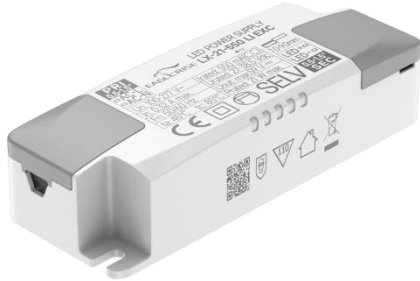


21W Constant Current power supply



■ Approve



Features

- For luminaries of protection Class II, SELV, Independent
- Input Voltage: 100-277VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: ≥ 0.9
- Efficiency: 83-85%
- 5 years warranty
- IP20

Applications

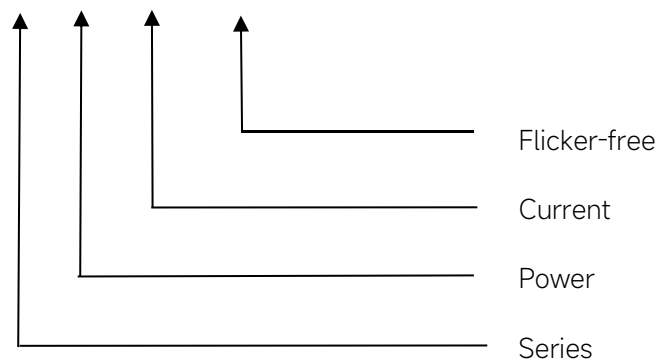
- LED panel, LED down light, LED spot light

◆ Description

LX-21-XXX LI EXC is a 21W constant current LED driver with 350 to 550mA output current. With its compact dimensions from 102 x 38.2 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, over Load, over voltage and over temperature.

◆ Model code

LX-21-XXX LI EXC



◆ Specification

	Constant Current (mA)	350mA	400mA	450mA	500mA	550mA	
Output	Voltage Range(VDC)	27-42VDC				27-38.5VDC	
	Unload voltage Max.(VDC)	59V					
	Current Accuracy	±7%			±5%		
	Output LF current ripple(≤120Hz)	±3%					
	SVM	≤0.4@full load,100-277VAC					
	P _{st}	≤1@full load,100-277VAC					
	Efficiency(277VAC/100VAC,Typ.)	85%@277VAC;83%@100VAC					
	Input	Rated input voltage	100-277VAC				
Range of input voltage		90-305VAC					
Frequency(Hz)		50/60 Hz					
Maximum voltage		320VAC@1 h maximum,unit might not operate in this abnormal condition					
Displacement factor		0.9					
Power Factor		≥0.9@full load, 277VAC					
Input Current max (A)		0.22	0.25	0.285	0.32	0.32	
Start-up time		< 0.5S					
No Load Power		≤0.5W					
Protection	Over Load Protection	103-130% YES/Auto Resume					
	Over Voltage Protection	59V YES/Auto Resume					
	Short Circuit Protection	YES/Auto Resume					
Capability	Surge capability (L-N)	1KV					
	Surge capability (L/N-Ground)	NA					
Withstand voltage	Input-Output	3750V/5mA/60S					
Environment	Operating Temperature	-20°C~+45°C					
	Humidity	20%-90%RH					
	T _c	85°C					
	Storage Temperature	-20°C~+85°C					
	Life time	> 50,000h@T _c =85°C					
Surface	Noise	≤25dB(A)@10cm					
	Dimension	102X38.2X25 (LXWXH)mm					
Standards	material	PC					
	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;AS/NZS 61347- 1, AS/NZS 61347-2- 13;AS 61347.2.13;EN62384;					
Standards	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN55015, EN61000-3-2, EN61000-3-3, EN61547,EN 62493;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547					

