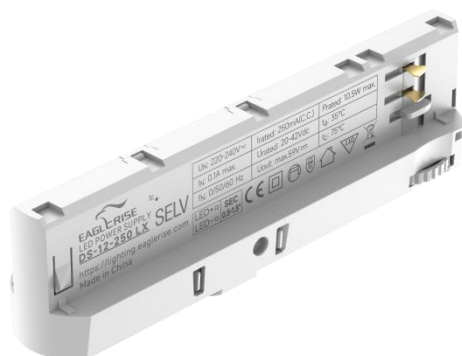


12W Constant Current -FDS power supply



Features

- For luminaires of protection Class II,SELV
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.95
- Efficiency: 86%
- Adjustable Output Current with dip-switch
- 5 years warranty

Applications

- Track Spot light

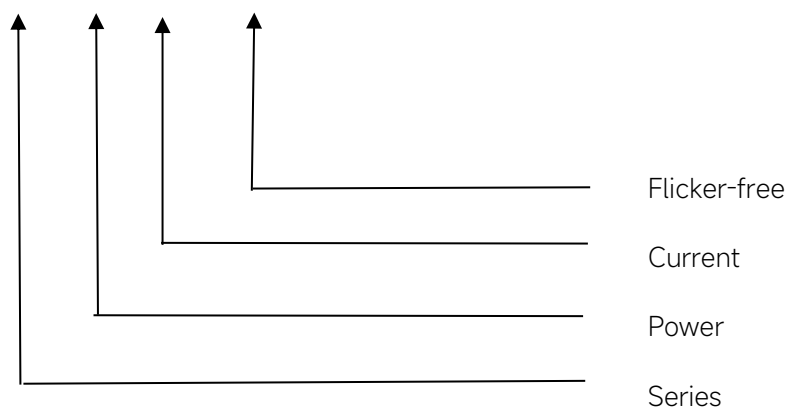
■ Approve



DS-12-XXX LX is a 12W constant current LED driver that operates from 198-264Vac input with 150 to 350mA output current and a forward voltage range from 20 to 42Vdc. The output current is adjustable by DIP Switch. With it's compact dimensions from 162x31.1x42.2mm. It is easy to integrate in track spot light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

DS-12-XXX LX



◆ Specification

	Constant Current	150mA	200mA	250mA	300mA	350mA
Output	Voltage Range(VDC)	20-42VDC				
	Unload voltage Max.	59VDC				
	Current Accuracy	±7%				
	Output HF current ripple(≥1KHz)	±10%				
	Output LF current ripple(≤120Hz)	±5%				
	SVM	≤0.4				
	P _{st}	≤1				
	Efficiency(Typ.)	86%@Full Load,230VAC				
Input	Rated input voltage	220-240V				
	Range of input voltage	198-264VAC				
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition				
	Range input voltage(DC)	176-280VDC				
	Frequency(Hz)	0/50/60 Hz				
	Displacement factor	≥0.9				
	Power Factor	0.95@230VAC, full load				
	Input Current max	0.1A MAX. @Full Load,230VAC				
	Start-up time	< 0.5S				
	No Load Power	≤0.5W				
	THD (Typ.)	<10% @Full Load,230VAC				
Protection	Over Load Protection	103-130%				
		YES/Auto Resume				
	Over Voltage Protection	> 59VDC				
		YES/Auto Resume				
	Short circuit Protection	YES/Auto Resume				
capability	Surge capability (L-N)	1KV				
	Surge capability (L/N-Ground)	2KV				
Environment	Operating Temperature	-20°C~+35°C				
	Humidity	10%-90%RH				
	T _c	75°C				
	Storage Temperature	-40°C...+85°C				
	Life time	> 50000h@T _c =70°C				
	Noise	≤25dB(A)@20cm				
Surface	Dimension	162x31.1x42.2mm(LXWXH)mm				
	material	PC				
Standards	Safety	IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13;EN62384				

	EMC	EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN61000-4-5
	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.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered. 4.EL compatible with IEC 61347-2-13 Annex J, compatible with EN 60598-2-22 emergency lighting fixtures, compatible with EN 50172 central battery system applications. 5.Switch and dimmer are not recommended to connect between this product output and luminaries. 6.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.	

