

## 30W FDS-DALI-2 Dimming power supply



■ Approve



### Features

- Class II,SELV,built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor > 0.95
- Efficiency ≥85%
- Adjustable Output Current with dip-switch
- Support DALI-2
- 5 years warranty

### Applications

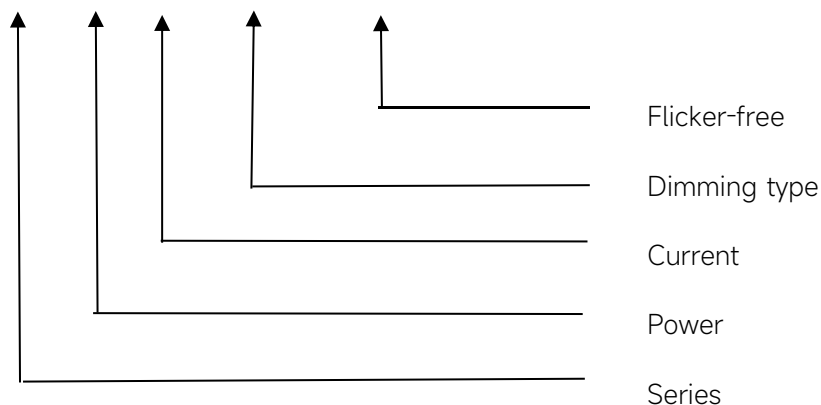
- Track light

### ◆ Description

FDS-30-700 DALI-2 LD is a 30W constant current LED driver that operates from 198-264Vac input with 350mA to 700 mA output current and a forward voltage range from 9 to 42Vdc. The output current is adjustable by DIP Switch. With it's compact dimensions from 248 x 31 x 45 mm it is easy to integrate in track light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

### ◆ Model code

FDS-30-700 DALI-2 LD



## ◆ Specification

	Constant Current (mA)	350	400	450	500	550	600	650	700
Output	Voltage Range (VDC)	9-42							
	Unload voltage Max.	55VDC							
	Current Accuracy	±5%							
	Output HF current ripple(≥1KHz)	±10%							
	Output LF current ripple(≤120Hz)	±3%							
	SVM	≤0.4							
	P <sub>st</sub>	≤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		< 0.5S							
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	> 55VDC 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	85°C							
	Storage Temperature	-25°C~+60°C							
	Lifetime	>50000h,@Tc=85°C							
Surface	Dimension	248X31X45(LXWXH)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°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.	

## ◆ Parameter

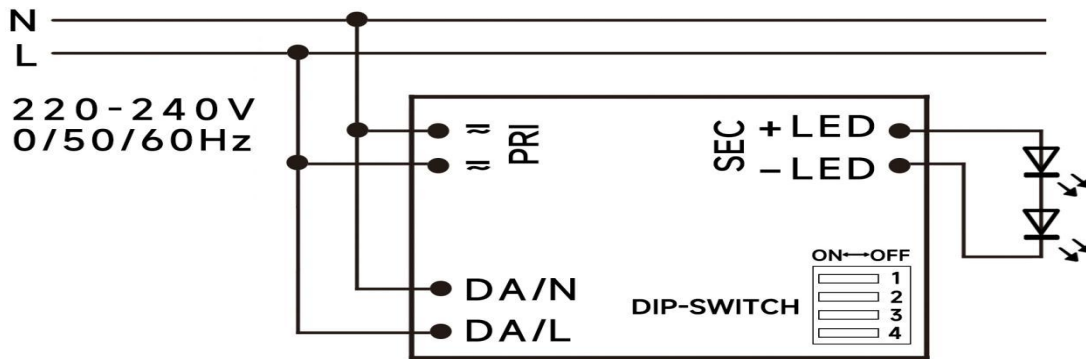
Number	Current(mA)	Switch position		
		1	2	3
1	350mA	--	--	--
2	400mA	ON	--	--
3	450mA	--	ON	--
4	500mA	ON	ON	--
5	550mA	--	--	ON
6	600mA	ON	--	ON
7	650mA	--	ON	ON
*8	700mA	ON	ON	ON

