

42W Constant Current in-track driver



■ Approve

CE CB SELV

Features

- For luminaires of protection Class II, SELV
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OTP
- Power Factor: 0.95
- Efficiency: 89%
- Adjustable Output Current with dip-switch
- Track Adapter Invisible
- 5 years warranty

Applications

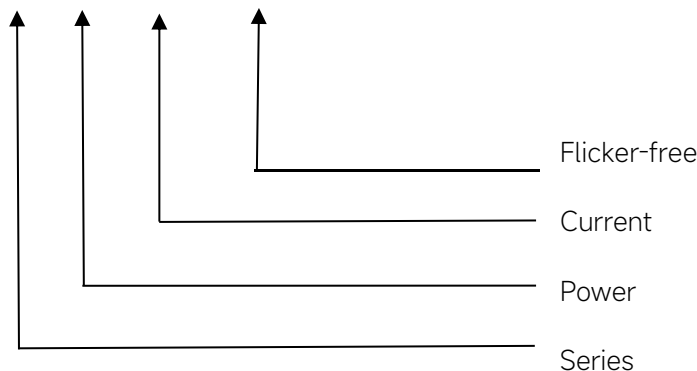
- Track Spot light

◆ Description

FDS-42-1050 LD EXC S is a 42W constant current LED driver that operates from 198-264Vac input with 700 to 1050mA output current and a forward voltage range from 30 to 40Vdc. The output current is adjustable by DIP Switch. With its compact dimensions from 133.2x31.1x42.3mm. 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

FDS-42-1050 LD EXC S



◆ Specification

Output	Constant Current	700mA	...	1050mA
	Voltage Range(VDC)	30-40VDC		
	Unload voltage Max.	59VDC		
	Current Accuracy	±5%		
	Output HF current ripple(≥1KHz)	±5%		
	Output LF current ripple(≤120Hz)	±3%		
	SVM	≤0.4		
	P _{st}	≤1		
	Efficiency(Typ.)	89% @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		
	Frequency(Hz)	50/60 Hz		
	Displacement factor	≥0.9		
	Power Factor	≥0.95 @Full Load,230VAC		
	Input Current max	0.23A MAX. @Full Load,230VAC		
	Start-up time	< 0.5S		
	Standby Power	≤0.5W		
	THD (Typ.)	<10% @Full Load,230VAC		
Protection	Over Load Protection	103-130%		
		YES/Auto Resume		
	Short circuit Protection	YES/Auto Resume		
capability	Surge capability (L-N)	1KV		
	Surge capability (L/N-Ground)	NA		
Environment	Operating Temperature	-25°C~+35°C		
	Humidity	10%-90%RH		
	T _c	75°C		
	Storage Temperature	-25°C...+75°C		
	Life time	> 50000h@T _c =75°C		
	Noise	≤25dB(A)@20cm		
Surface	Dimension	133.2 x31.1x42.3mm(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.Switch and dimmer are not recommended to connect between this product output and luminaries. 4.The over-temperature protection of the product is provided by the IC. 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.enclosure. When they are integrated into a system, the EMI characteristics of the system must be re-verified again.
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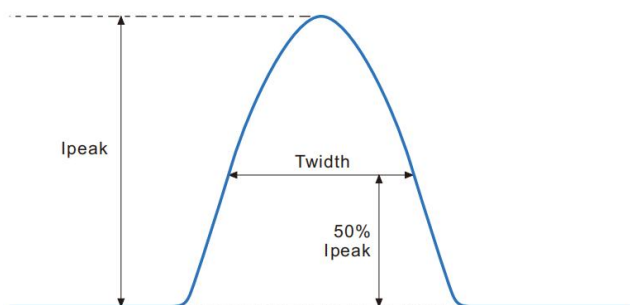
◆ Parameter

Number	Output			Switch position			
	Current (mA)	Voltage (VDC)	Voltage No load(VDC)	1	2	3	Power (W)
1	700mA	30-42VDC	59V	--	--	--	28
2	750mA			--	--	ON	30
3	800mA			--	ON	--	32
4	850mA			--	ON	ON	34
5	900mA			ON	--	--	36
6	950mA			ON	--	ON	38
7	1000mA			ON	ON	--	40
*8	1050mA			ON	ON	ON	42

* Factory default

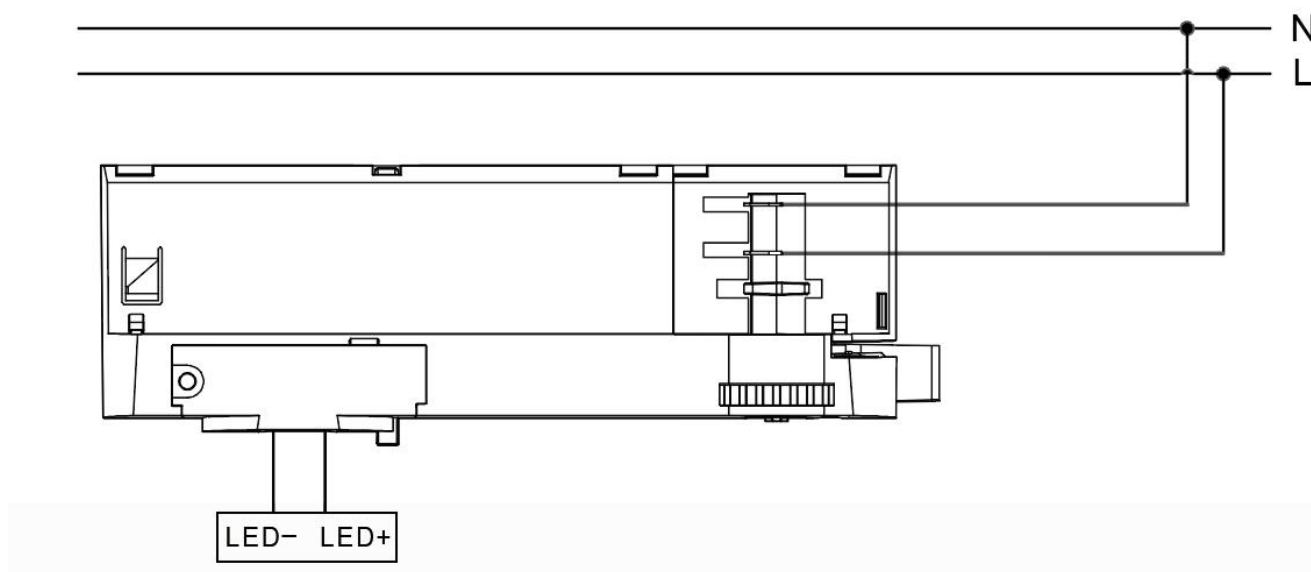
◆ Inrush Current

I _{peak}	T _{width}	B10	B16	B20	C10	C16	C20
9.5A	2.6μs	32pcs	52pcs	65pcs	52pcs	84pcs	105pcs

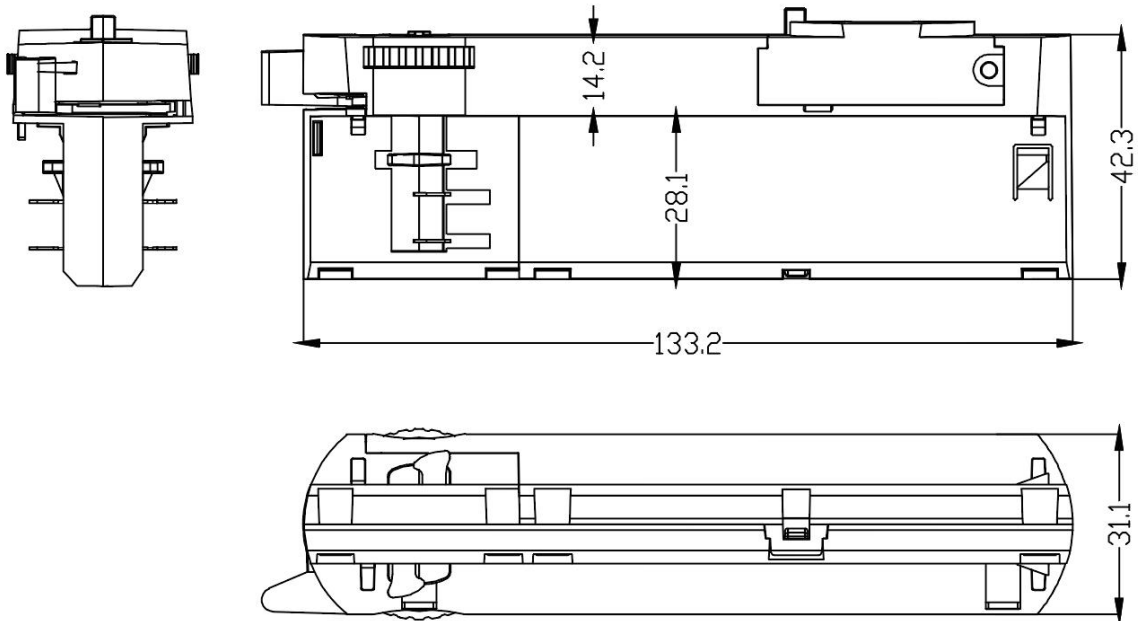

Remarks:

- 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

◆ Packaging

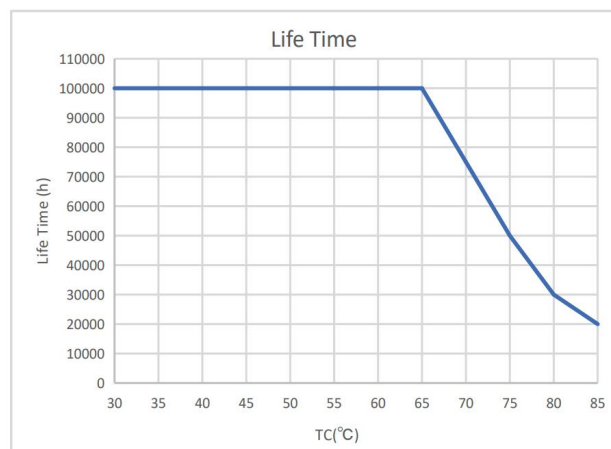
Mode	Product. Dimensions(mm)	weight/piece.	Outer carton dimension(mm)	Quantity/ carton	Net weight/ carton(Kg)	Gross weight/ carton(Kg)
FDS-42-1050 LD EXC S	133.2*31.1*42.3mm	0.102	395*295*125mm	64	6.4	7.03

◆ Matching brand

Serial number	Serial number	Serial number	Serial number
1	Global	XTSC&XTSCF6	3P
2	Stucchi	9000XX Series	3P
3	Unipro	T32B	3P
4	Eutrac	2510x	3P
5	Lvela	7501	3P
6	ERCO	ZUMTOBEL	3P

◆ Curve for FDS-42-1050 LD EXC S, $I_o=1050\text{mA}$

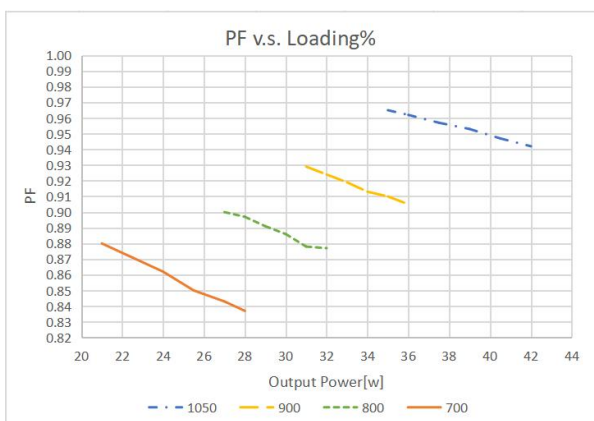
Lifetime vs. Temperature Curve



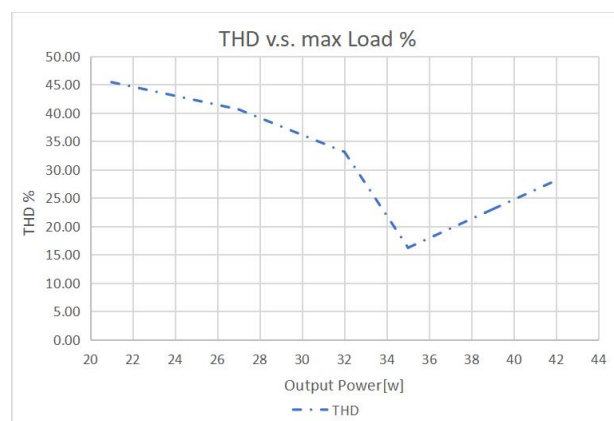
Efficiency vs. Load



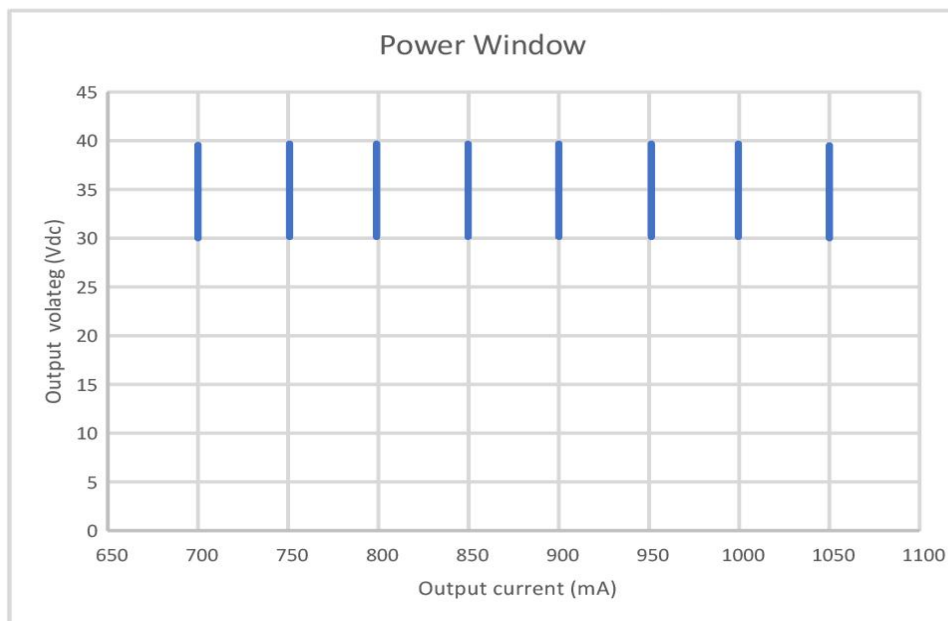
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/02/20

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>



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Manual