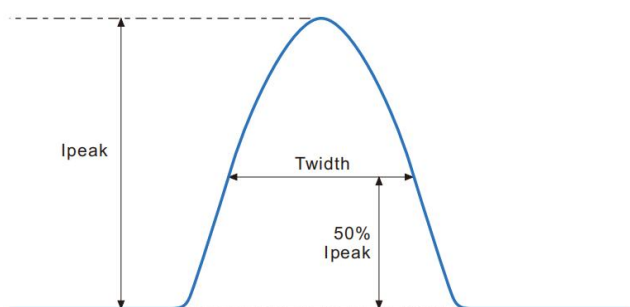
◆ Model list

Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	DS-12-150 LX	150	20-42	59	6.3
2	DS-12-200 LX	200			8.4
3	DS-12-250 LX	250			10.5
4	DS-12-300 LX	300			12.6
5	DS-12-350 LX	350			14.7

* Factory default

◆ Inrush Current

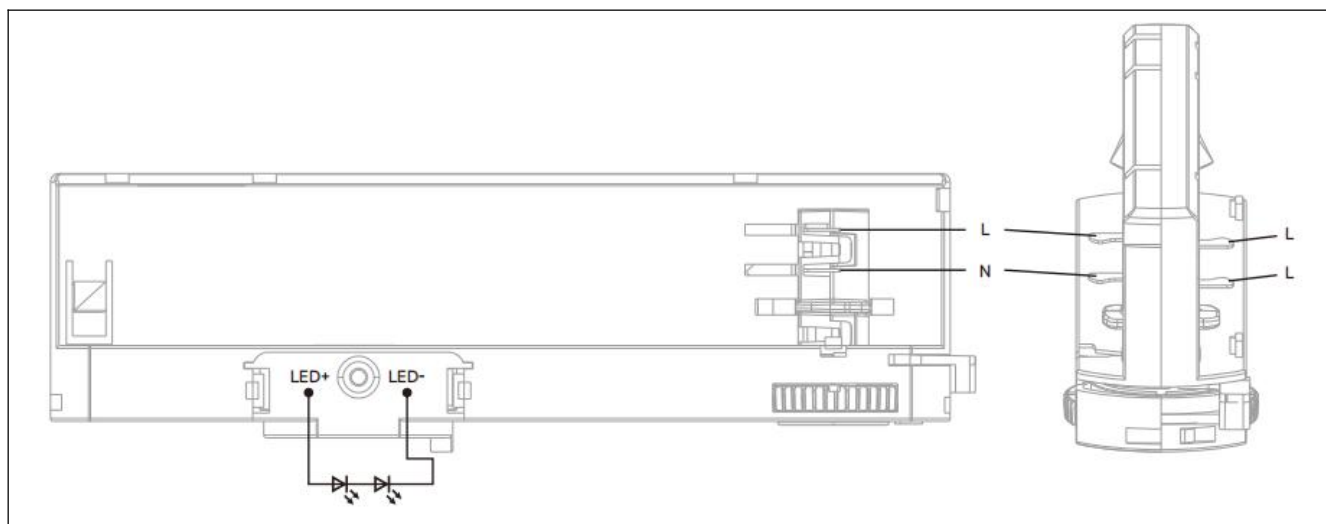
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
13.3A	124μs	51pcs	81pcs	102pcs	80pcs	128pcs	160pcs



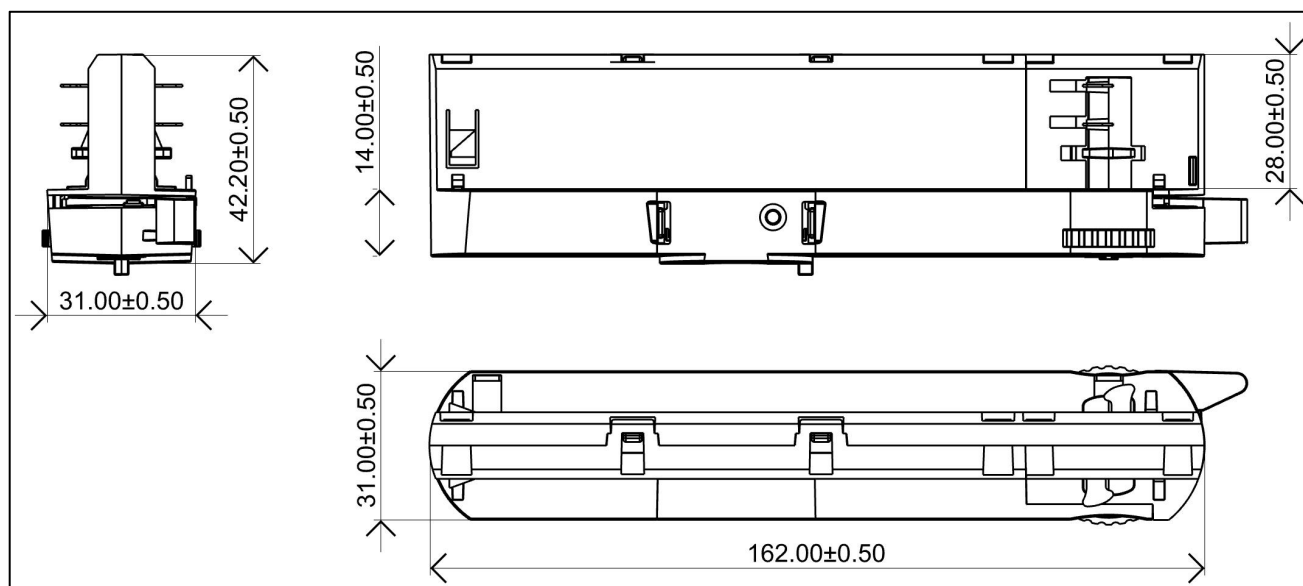
Remarks:

- 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



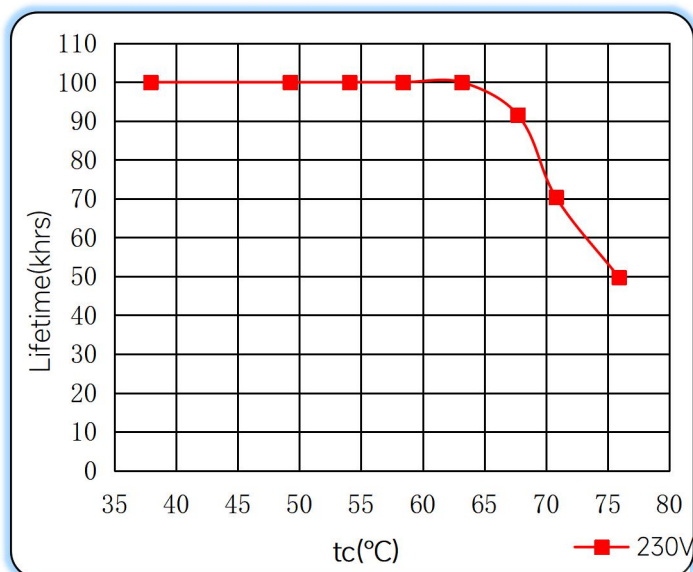
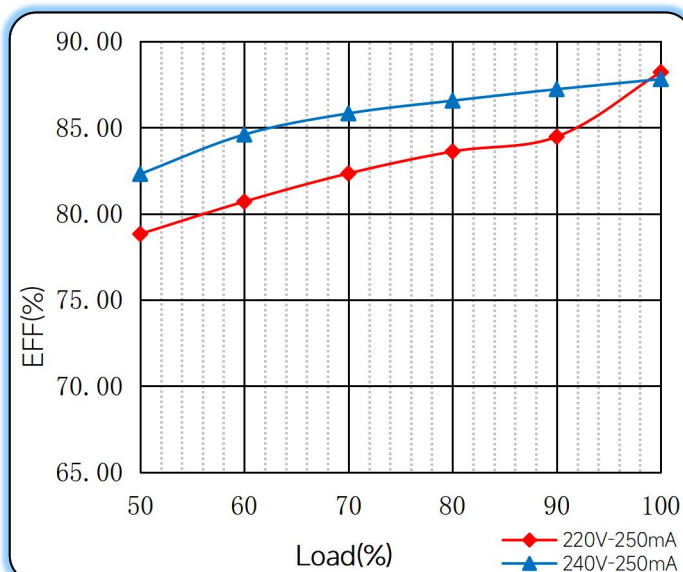
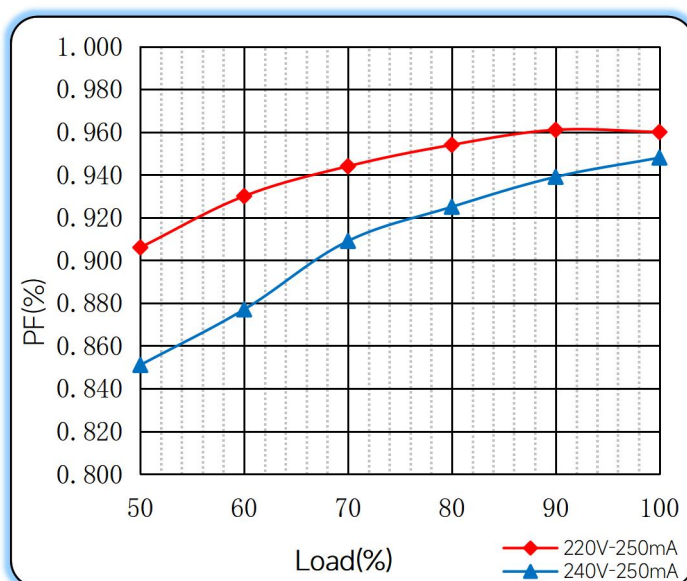
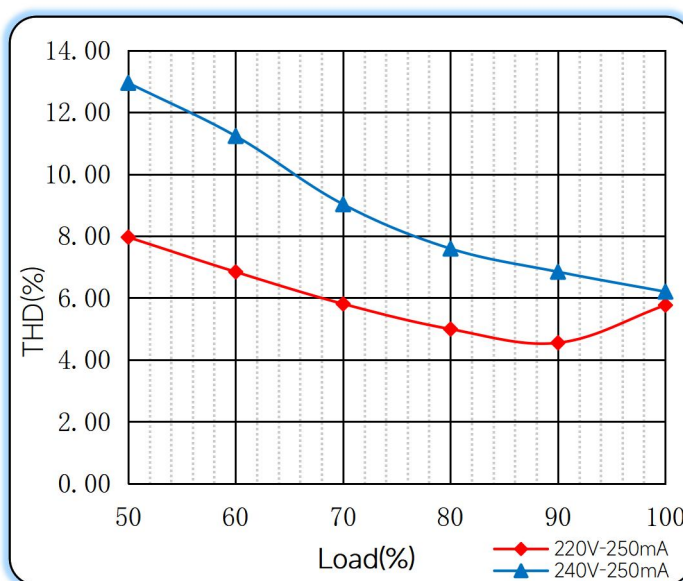
◆ Wiring & Connections

