



FSS-60-1400 DALI-2 LD1

60W DALI+PUSH Dimming power supply



Features

- Class II, SELV, built_in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP Power Factor: >0.95 Efficiency: ≥88%
- Support DALI-2, Push Dimming
- 5 years warranty
- Applications: LED panel, down light, spot light

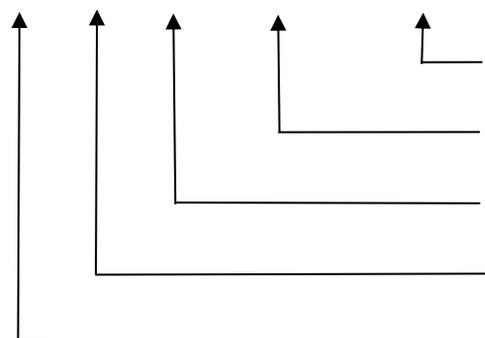


Description

FSS-60-1400 DALI-2 LD1 is a 60W constant current LED driver with 700 to 1400mA output current and a forward voltage range from 9 to 52Vdc. The output current is adjustable by DIP Switch. With it's dimensions from 110 x 74 x 30 mm 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

FSS-60-1400 DALI-2 LD1



- Flicker-free
- Dimming type
- Current
- Power
- Series

◆ Specification

	Constant Current (mA)	700	750	800	1150	1200	1250	1300	1350	1400	
Output	Voltage Range (VDC)	9-52				9-50		9-48	9-46	9-44	9-43	
	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.)	≥88%@Full load										
	Input	Rated input voltage	220-240VAC									
Range of input voltage		198-264VAC										
Range input voltage(DC)		198-280VDC										
Frequency(Hz)		0/50/60 Hz										
Displacement factor		≥0.9										
Power Factor		>0.95@Full load										
Input Current		0.46A										
Start-up time		< 0.5S										
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 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										
	Tc	90°C										
Surface	Storage Temperature	-40°C~-+80°C										
	Lifetime	>50000h,@Tc=85°C										
Surface	Dimension	110X74X30mm (With side caps : 160X74X30mm)										

FSS-60-1400 DALI-2 LD1

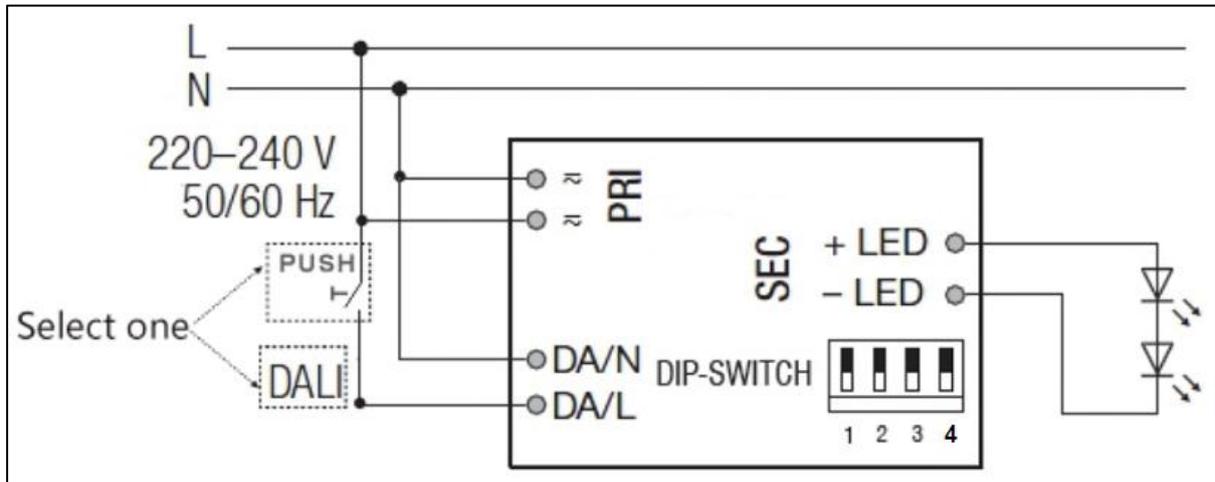
standards	EN 61347-1; EN61347-2-13; EN62384; EN55015; EN61000-3-2 ; EN61000-3-3; EN 61547;		
Others	ErP	EU 2019/2020	
	RoHS	RoHS (2011/65/EU) (EU)2015/863	
Note	<p>1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple & Noise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