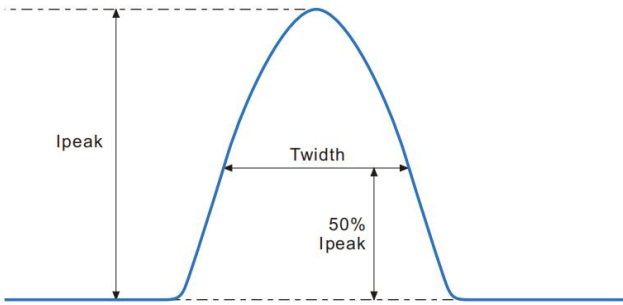
	ErP	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	<p>1.All parameters not specially mentioned are measured at 100-277VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.</p> <p>3.Data are typical values obtained from test samples</p> <p>4.The over-temperature protection of the product is provided by the IC.</p> <p>5.All Eaglerise power supply are complied with EMI regulations. Since they are belong to component and will be installed inside system enclosure. When they are integrated into a system, the EMI characteristics of the system must be re-verified again.</p>	

◆ Model list

Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	LX-21-350 LI EXC	350	27-42	59	14.7
2	LX-21-400 LI EXC	400			16.8
3	LX-21-450 LI EXC	450			18.9
4	LX-21-500 LI EXC	500			21
5	LX-21-550 LI EXC	550	27-38.5		21

◆ **Inrush Current**

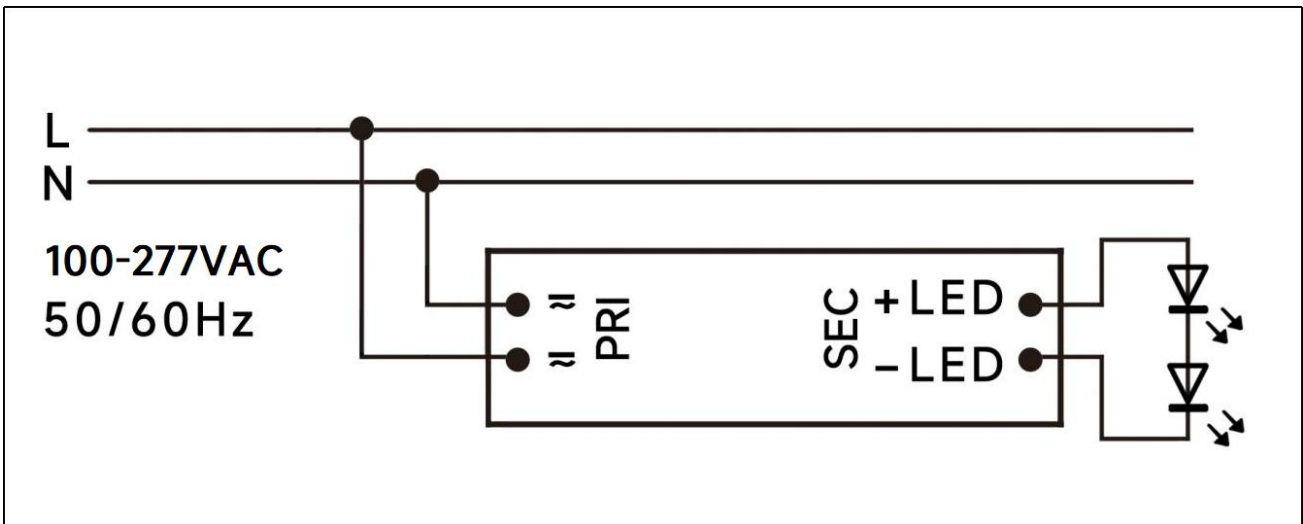
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
24.3A	188μs	17pcs	28pcs	35pcs	25pcs	40pcs	50pcs



