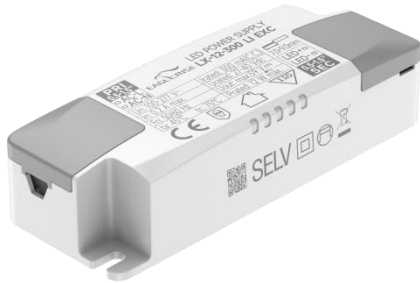


12W Constant Current power supply



■ Approve



Features

- For luminaires of protection Class II, SELV, Independent
- Input Voltage: 100-277VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.9C
- Efficiency: $\geq 78\%$
- 5 years warranty
- IP20

Applications

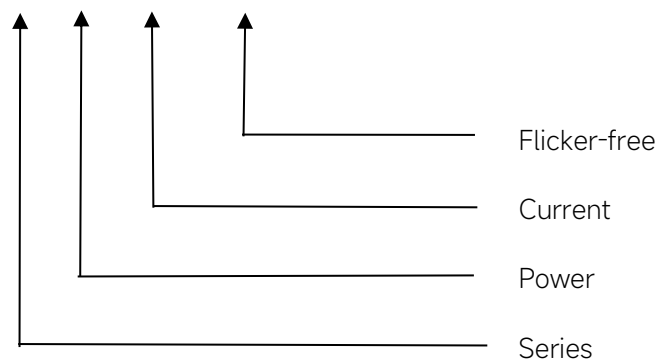
- LED panel, LED down light
LED spot light

◆ Description

LX-12-XXX LI EXC is a 12W constant current LED driver with 250 to 300mA output current. With its 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

LX-12-XXX LI EXC



◆ Specification

Output	Constant Current (mA)	250mA	280mA	300mA
	Voltage Range(VDC)	27-42VDC		27-40VDC
	Unload voltage Max.(VDC)	59V		
	Current Accuracy	±5%		
	Output LF current ripple(≤120Hz)	±3%		
	SVM	≤0.4		
	P _{st}	≤1		
	Efficiency(Typ.)	≥78%		
Input	Rated input voltage	100-277VAC		
	Range of input voltage	90-305VAC		
	Maximum voltage	305VAC@1 h maximum,unit might not operate in this abnormal condition		
	Frequency(Hz)	50/60 Hz		
	Displacement factor	≥0.7		
	Power Factor	0.9C		
	Input Current max (mA)	0.175A	0.195A	0.2A
	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		
Environment	Operating Temperature	-20°C~+45°C		
	Humidity	20%-90%RH		
	T _c	75°C		
	Storage Temperature	-20°C~+75°C		
	Life time	> 50,000h@T _c =75°C		
	Noise	≤20dB(A)@10cm		
Surface	Dimension	92X36X25 (LXWXH)mm		
	material	PC		
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;AS/NZS 61347- 1, AS/NZS 61347-2- 13;AS 61347.2.13;EN62384;		
	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		

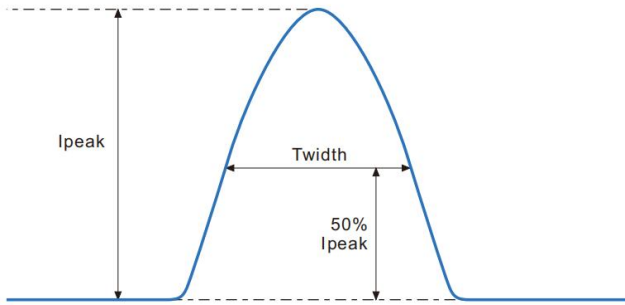
Note	<p>1.All parameters not specially mentioned are measured at 100-277VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor.</p> <p>3.Data are typical values 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-12-250 LI EXC	250	27-42	59	10.5
2	LX-12-280 LI EXC	280			11.8
3	LX-12-300 LI EXC	300	27-40		12

◆ Inrush Current

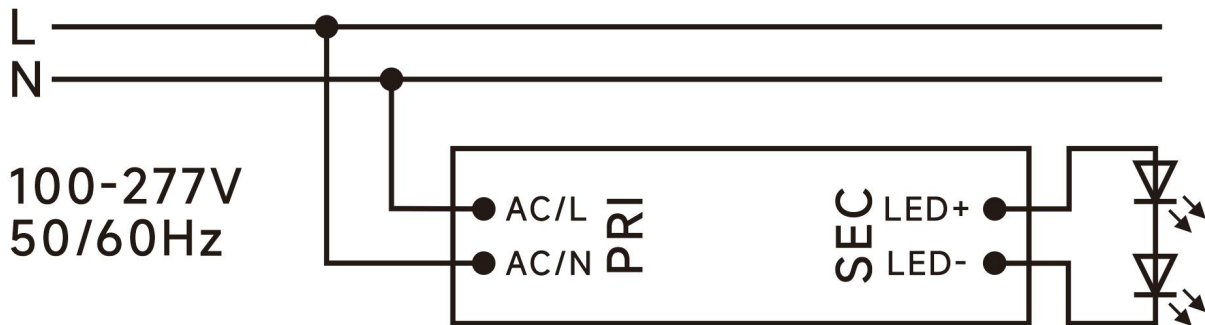
I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
21.9A	140μs	27pcs	43pcs	54pcs	40pcs	64pcs	80pcs



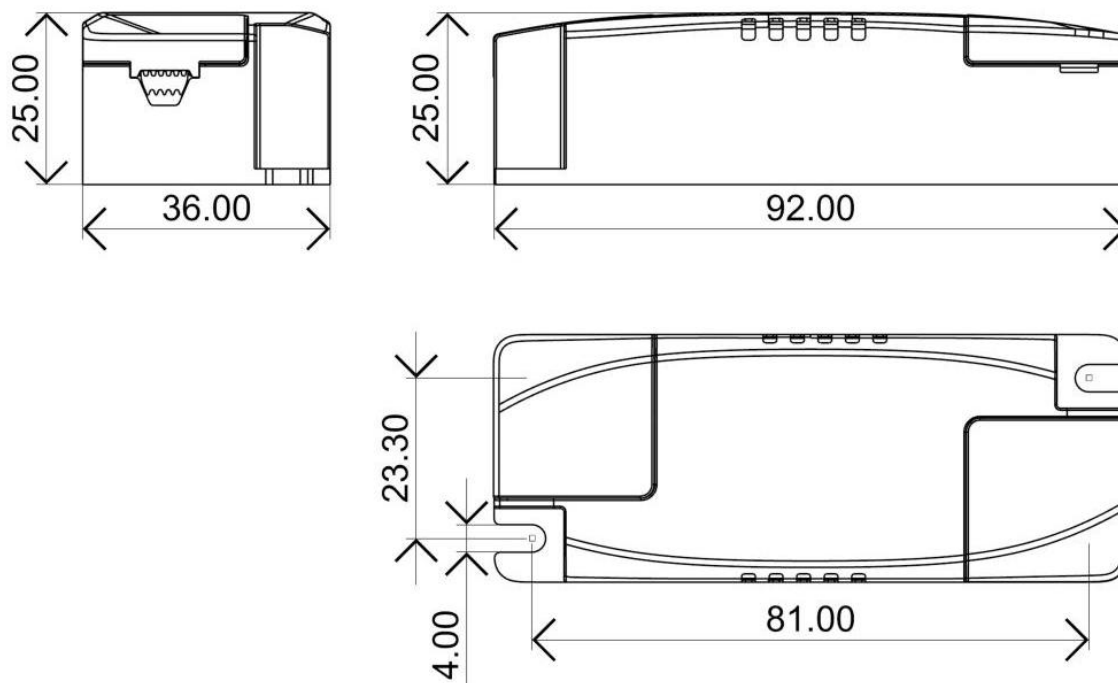
Remarks:

- 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.

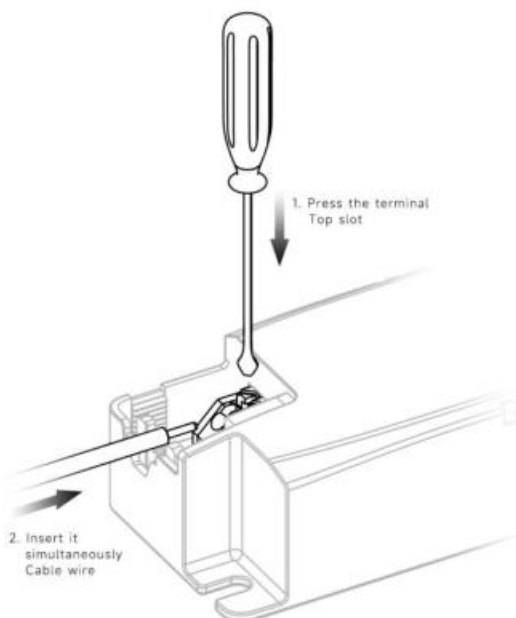
◆ Wiring diagram



◆ 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

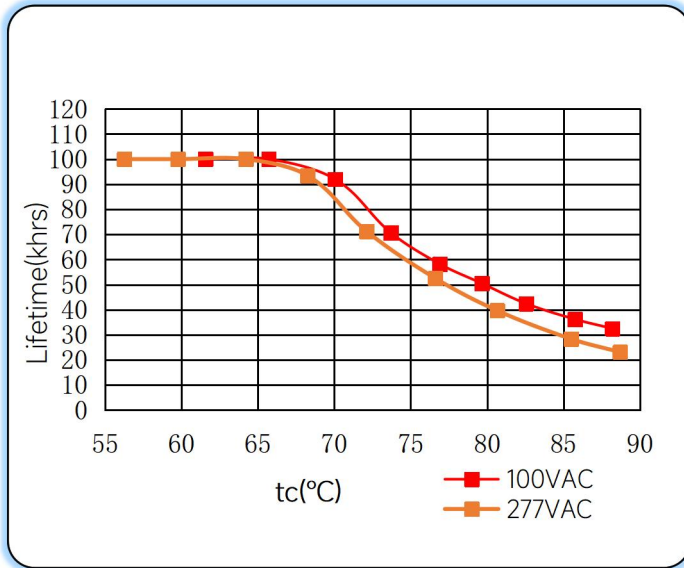
Note:Solid wire is risky to use on an angled terminal.Stranded wire is recommended for this kind of use.

◆ Packaging

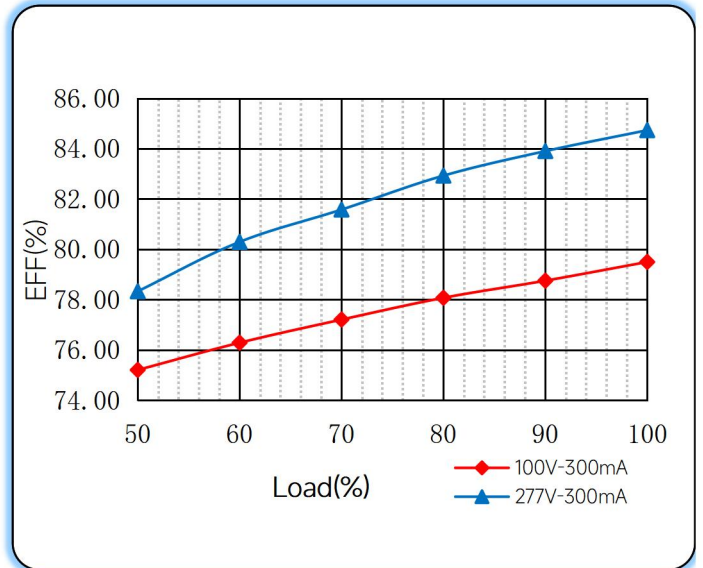
Model	Product Dimensions(mm)	weight/piece(Kg)	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LX-12-XXX LI EXC	92X36X25	0.05	380X285X230	180	9	9.81

◆ **Curve for LX-12-300 LI EXC, I_o=300mA**

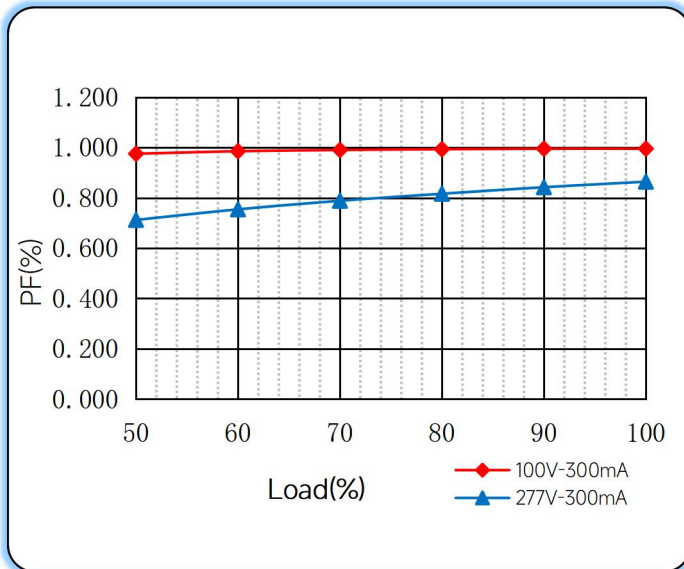
Lifetime vs. Temperature Curve



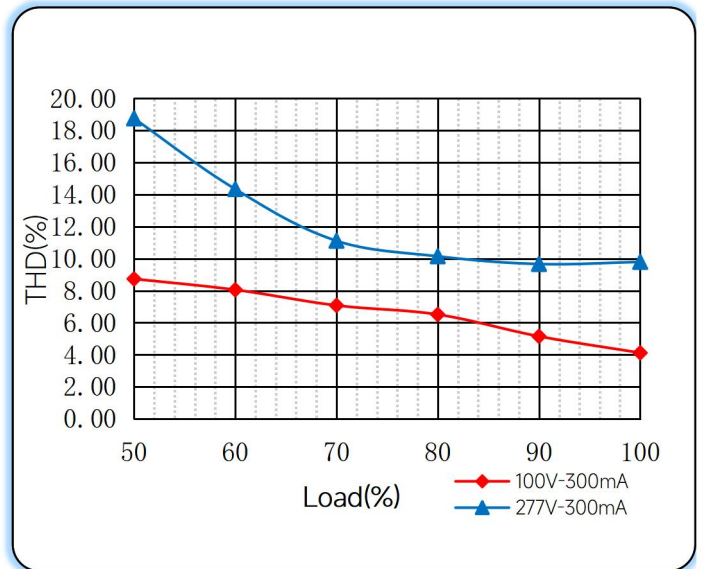
Efficiency vs. Load



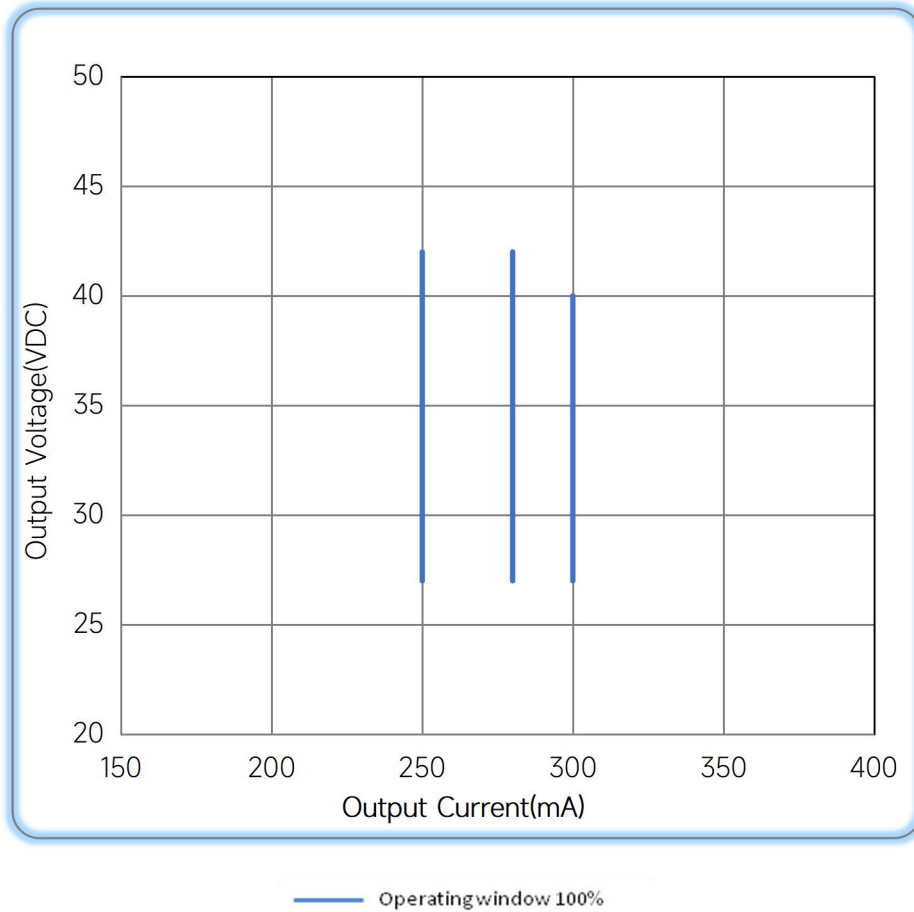
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/11/08
Efficiency(Typ.)	≥79%	≥78%	B	2025/11/05
Power Factor	≥0.9C@full load,100-277VAC	0.9C	C	2026/04/02

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

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

E-mail: sales@eaglerise.com

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

