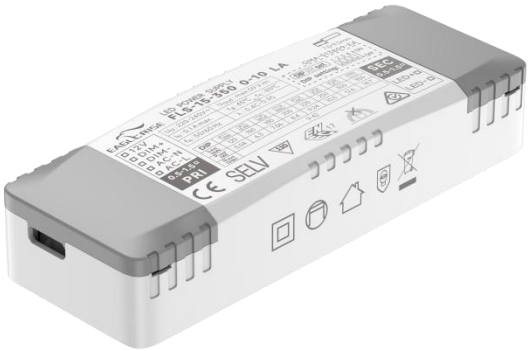
15W 0-10V+RX+PWM Dimming power supply



■Approve

CECB SELV

Features

- For luminaries of protection
- Class I，II，SELV，Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor：0.4C-0.95
- Efficiency：≥80%
- Support 0-10V,RX,PWM Dimming
- 5 years warranty

Applications

- LED panel light、Down light

◆ Description

FLS-15-350 0-10 LA is a 15W constant current LED driver that operates from 198-264Vac input with 120 to 350mA 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 125 x 45 x 26mm. 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.

◆ Model code

FLS-15-350 0-10 LA

- LA: Flicker-free
- 0-10: Dimming type
- 350: Current
- 15: Power
- FLS: Series

◆ Specification

Output	Constant Current (mA)	120	150	180	200	220	250	300	350
	Voltage Range(VDC)	9-42VDC							
	Unload voltage Max.(VDC)	59VDC							
	Current Accuracy	±10%		±8%			±6%		
	Output HF current ripple(≥1KHz)	±5%							
	Output LF current ripple(≤120Hz)	±3%							
	Auxiliary Output Voltage	12V							
	Auxiliary Output Current	50 mA							
	SVM	≤0.4							
	P_{st}	≤1							
	Efficiency(Typ.)	≥80%@Full load							
Input	Rated input voltage(VAC)	220-240VAC							
	Range of input voltage(VAC)	198-264VAC							
	Frequency(Hz)	50/60 Hz							
	Displacement factor	≥0.9@Full load							
	Power Factor	0.4C-0.95							
	Input Current max	0.1 A Max							
	Start-up time	＜0.5S							
	No Load Power	≤0.5W							
	THD (Typ.)	≤15%@Full load							
Dimming	Dimming	YES							
	Dimming mode	0-10V,RX,PWM							
	Dimming depth	1%							
	Dimming current range	1-100%							
Protection	Over Load Protection	103-130%							
		YES/Auto Resume							
	Over Voltage Protection	＞59VDC							
		YES/Auto Resume							
	Short circuit Protection	YES/Auto Resume							
	Over Temperature Protection	YES/Auto Resume ‘							
Environment	Operating Temperature	-20℃…+45℃							
	Humidity	20%-90%RH							
	Tc	85℃							
	Storage Temperature	-25℃…+80℃							
	Life time	＞50000h@Tc=85℃							
Surface	Dimension	125X45X26(LXWXH)mm							

Standards	EN 61547; EN 61347-1,EN 61347-2-13; IEC 61347-1,IEC 61347-2-13; GB 19510.1,GB 19510.14; AS 61347.1,AS 61347.2.13; EN 62384; 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℃ 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.Switch and dimmer are not recommended to connect between this product output and luminaries.	