◆ Parameter

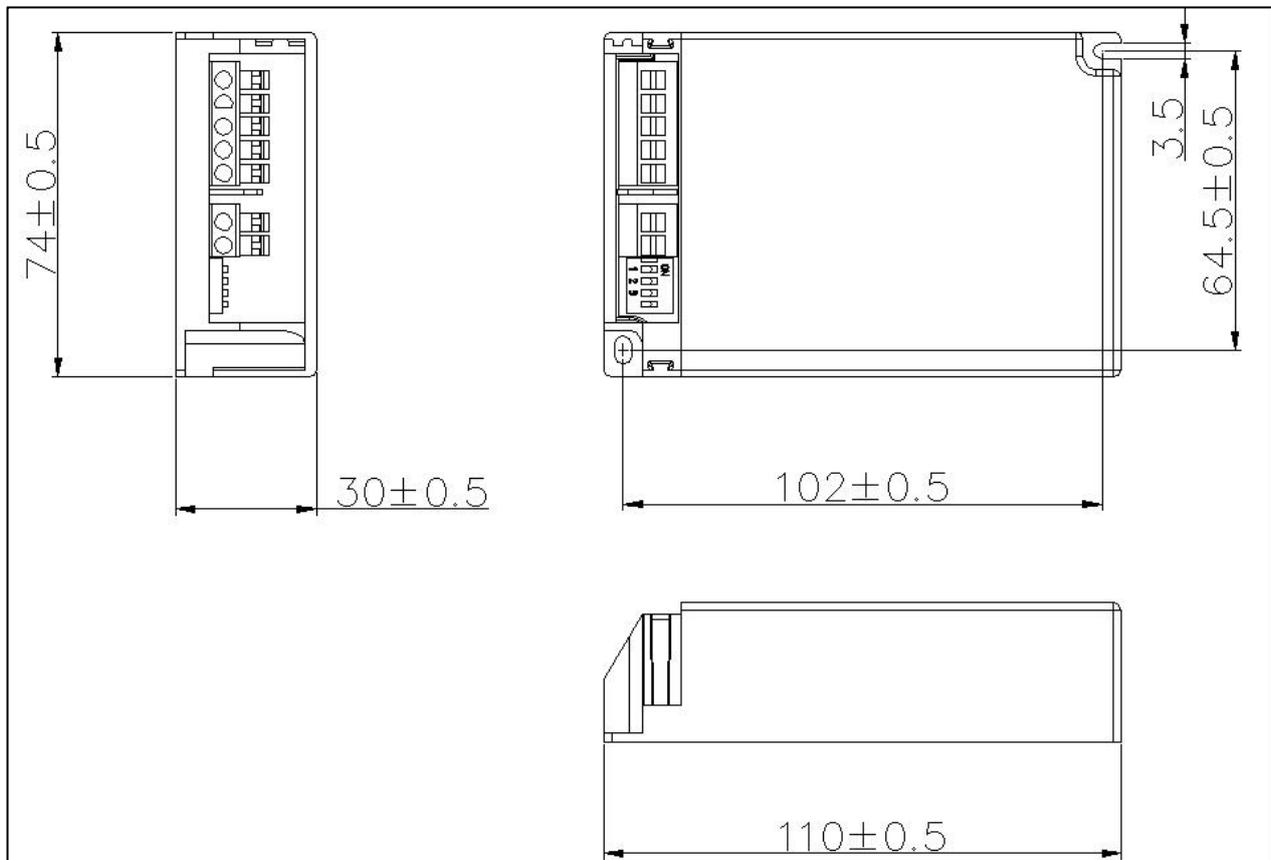
Number	Output	Switch position			
	Current(mA)	1	2	3	4
1	700	ON	--	--	--
2	750	--	ON	--	--
3	800	ON	ON	--	--
4	850	--	--	ON	--
5	900	ON	--	ON	--
6	950	--	ON	ON	--
7	1000	ON	ON	ON	--
8	1050	--	--	--	ON
9	1100	ON	--	--	ON
10	1150	--	ON	--	ON
11	1200	ON	ON	--	ON
12	1250	--	--	ON	ON
13	1300	ON	--	ON	ON
14	1350	--	ON	ON	ON
15*	1400	ON	ON	ON	ON