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

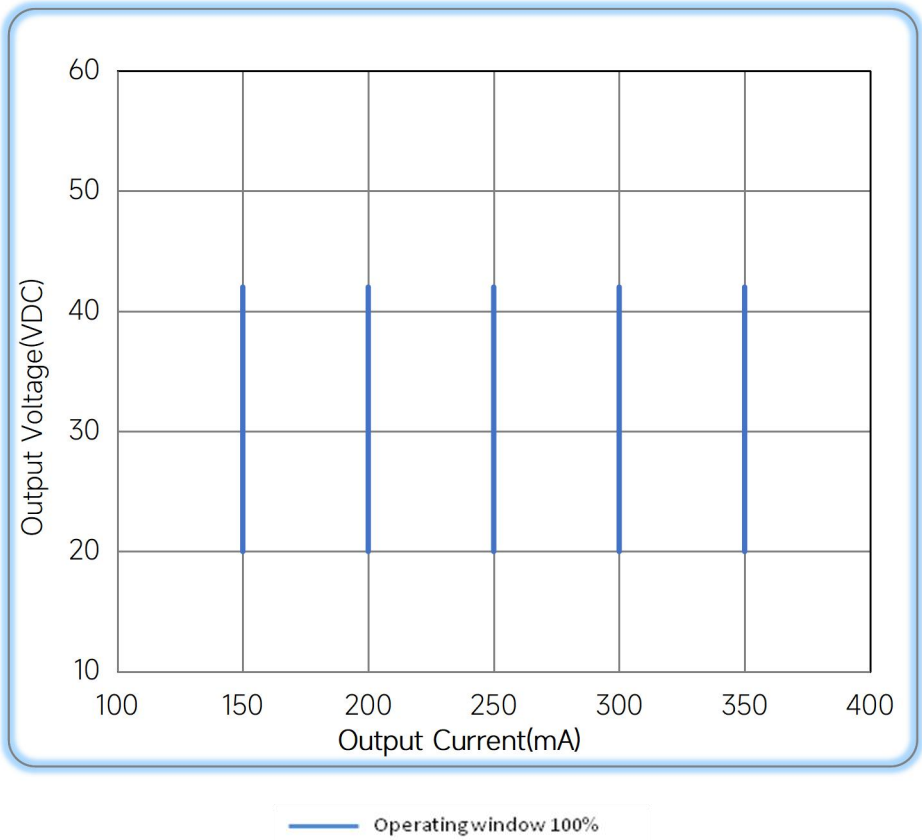
◆ Matching brand

Manufacturer	Type	System	Intrack casing colour
EUTRAC	25-XX-XX/26-XX-XX	3P	Black, white, gray
IVELA	7501/7511/7512	3P	Black, white, gray
LUMISYS UNIPRO	T32/T33/34	3P	Black, white, gray
LUMISYS UNIPRO	T32F/T33F/34F	3P	Black, white, gray
NORDIC ALUMINIUM	GLOBAL Trac Pro XTS 4XXX	3P	Black, white, gray
NORDIC ALUMINIUM	GLOBAL Trac Pro XTSF 4XXX	3P	Black, white, gray
ERCO	783..	3P	Black, white, gray
SIDE	25101	3P	Black, white, gray
PHILIPS	RCS350 3C	3P	Black, white, gray
Stucchi	One track	3P	Black, white, gray
Powergear	PRO-0610	3P	Black, white, gray
Unipro	T32W	3P	Black, white, gray
ZUMTOBEL	280 174	3P	Black, white, gray

◆ Curve for DS-12-XXX LX, $I_o=250\text{mA}$

Lifetime vs. Temperature Curve

Efficiency vs. Load

Power Factor Characteristics

THD vs. Load


◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/06/05

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

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EAGLERISE



Manual