◆ Parameter

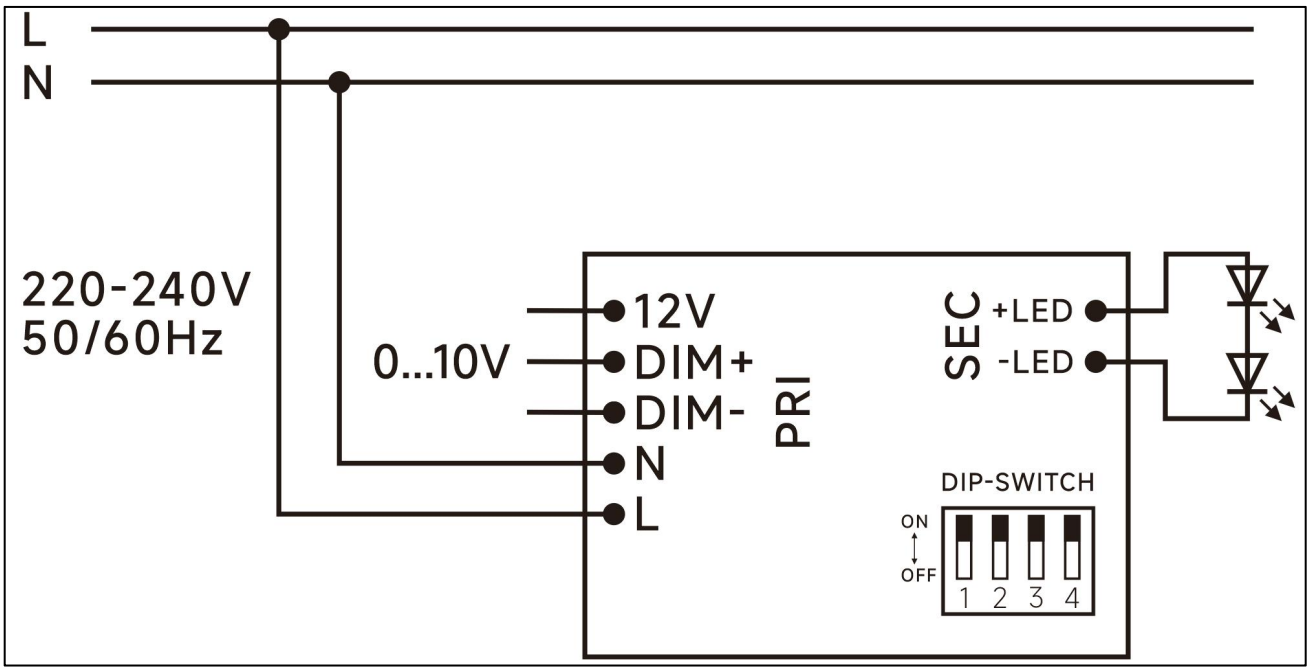
Number	Output				Switch position			
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3	4
1	120mA	9-42VDC	59VDC	5	ON	--	--	--
2	150mA	9-42VDC		6.3	--	ON	--	--
3	180mA	9-42VDC		7.56	--	--	ON	--
4	200mA	9-42VDC		8.4	--	--	--	ON
5	220mA	9-42VDC		9.24	ON	--	--	ON
6	250mA	9-42VDC		10.5	--	ON	--	ON
7	300mA	9-42VDC		12.6	ON	--	ON	ON
*8	350mA	9-42VDC		14.7	ON	ON	ON	ON