\* Factory default

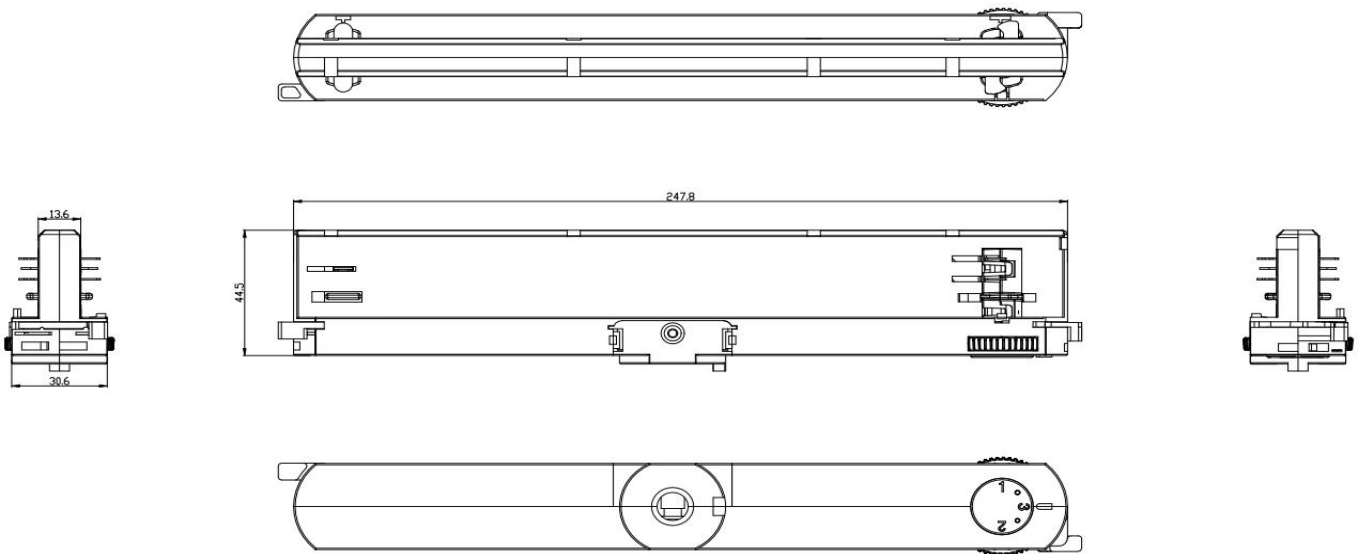
## ◆ Circuit Breaker

I <sub>peak</sub>	T <sub>width</sub>	B10	B16	B20	C10	C16	C20
17.6A	101.1μs	30pcs	49pcs	61pcs	30pcs	49pcs	61pcs

### ◆ Wiring diagram



### ◆ 2D diagram

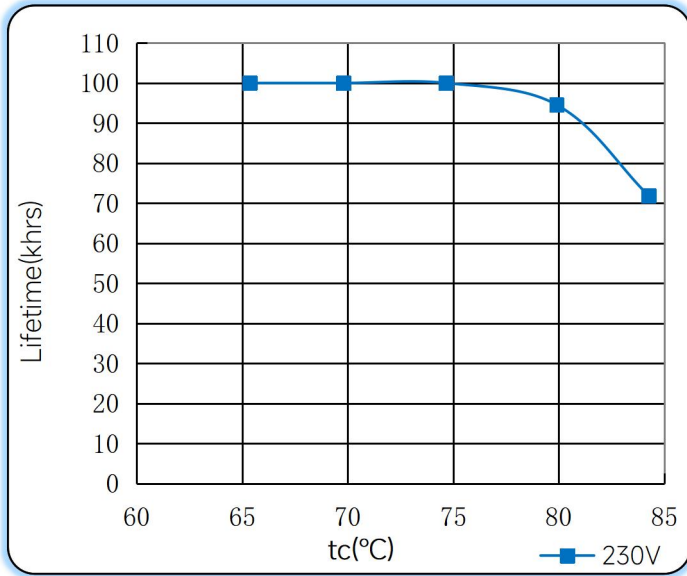


### ◆ Wiring & Connections

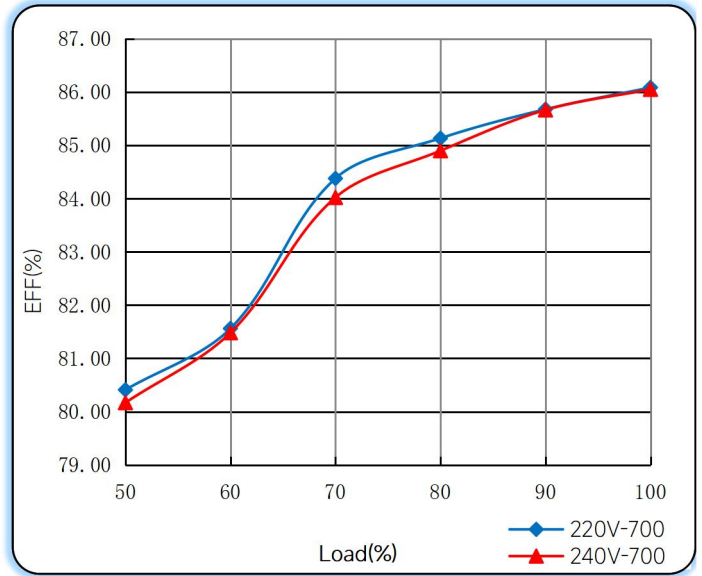
Specification item		Value (Unit )
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	8...9mm