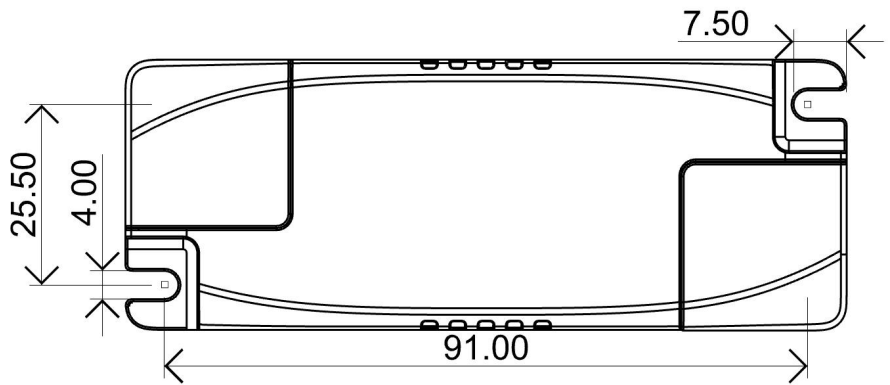
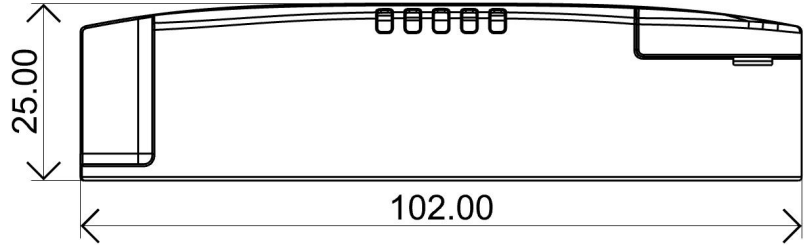
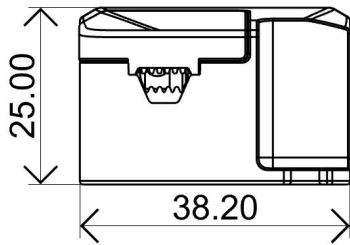
Remarks:

- 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.

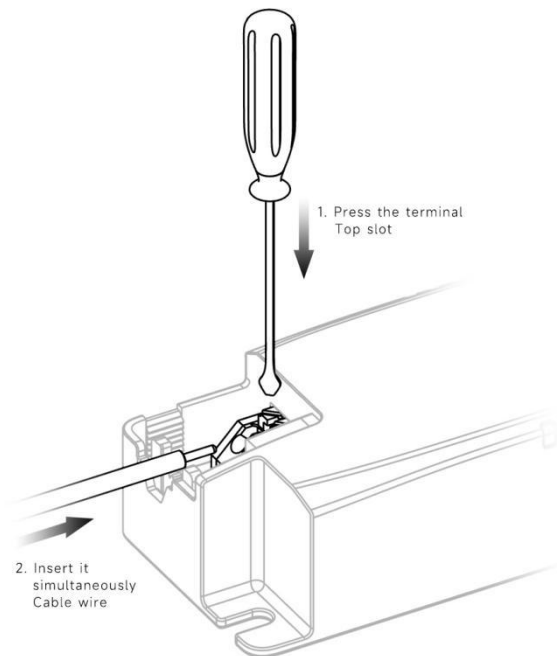
◆ **Wiring diagram**



◆ 2D diagram



Terminal



◆ Wiring & Connections

Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ² (With side caps: 0.75...1.5 mm ²)
	Input wire gauge.	16...20 AWG (With side caps: 16...22 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

◆ Recommended wire

Wire cross-section	Wire type
2*0.5mm ²	H03VVH2-F 2core
2*0.75mm ²	H03VVH2-F 2core
1.5mm ²	CCC 08(RV-90)
16AWG(1.25mm ²)	UL1015

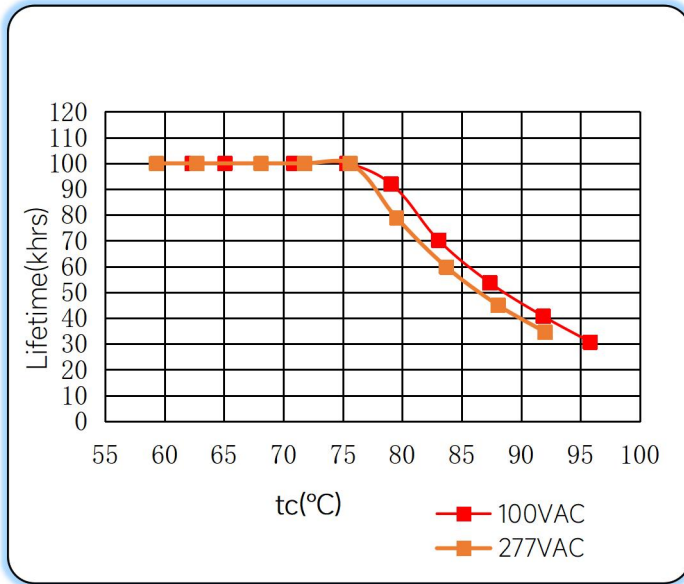
Note:Solid wire is risky to use on an angled terminal.Stranded wire is recommended for this kind of use.

◆ Packaging

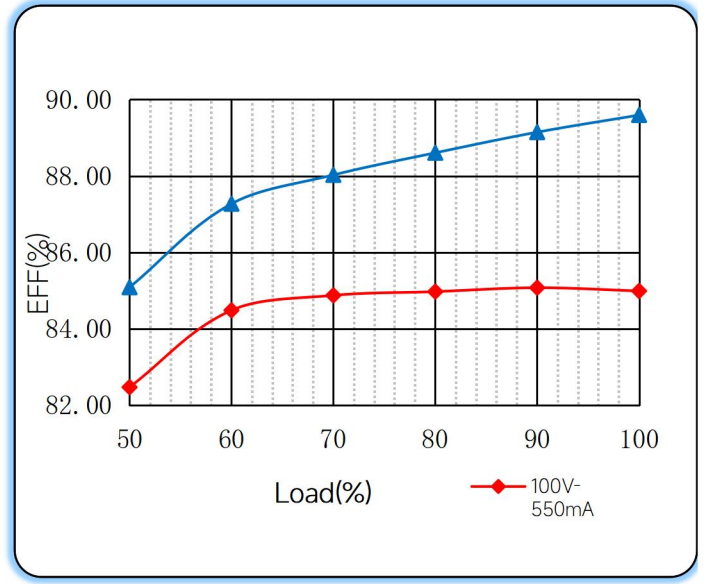
Model	Product Dimensions(mm)	weight/piece(Kg)	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LX-21-XXX LI EXC	102X38.2X25	0.072	380X285X230	156	11.232	12.042

◆ **Curve for LX-21-XXX LI EXC, I_o=550mA**

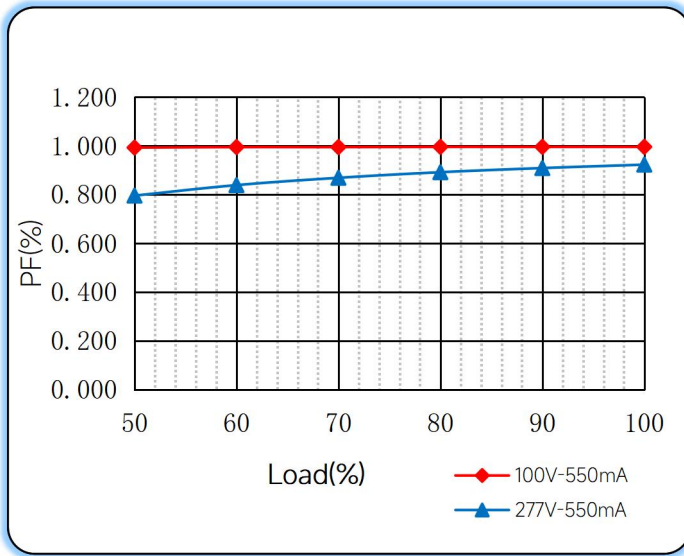
Lifetime vs. Temperature Curve



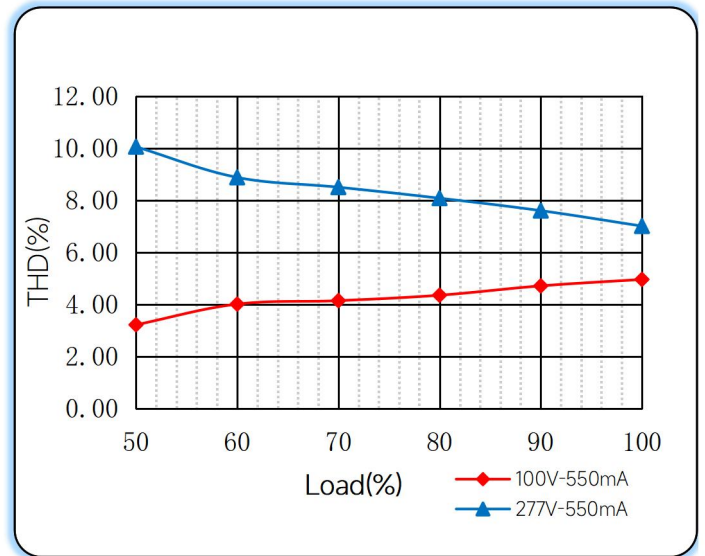
Efficiency vs. Load



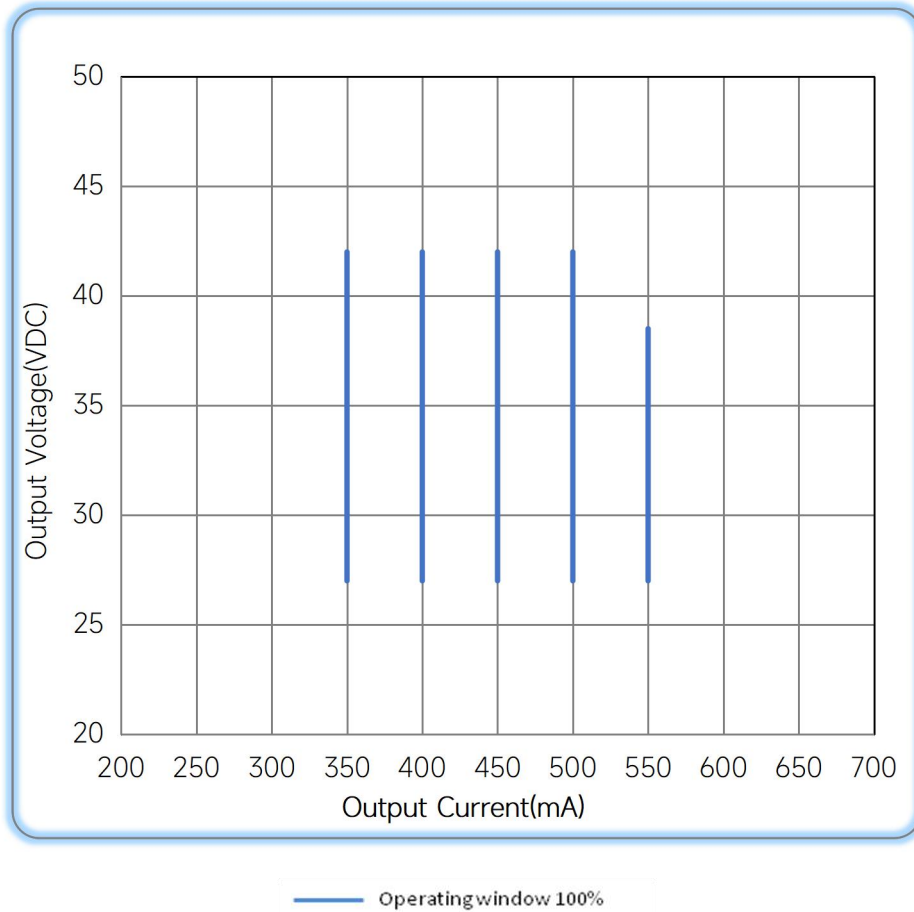
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/11/08
Life time	> 50,000h@Tc=75°C	> 50,000h@Tc=85°C	B	2025/11/26
Noise	≤20dB(A)@10cm	≤25dB(A)@10cm	C	2025/11/28

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

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