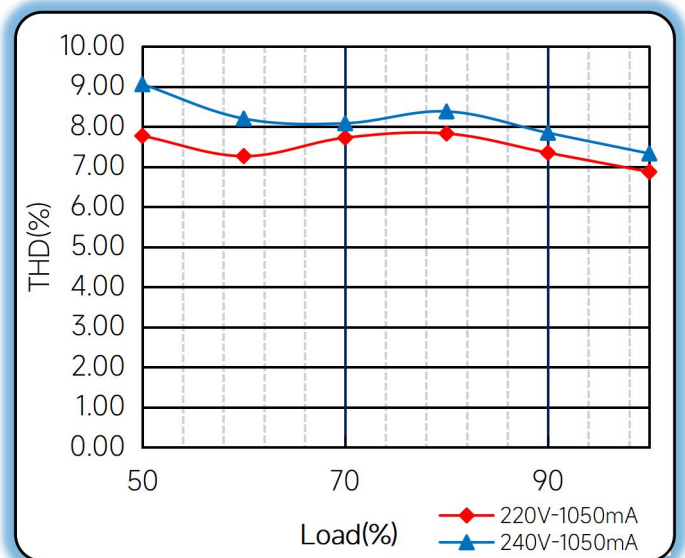
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



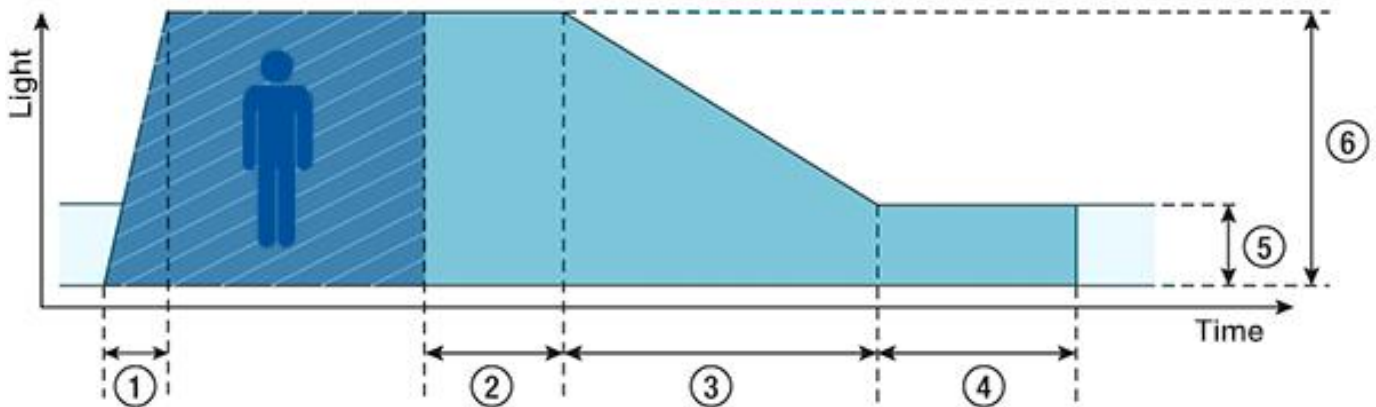
◆ Push dimming operation

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	Sync all LEDs to be 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:

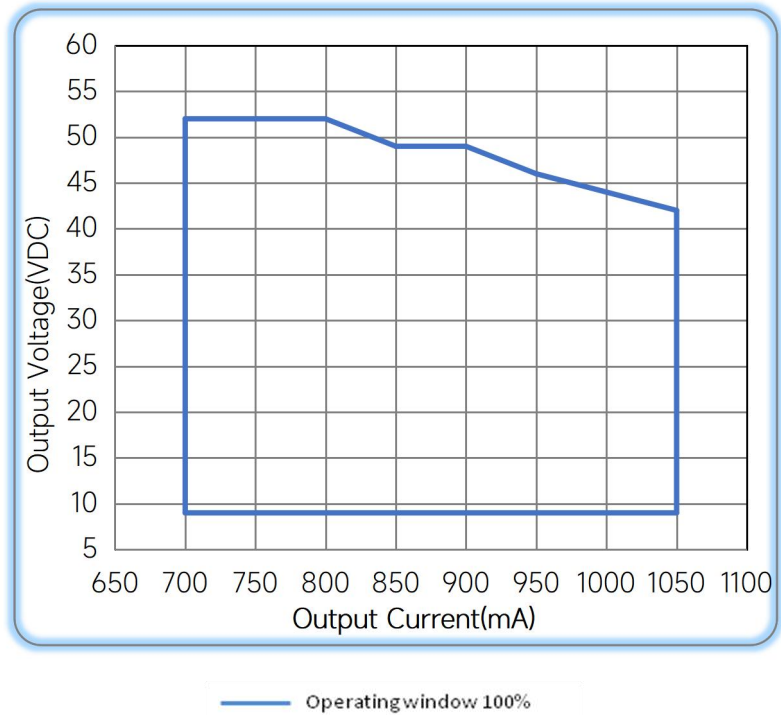
- 1.The factory default brightness is at 100%.
- 2.Up to 30 drivers can perform the PUSH dimming at the same time when utilizing one common push button
- 3.The maximum length of the cable from the push button to the last driver is 200 meters.

◆ **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	2022-02-15
Start-up time	0.5S	0.7S	A	2022/08/12

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Manual