* Factory default

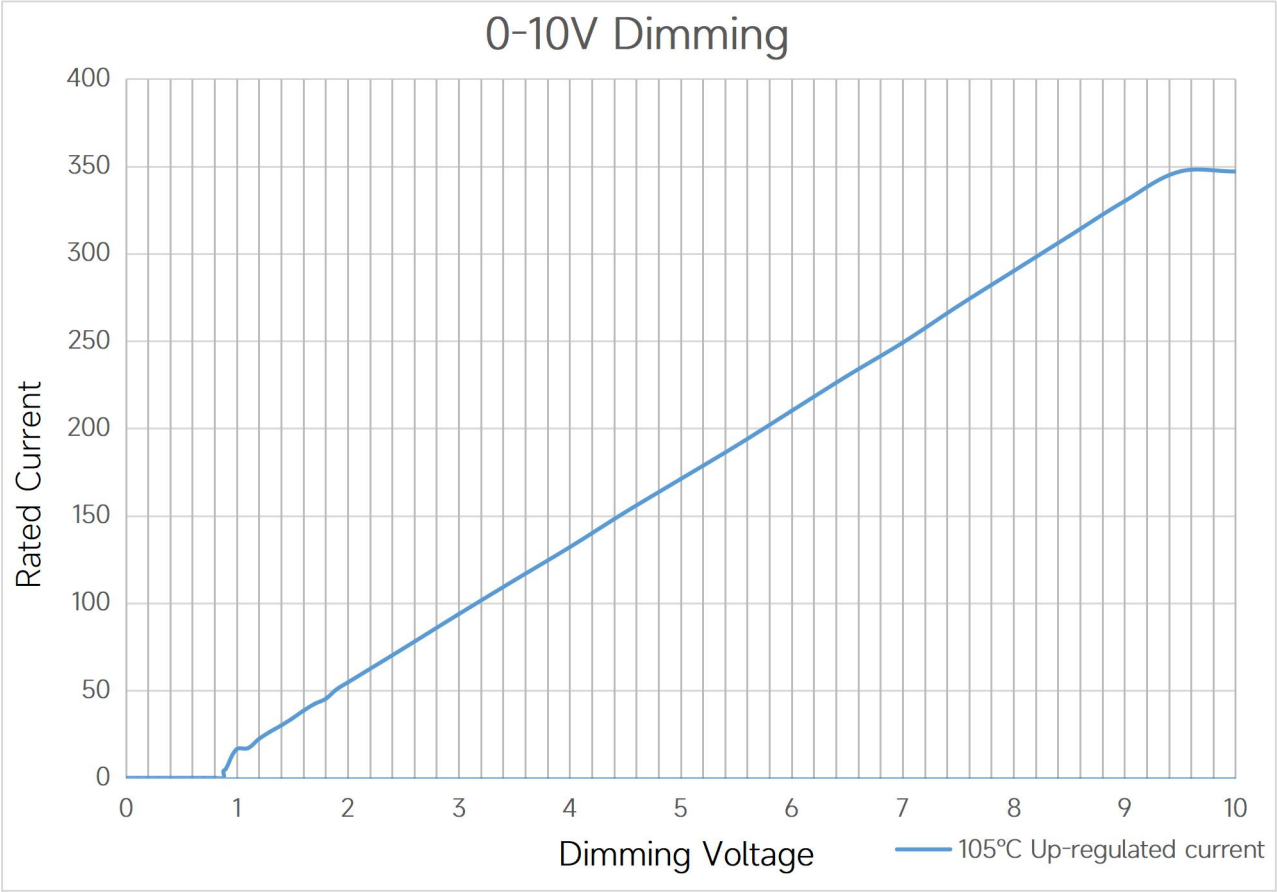
◆ Circuit Breaker

I^{peak}	Twidth	B10	B16	B20	C10	C16	C20
3.1A	**44μs**	80pcs	128pcs	160pcs	80pcs	128pcs	160pcs

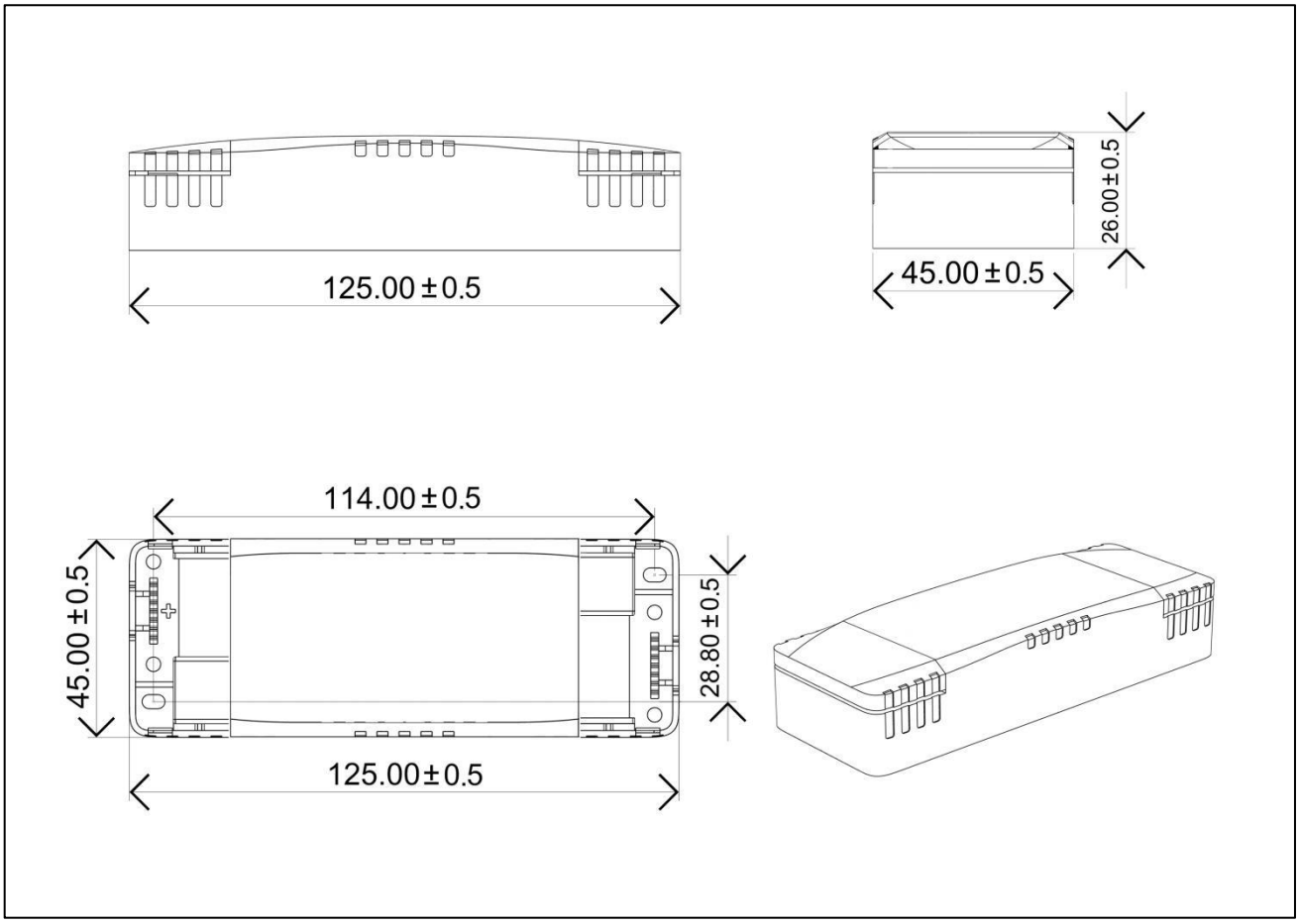
◆ Wiring diagram



◆ The dimming curve



◆ 2D diagram

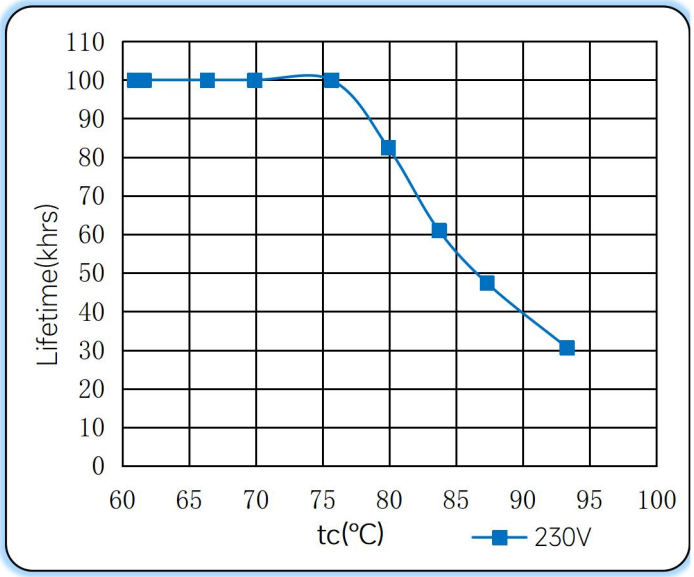


◆ Wiring & Connections

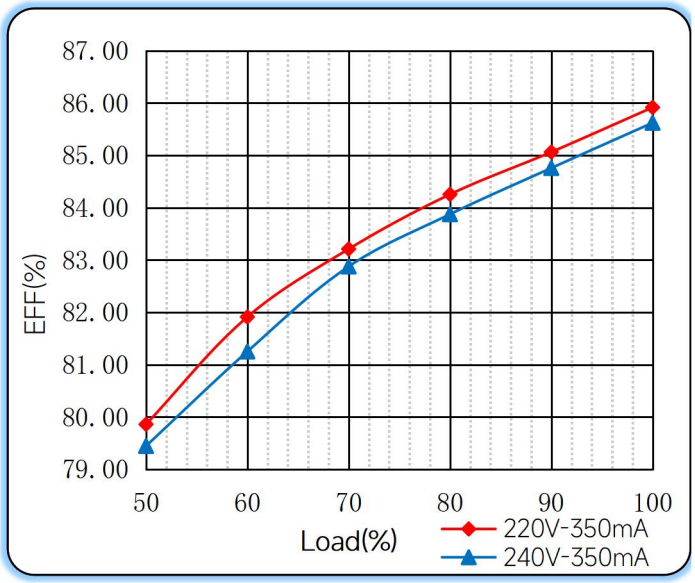
Specification item		Value （Unit ）
Input	Input wire cross-section	0.5...1.5 mm^2
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm^2
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ Curve for FLS-15-350 0-10 LA, Io=350mA