* Factory default

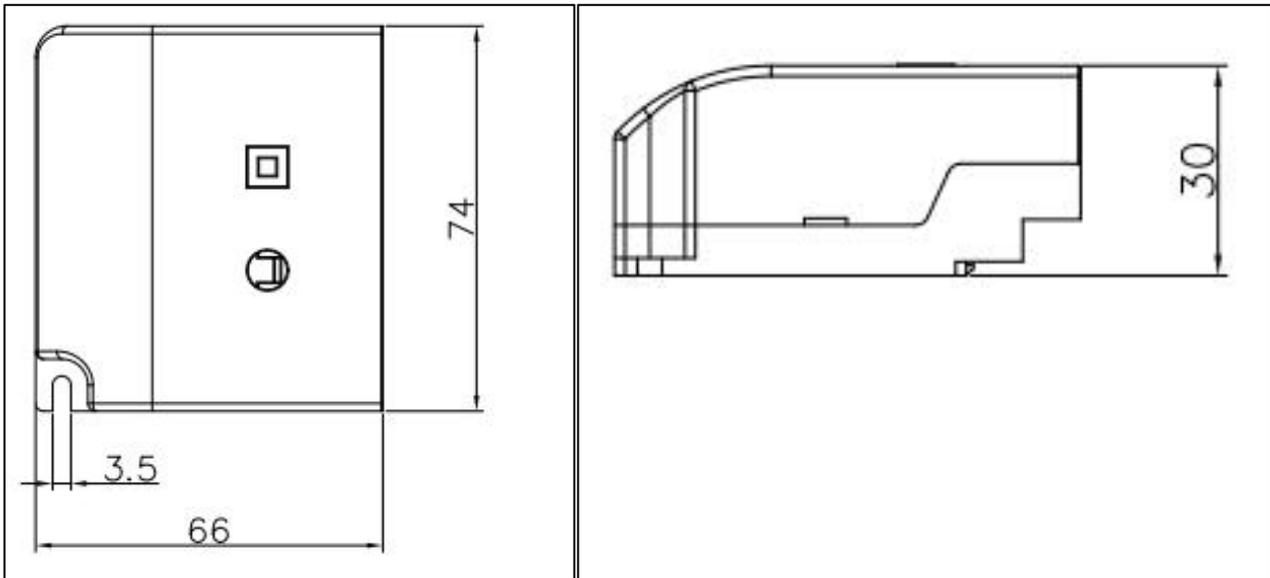
◆ Wiring diagram



◆ 2D diagram



With side caps

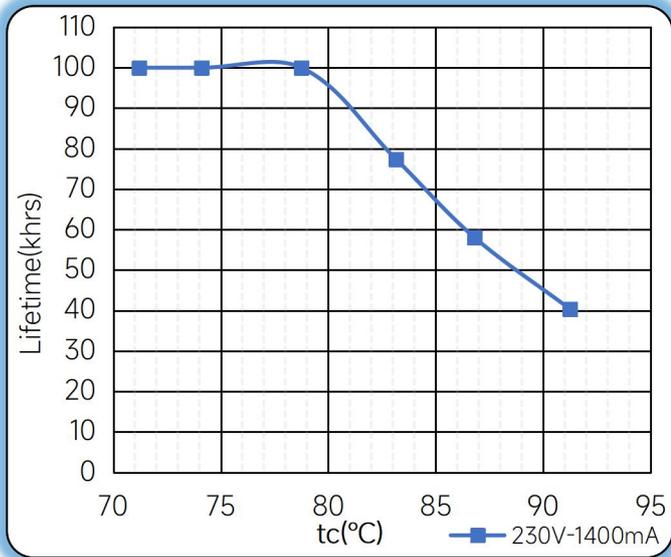


◆ Wiring & Connections

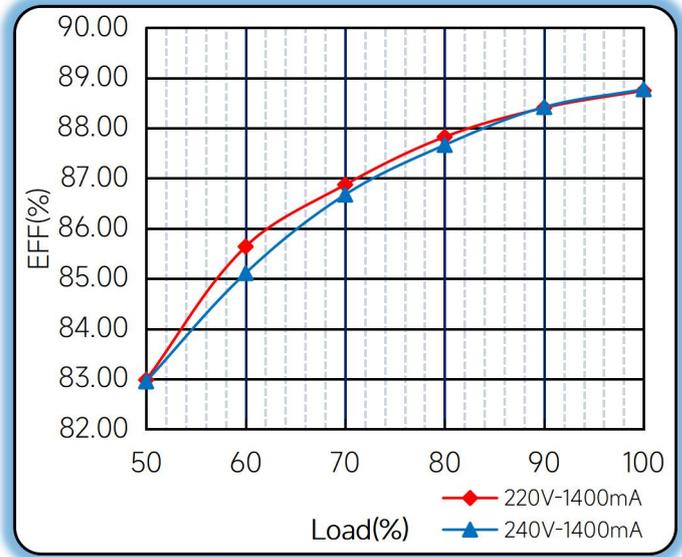
Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	8...