

60W Constant Current DALI-FLS Series

FLS-60-1400 DALI2 LA1

■ Approve

SELV CE

■ Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor >0.95
- Efficiency ≥86%
- Support DALI II, Push Dimming
- 5 years warranty

■ Applications(Typ.)

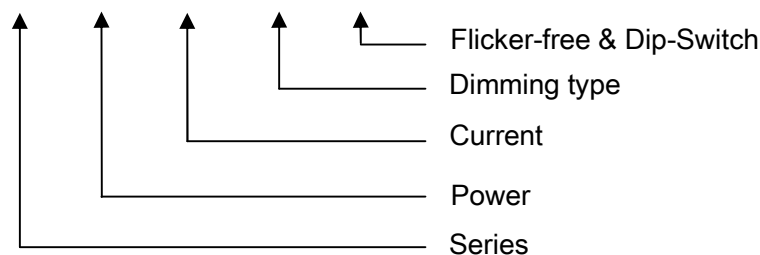
- LED strips
- LED panel
- Spot light
- Down light

■ Description

FLS-60-1400 DALI2 LA1 is a 60W constant current LED driver with 650 to 1400mA output current and a forward voltage range from 9 to 48Vdc. The output current is selectable by DIP Switch. With it's dimensions from 187 x 45 x 30.5mm 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-60-1400 DALI2 LA1



60W Constant Current DALI-FLS Series

FLS-60-1400 DALI2 LA1

■ Specification

Input	Rated input voltage	220-240VAC
	Range of input voltage	198-264VAC
	DC voltage range	198-254V
	Frequency(Hz)	0/50/60 Hz
	Power Factor	> 0.95@220-240VAC, full load
	Displacement factor	≥0.9
	Input Current max	0.46A MAX. @Full Load,198VAC(Please see Model list below for details)
	Start-up time	< 1s
	Unload Power Consumption	≤0.5W
	Inrush Current	30A Max./40μs@ Full Load, 230VAC , 50%Ipk-50%Ipk
	THD	< 10%. @Full Load,240VAC,Io=1400mA
	Leakage Current	< 0.7mA(240VAC)
Output	Constant Current	650/.../1400mA
	Unload voltage Max.	60 VDC
	Voltage Range(VDC)	9-48VDC
	Rated power	60.2W Max.
	Current Accuracy	±5%@220-240VAC
	Voltage Regulation	±5% @Full Load,220-240VAC
	Load Regulation	±5%@220-240VAC
	Hold-up Time	1s max.@Full Load
	Output HF current ripple *Note.2	≤±10% @Full Load,240VAC
	Output LF current ripple(<120Hz)	≤±3% @Full Load,240VAC
Efficiency(Typ.)	≥86%	
Dimming	Dimmable	YES
	Dimming mode	DALI II, Push
	Dimming current range	Io≥1000mA : 1%~100% ; Io < 1000mA : 10mA(min) ~100%
Protection	Over Load Protection	103-120% Protection type: Latch off
	Over Voltage Protection	< 60VDC Protection type: Latch off
	Short circuit Protection	Protection type: Latch off
	Over Temperature Protection	Protection type: Auto resume
Environment	Operating Temperature	-20°C...+45°C
	tc	90°C
	Storage Temperature	-25°C...+60°C
	Life time	> 50,000h@45°C, 230VAC
Humidity		20%-90%RH
Others	Dimension	187X45X30.5(LXWXH)mm
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13; EN62384
	Withstand voltage	Input-Output : 3750V/5mA/1min
	Isolation resistance	Input-Output : ≥4MΩ@500VDC
	EMI	EN55015; EN61000-3-2 Class C; EN61000-3-3
	EMS	EN 61547; EN 61000-4-2; EN 61000-4-5 —1000V;

60W Constant Current DALI-FLS Series

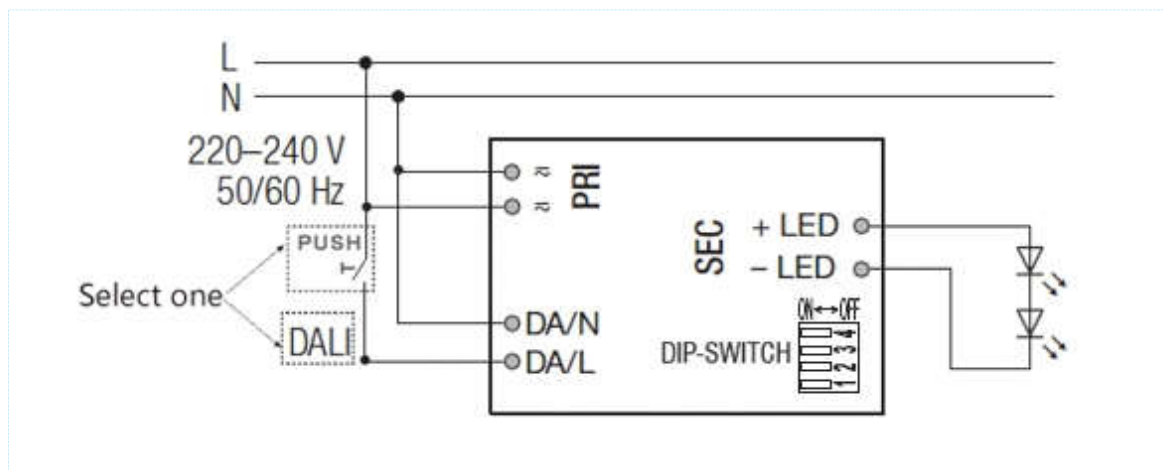
FLS-60-1400 DALI2 LA1

Note	1.All parameters NOT specially mentioned are measured at 240VAC 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.Output current can be from 650mA to 1400mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.

■Adjustable Output Current with dip-switch

Vo	Po	Io	1	2	3	4
9-48VDC	31.2W	650mA	--	--	--	--
9-48VDC	33.6W	700mA	ON	--	--	--
9-48VDC	36W	750 mA	--	ON	--	--
9-48VDC	38.4W	800mA	ON	ON	--	--
9-48VDC	40.8W	850mA	--	--	ON	--
9-48VDC	43.2W	900mA	ON	--	ON	--
9-48VDC	45.6W	950mA	--	ON	ON	--
9-48VDC	48W	1000mA	ON	ON	ON	--
9-48VDC	50.4W	1050mA	--	--	--	ON
9-48VDC	52.8W	1100mA	ON	--	--	ON
9-48VDC	55.2W	1150mA	--	ON	--	ON
9-48VDC	57.6W	1200 mA	ON	ON	--	ON
9-48VDC	60W	1250 mA	--	--	ON	ON
9-46VDC	59.8W	1300mA	ON	--	ON	ON
9-44VDC	59.4W	1350mA	--	ON	ON	ON
9-43VDC	60.2W	1400mA	ON	ON	ON	ON

