

21W Constant Current power supply



■ Approve



Features

- For luminaires of protection Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.6C
- Efficiency: $\geq 85\%$
- 5 years warranty
- IP20

Applications

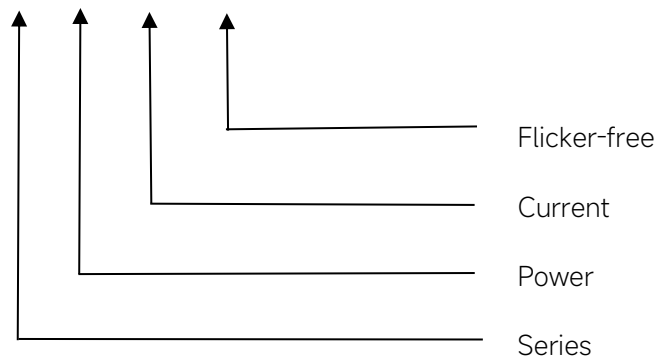
- LED panel、LED down light
LED spot light

◆ Description

LS-21-XXX CCT SI E is a 21W constant current LED driver with 300~700mA output current. With it's compact dimensions from 92 x 36 x 25 mm it is easy to integrate in LED panel、LED down light、LED spot light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

LS-21-XXX CCT SI E



◆ Specification

Output	Constant Current (mA)	300	350	400		700
	Voltage Range(VDC)	40-70	42-60	30-42		18-30
	Unload voltage Max.	90	80	59		50
	Current Accuracy	±5%				
	Output HF current ripple(≥1KHz)	±5%				
	Output LF current ripple(≤120Hz)	±5%				
	SVM	≤0.4				
	P _{st}	≤1				
	Efficiency(Typ.)	≥85%@Full load,230V				
Input	Rated input voltage	220-240VAC				
	Range of input voltage	198-264VAC				
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition				
	Frequency(Hz)	50/60 Hz				
	Displacement factor	≥0.7				
	Power Factor	0.6C@Full load,230V				
	Input Current max	0.3A				
	Start-up time	< 0.5S				
	No Load Power	≤0.5W				
Protection	Over Load Protection	103-120%				
		YES/Auto Resume				
	Over Voltage Protection(VDC)	90	80	59		50
		YES/Auto Resume				
	Short circuit Protection	YES/Auto Resume				
capability	Over Temperature Protection	YES/Auto Resume				
	Surge capability (L-N)	1KV				
Environment	Surge capability (L/N-Ground)	NA				
	Operating Temperature	-20°C~+45°C				
	Humidity	20%-90%RH				
	Tc	80°C				
	Storage Temperature	-25°C~+60°C				
	Life time	> 30,000h@tc=75°C; > 60,000h@tc=65°C				
	Noise	≤20dB(A)@10cm				
Surface	Dimension	92x36x25 (LxWxH)mm				
	material	PP				
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13,EN62384				

	EMC	GB/T17743, GB17625. 1,EN55015, EN61000-3-2, EN61000-3-3, EN61547,EN61000-4-5,EN61000-4-2,3,4,5,6,8,11, EN61547
	Energy Efficiency	Erp2.0 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. 3. Data are typical values obtained from test samples 4. Switch and dimmer are not recommended to connect between this product output and luminaries.	

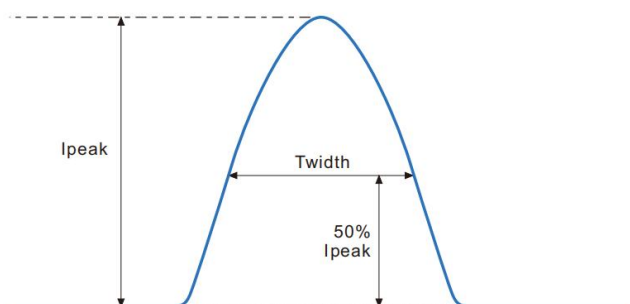
◆ Model list

Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	LS-21-300 CCT SI E	300	40-70	90	21
2	LS-21-350 CCT SI E	350	42-60	80	21
3	*LS-21-400 CCT SI E	400	30-42	59	16.8
4	*LS-21-450 CCT SI E	450	30-42		18.9
5	*LS-21-500 CCT SI E	500	30-42		21
6	LS-21-550 CCT SI E	550	30-40		22
7	*LS-21-600 CCT SI E	600	27-35		21
8	*LS-21-650 CCT SI E	650	20-32	50	20.8
9	*LS-21-700 CCT SI E	700	18-30	50	21