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	8...9mm

◆ Curve for FSS-60-1400 DALI-2 LD1, $I_o=1400\text{mA}$

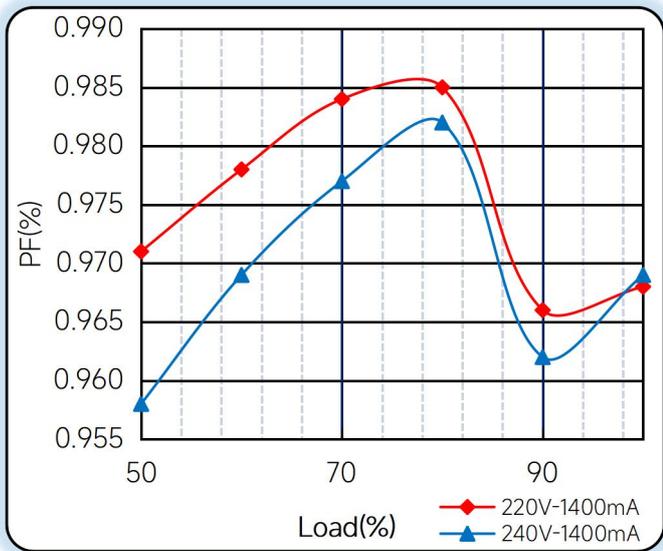
Lifetime vs. Temperature Curve



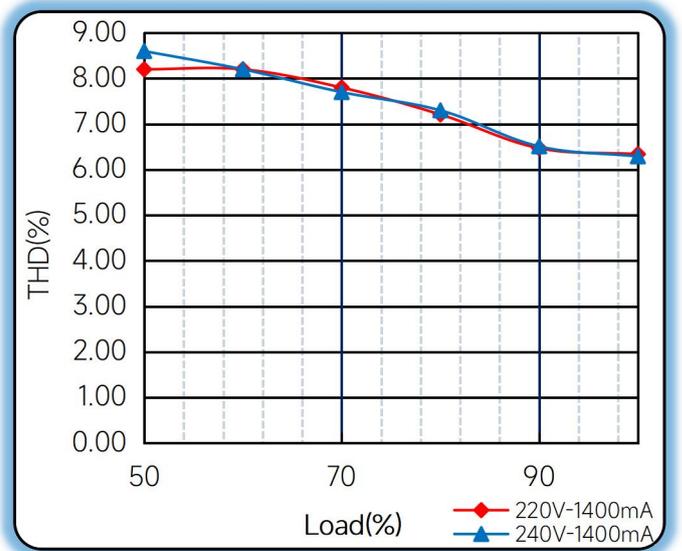
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



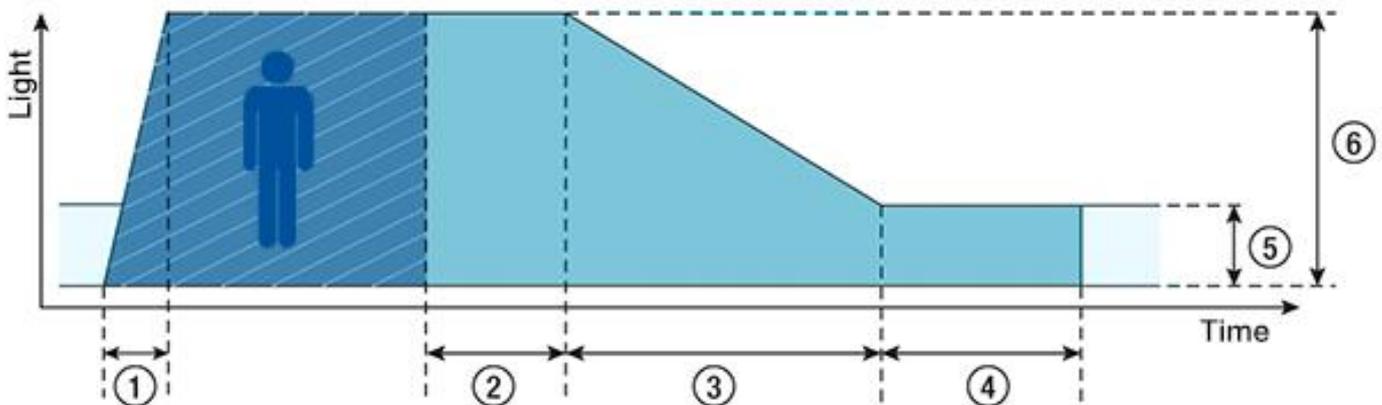
◆ Push dimming operation

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:

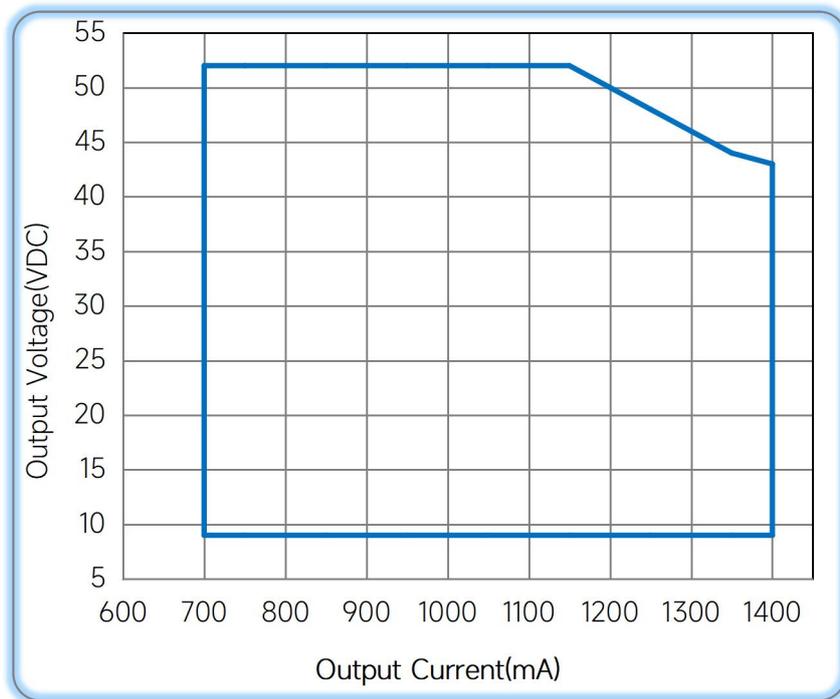
- 1.The factory default brightness is at 100%.
- 2.Up to 30 drivers can perform the PUSH dimming at the same time when utilizing one common push button
- 3.The maximum length of the cable from the push button to the last driver is 200 meters.

◆ 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	2022-05-10



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