**◆ Curve for FDS-30-700 DALI-2 LD, I<sub>o</sub>=700mA**

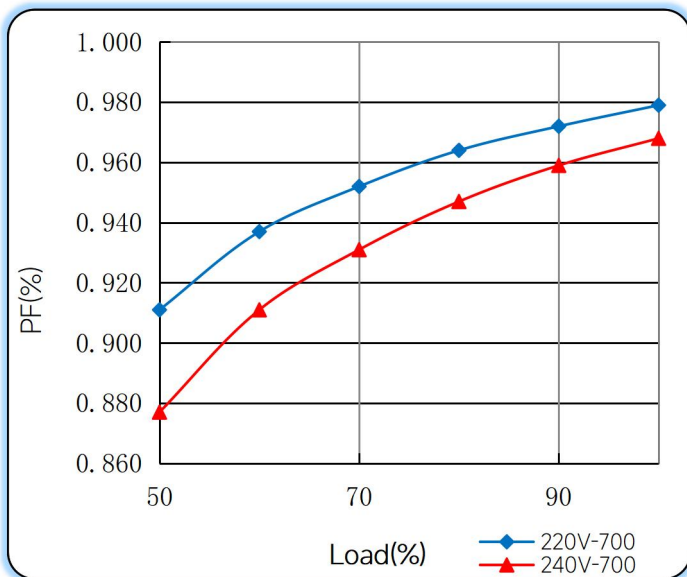
**Lifetime vs. Temperature Curve**



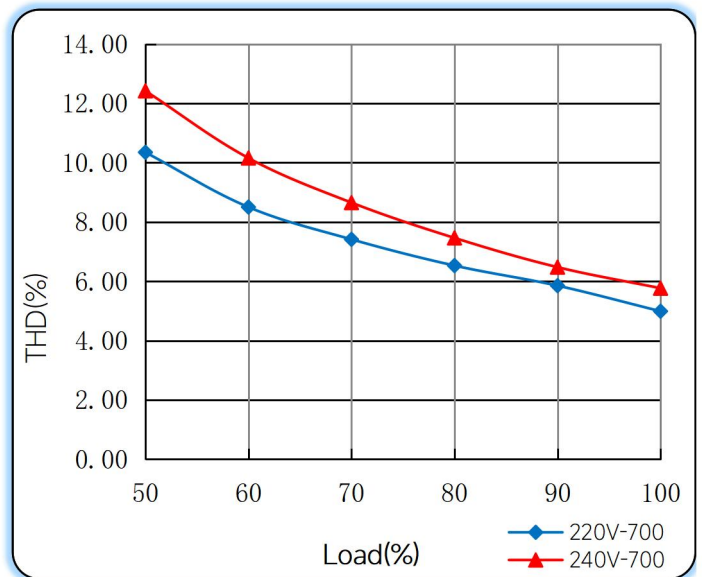
**Efficiency vs. Load**



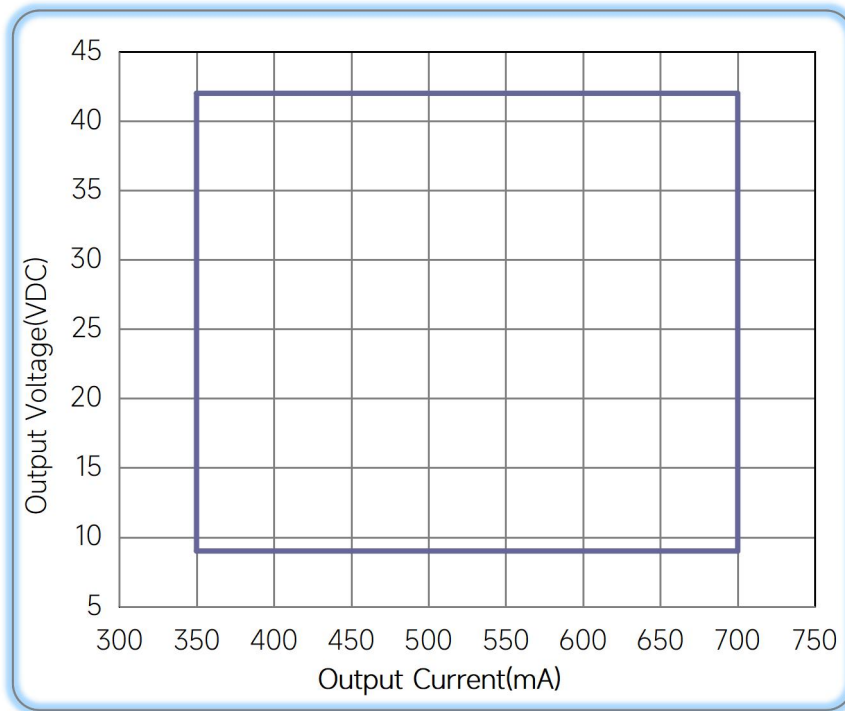
**Power Factor Characteristics**



**THD vs. Load**



◆ **Operating window**



— Operating window 100%

◆ **Revision Updates**

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/02/15

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual