60W DALI + PUSH Dimming power supply

Features

- Class II，SELV，independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor ＞0.95
- Efficiency ≥88%
- 2 Slots
- 5 years warranty
- Support DALI-2,Push Dimming

Applications

- LED panel,down light

■Approve

CE | 05 | SELV | DALI 2 | EL | CB

◆ Description

FLS-60-1400 DALI-2 LS1 is a 60W constant current, 2 slots 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 180 x 80 x 30mm it is easy to integrate in LED Panel and down light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.l products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

FLS-60-1400 DALI-2 LS1

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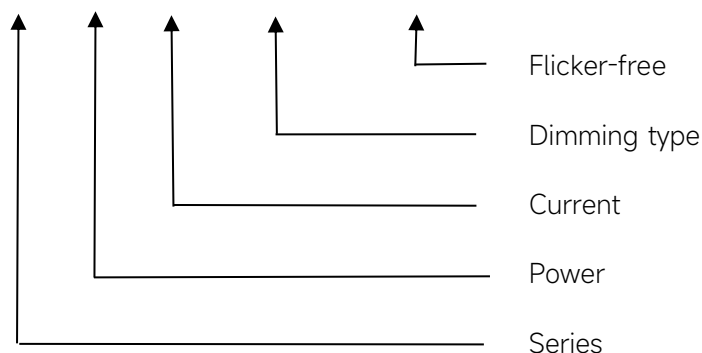
◆ Specification

	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%									
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	0.46A									
	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									
	Short circuit Protection	YES/Latch off									
	Over Temperature Protection	YES/Auto Resume									
Environment	Operating Temperature	-20℃~+45℃									
	Humidity	20%-90%RH									
	Tc	90℃									
	Storage Temperature	-25℃~+60℃									
	Lifetime	>50000h,@Tc=90℃									
Surface	Dimension	180x80x30 mm									

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	1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25℃ 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.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements，EMC is not considered.	

◆ 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

◆ Circuit Breaker

I^{peak}	Twidth	B10	B16	B20	C10	C16	C20
8.17A	40.9μs	17pcs	27pcs	34pcs	17pcs	27pcs	34pcs

Stock code : 002922
Article information 2022/ 05 /04　　　　　REV: A　　　　lighting.eaglerise.com　　　　DZ-YF3-02-09A
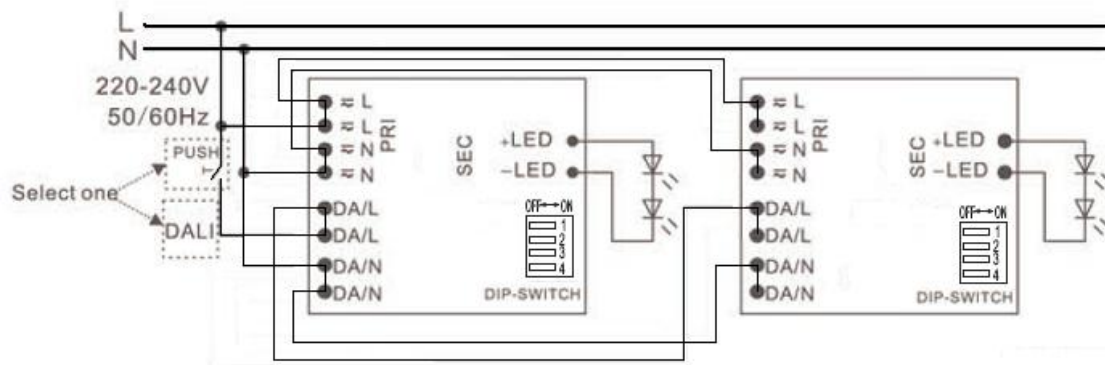
◆ Wiring diagram

◆ 2D diagram
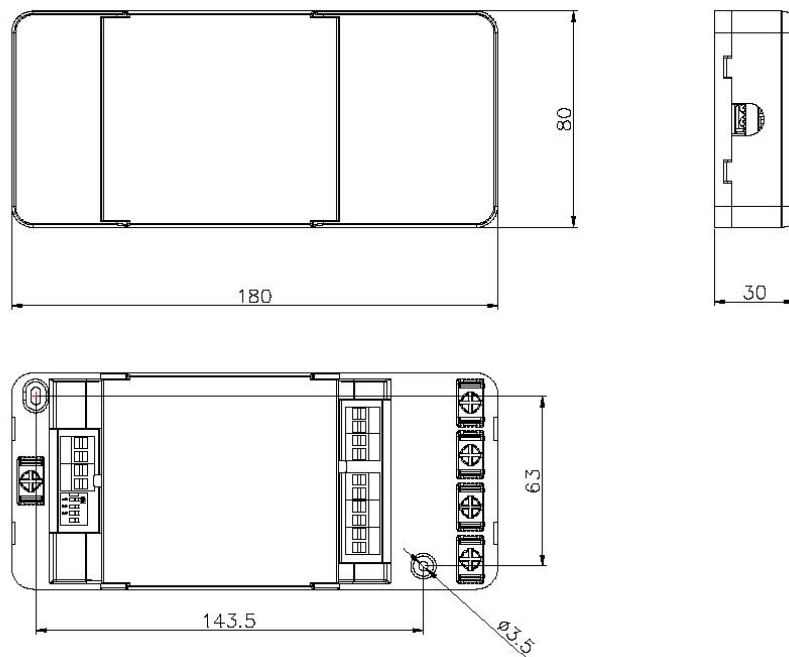
◆ Wiring & Connections

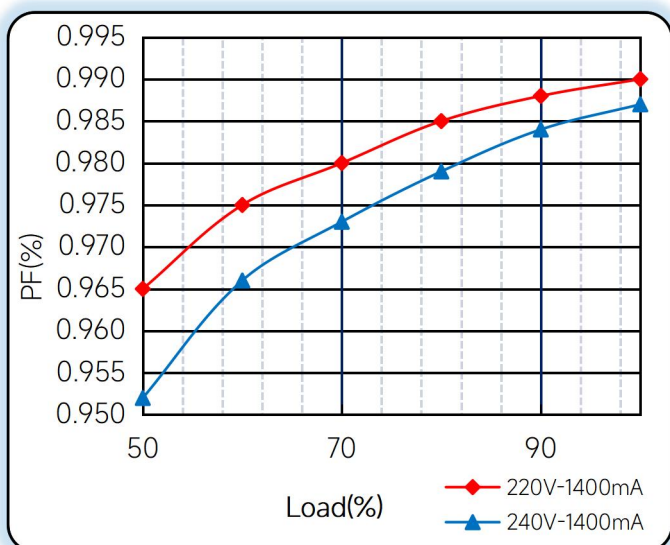|	Specification item	Value （Unit）
Input	Input wire cross-section	0.5...2.5 mm2
	Input wire gauge.	16...20 AWG
	Input wire strip length	8...9mm
Output	Output wire cross-section	0.5...1.5 mm2
	Output wire gauge.	16...20 AWG
	Output wire strip length	8...9mm

◆ Curve for FLS-60-1400 DALI-2 LS1, Io=1400mA
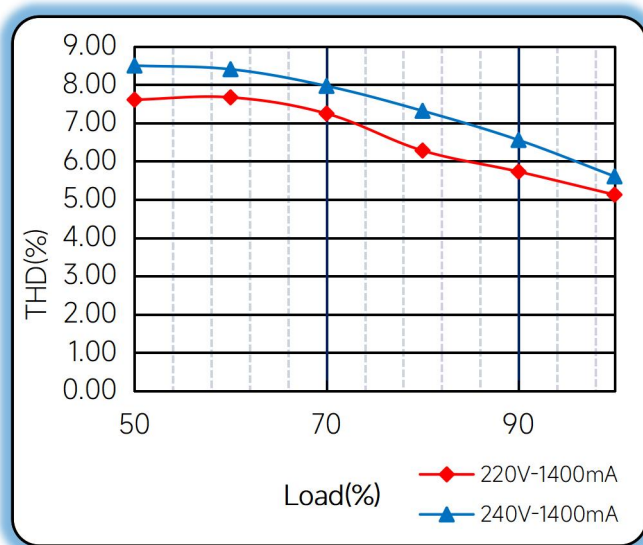
Lifetime vs. Temperature Curve

230V-1400mA
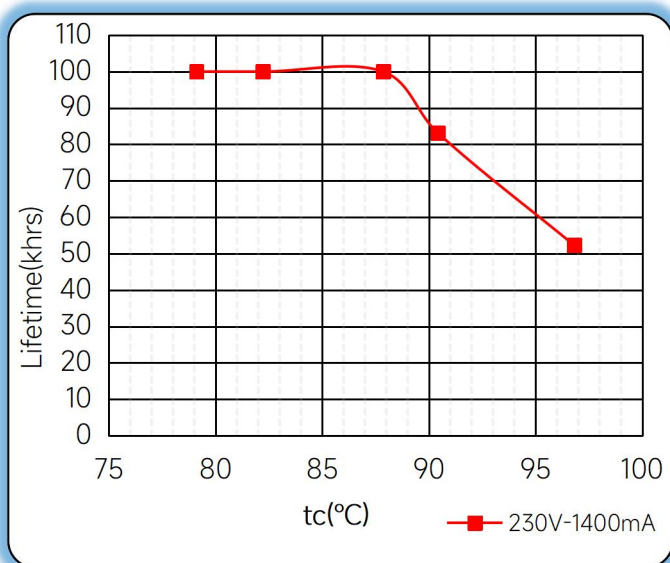
Efficiency vs. Load

220V-1400mA
240V-1400mA
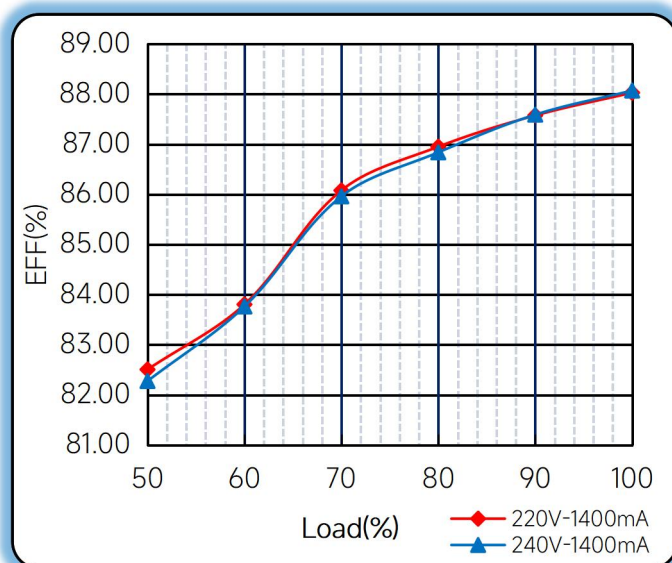
Power Factor Characteristics

220V-1400mA
240V-1400mA

THD vs. Load

220V-1400mA
240V-1400mA

◆ 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
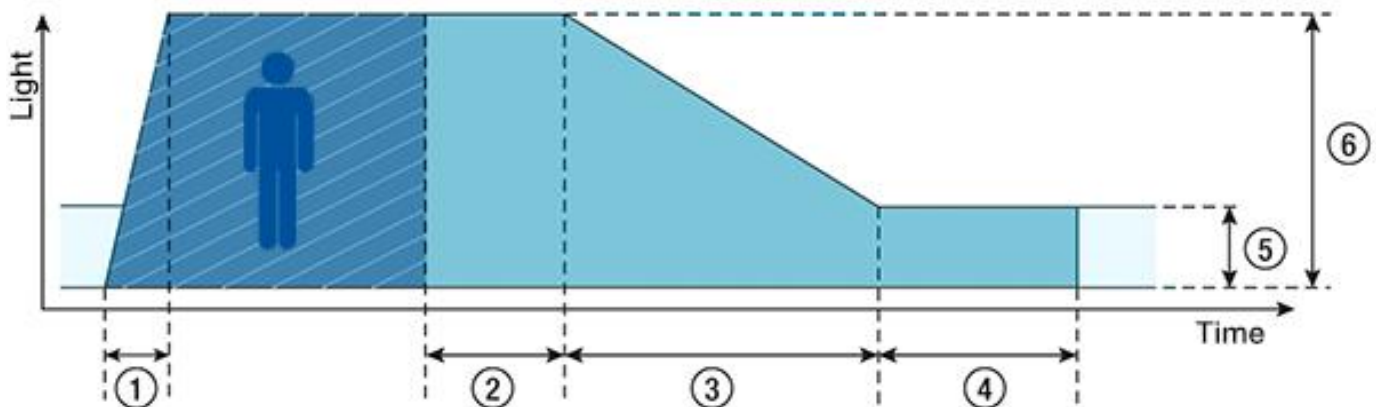
◆ **Fade-in time(0.5s):** the time that starts as soon as the presence of a person is detected. During the fade-in time the luminous intensity is faded up to the presence value.

◆ **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
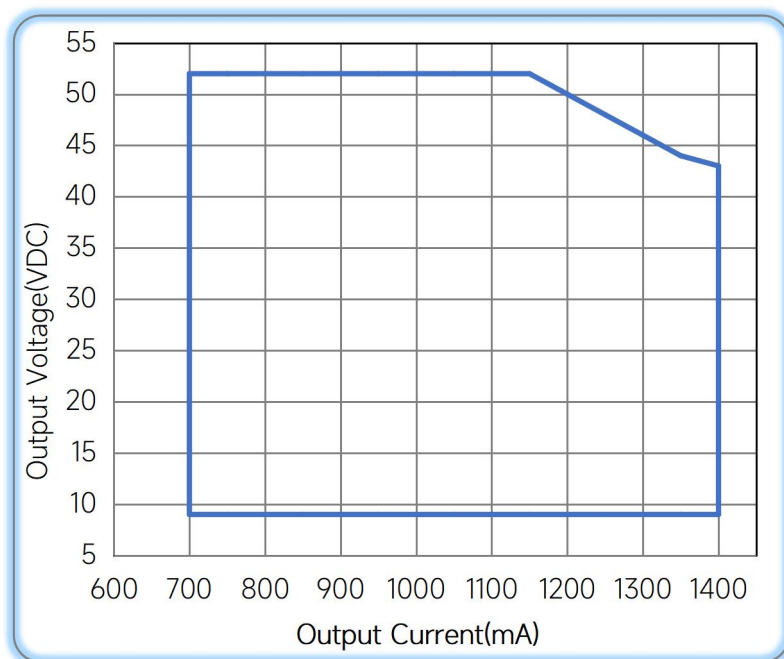
Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/04

Tel: +86-0757-86256822, +86-0757-86256831
E-mail: sales@eaglerise.com
Website : https://lighting.eaglerise.com

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