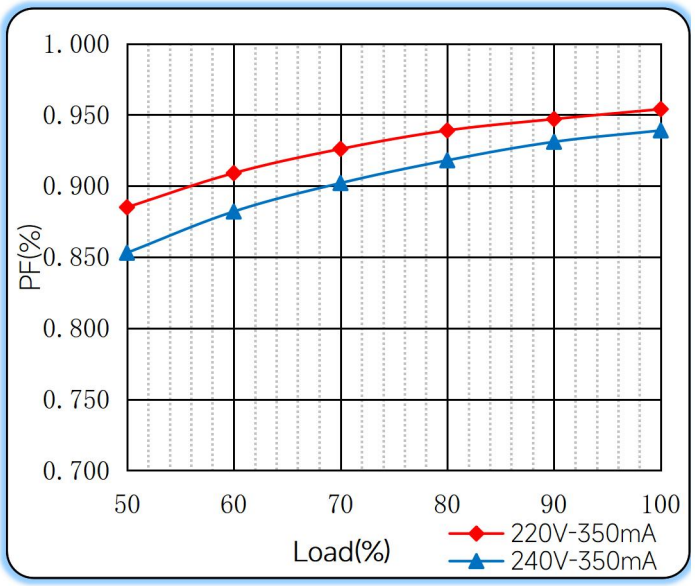
Lifetime vs. Temperature Curve



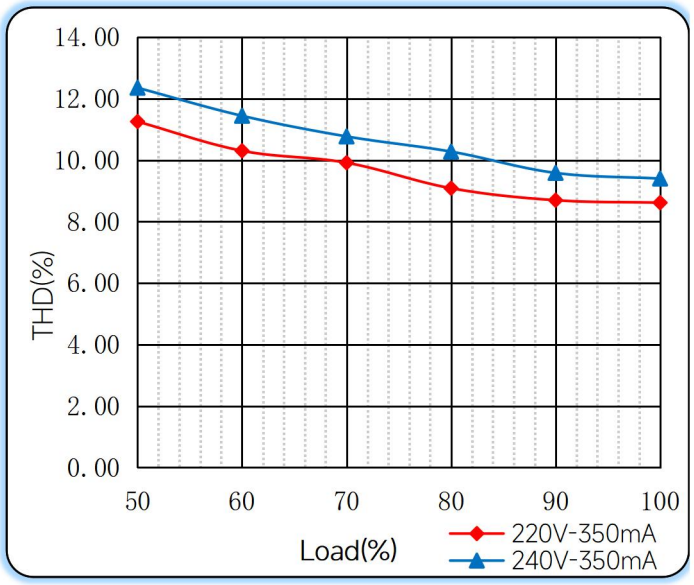
Efficiency vs. Load



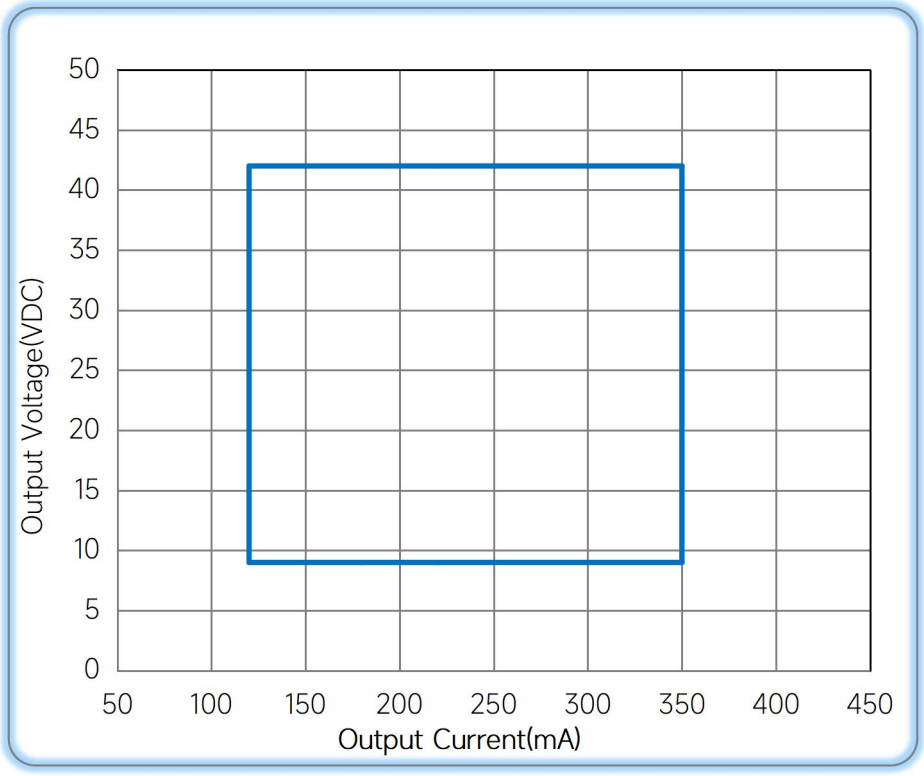
Power Factor Characteristics



THD vs. Load



◆ Operating window



Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/01/04