*Regular stock

◆ Inrush Current

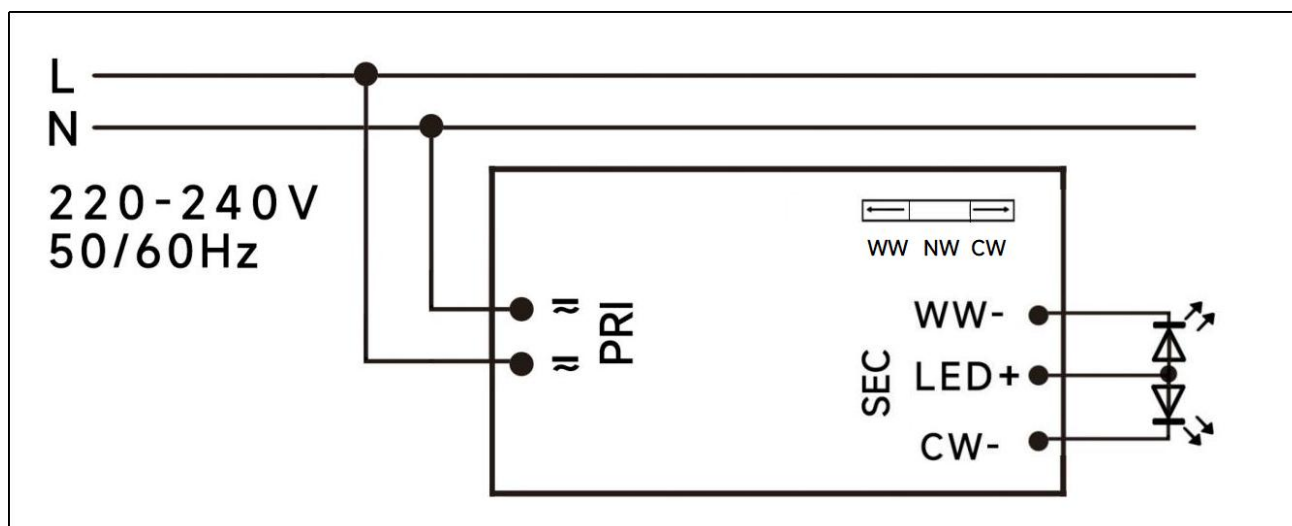
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
13.4A	101.6μs	26pcs	42pcs	53pcs	26pcs	42pcs	53pcs



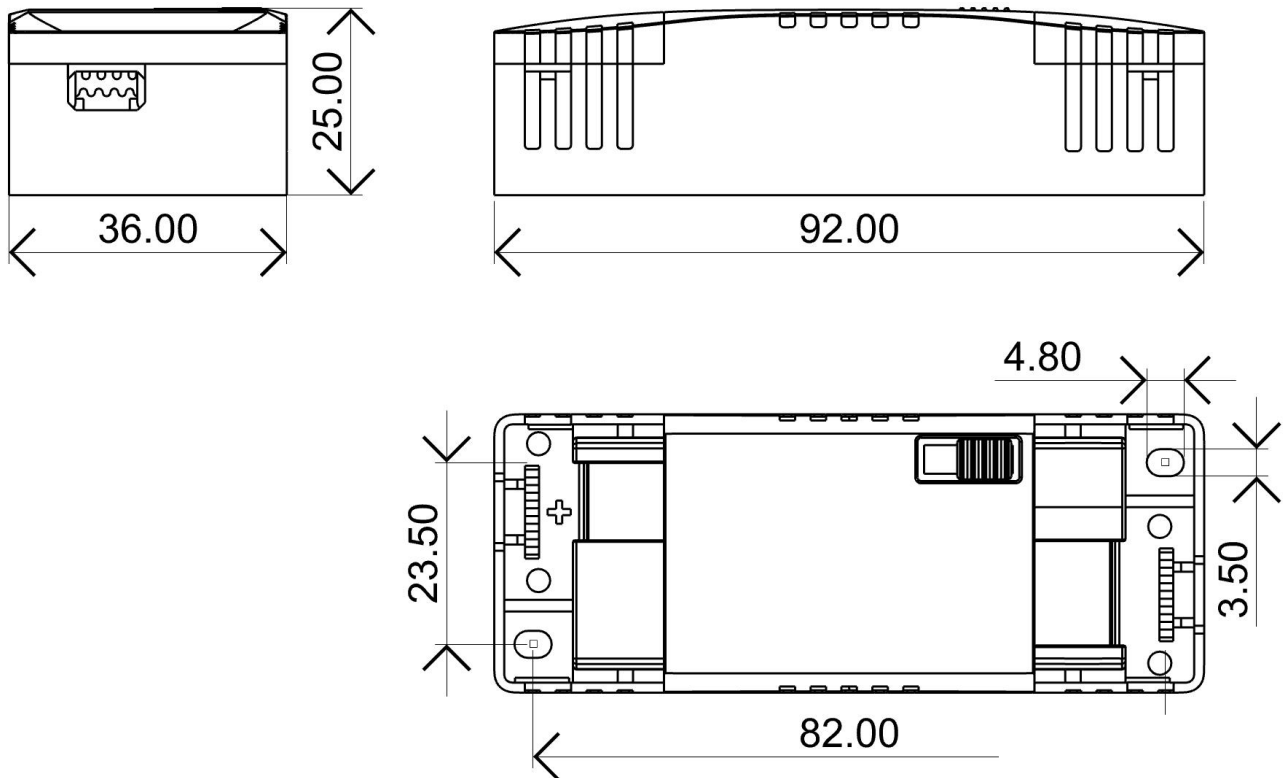
Remarks:

- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

◆ Wiring diagram



◆ 2D diagram



◆ Wiring & Connections

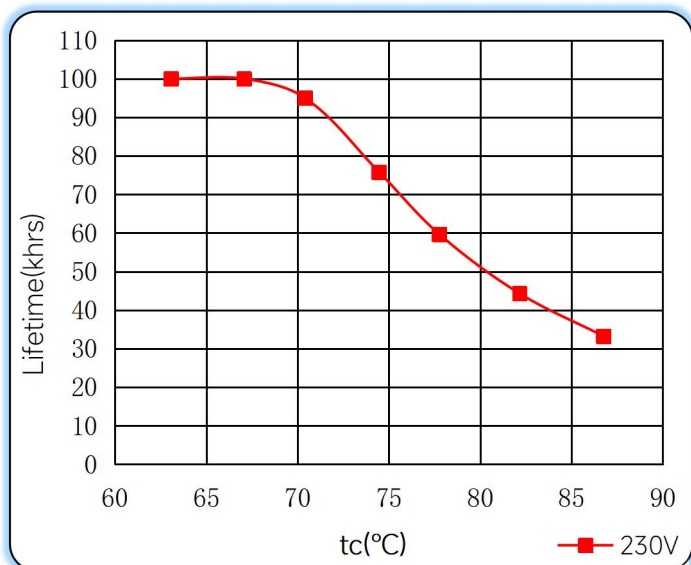
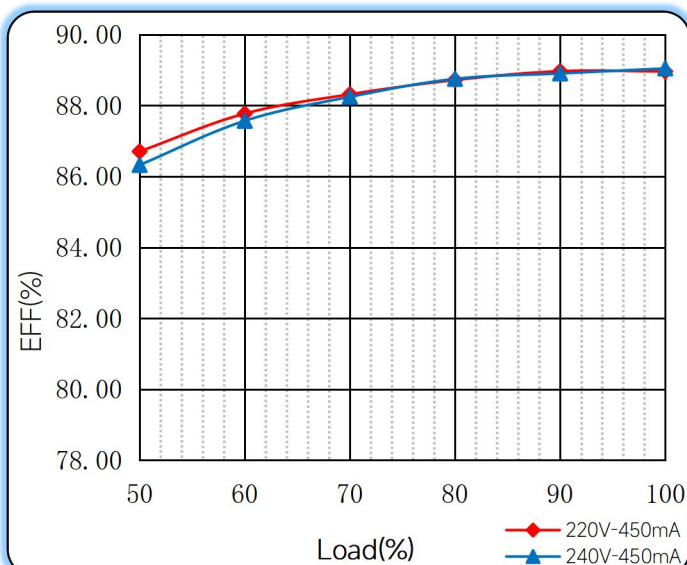
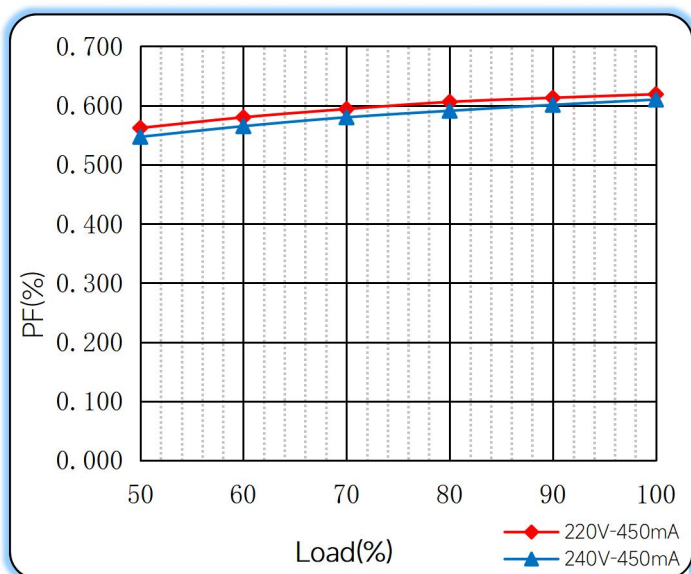
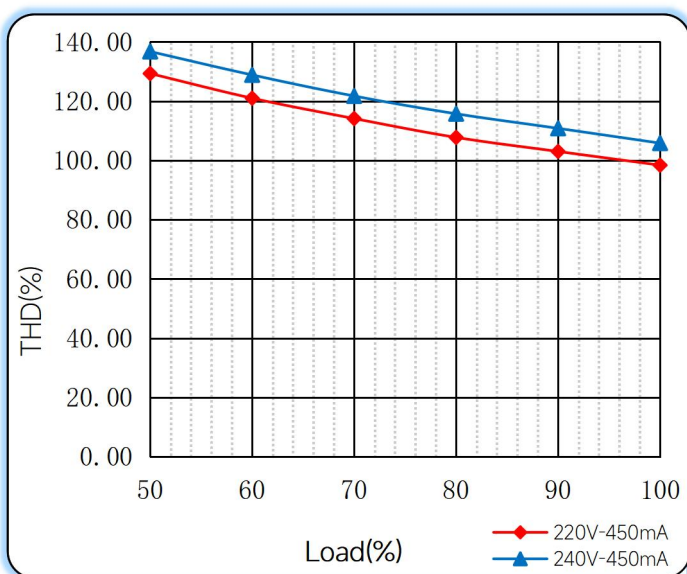
Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