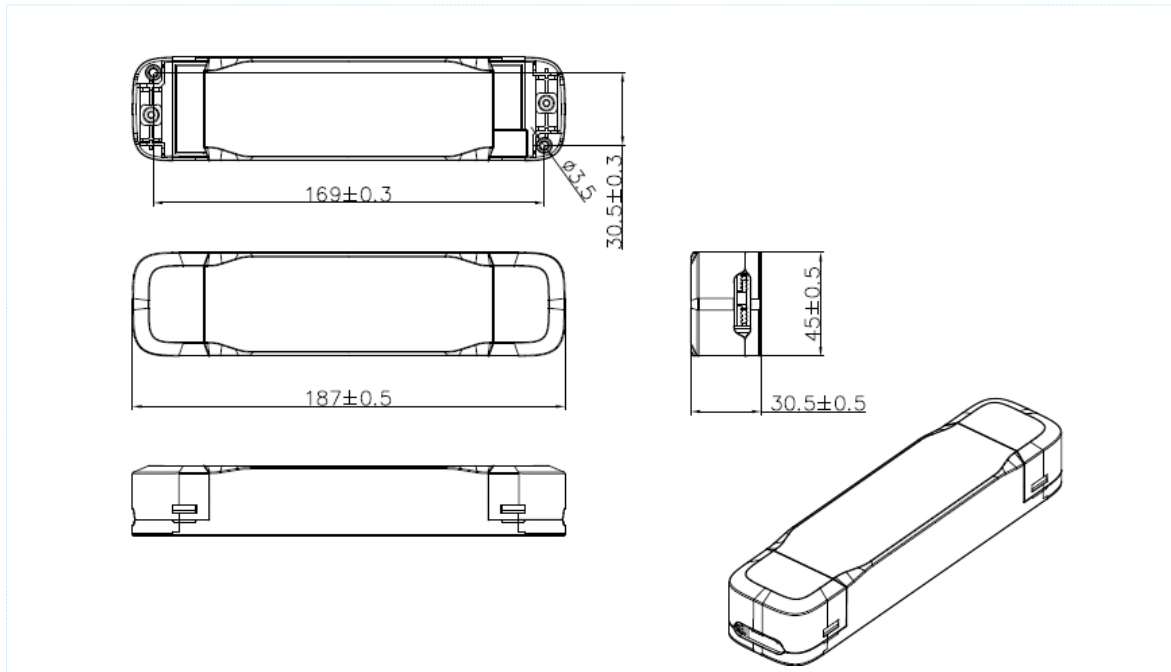
■Wiring diagram



60W Constant Current DALI-FLS Series

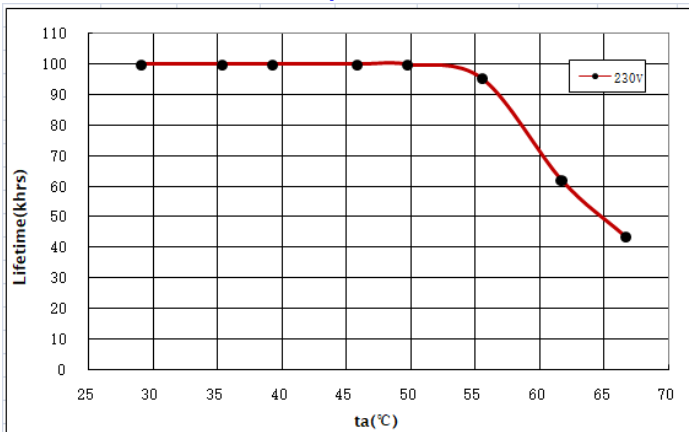
FLS-60-1400 DALI2 LA1

■2D diagram

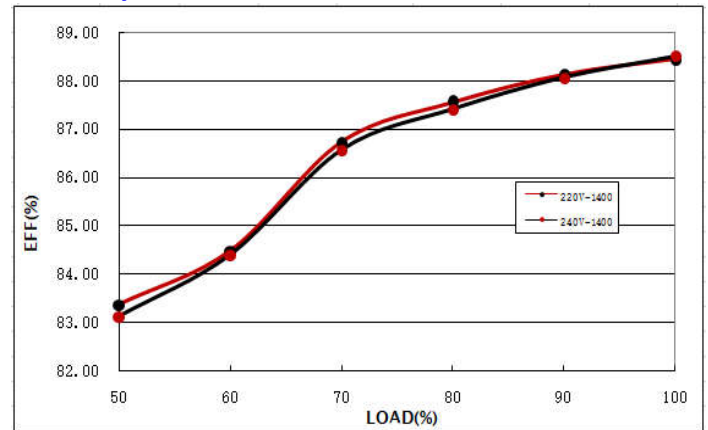


■Curve @ FLS-60-1400 DALI2 LA1 , I_o=1400mA

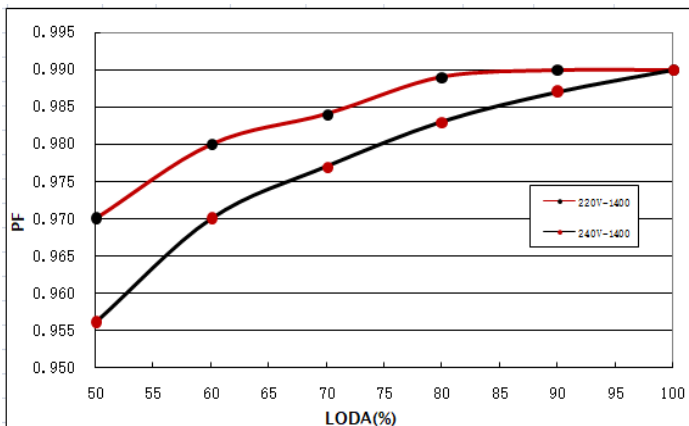
Lifetime vs. Ambient Temperature Curve



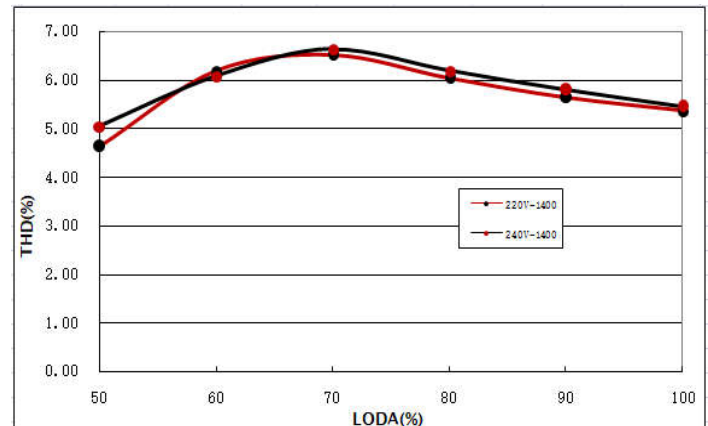
Efficiency vs. Load



Power Factor Characteristics



THD vs. Load



60W Constant Current DALI-FLS Series

FLS-60-1400 DALI2 LA1

■ Operating window