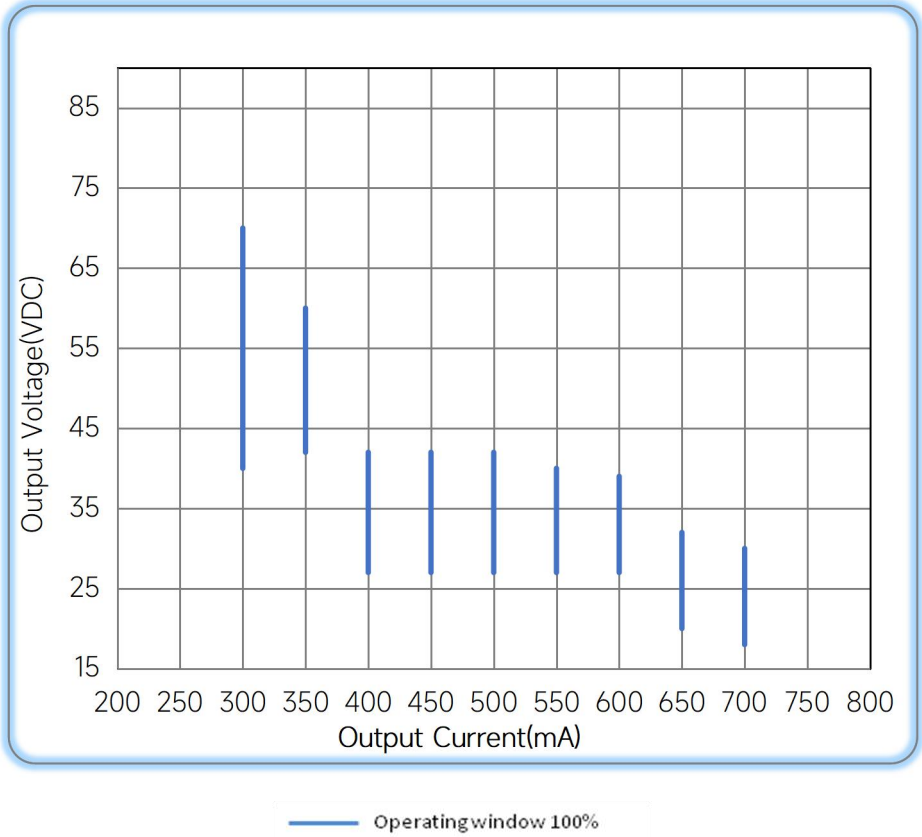
◆ Packaging

Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-21-XXX CCT SI E	92x36x25	0.0456	Inside: 295X255X200 Outside: 310X265*210	132	6.0192	6.5592

◆ Curve for LS-21-XXX CCT SI E, $I_o=450\text{mA}$

Lifetime vs. Temperature Curve

Efficiency vs. Load

Power Factor Characteristics

THD vs. Load


◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/09/10

Remark:The final interpretation of the contents of the specification belongs to Eaglerise Electric & Electronic (China) Co., Ltd.

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