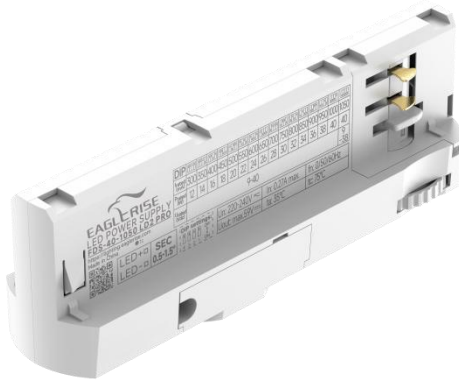


40W Constant Current -FDS power supply



Features

- For luminaires of protection Class II,SELV, Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.95
- Efficiency: 89.5%
- Adjustable Output Current with dip-switch
- 5 years warranty

Applications

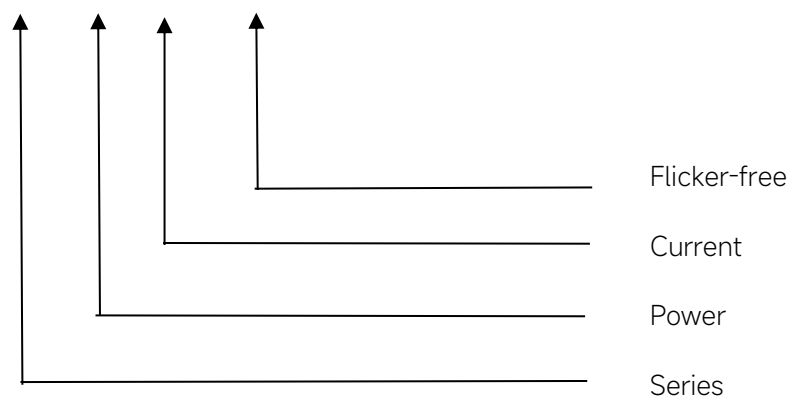
- Track light

◆ Description

FDS-40-1050 LD2 PRO is a 40W constant current LED driver with 300 to 1050mA output current and a forward voltage range from 9 to 40Vdc. The output current is adjustable by DIP Switch. With its compact dimensions from 133x31x44.5mm. 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-40-1050 LD2 PRO



◆ Specification

Output	Constant Current	300-400mA	...mA	1000mA	1050mA
	Voltage Range(VDC)	9-40VDC			9-38VDC
	Unload voltage Max.	59VDC			
	Current Accuracy	±7%	±5%		
	Output LF current ripple(≤120Hz)	±3%			
	SVM	≤0.4@Full Load			
	Pst	≤1@Full Load			
	Efficiency(Typ.)	89.5%@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 of input voltage(VDC)	198-280VDC			
	Frequency(Hz)	0/50/60 Hz			
	Displacement factor	≥0.9@full load, 230Vac			
	Power Factor	0.95@full load, 230Vac			
	Input Current max	0.27A max			
	Start-up time(AC mode)	< 0.5S			
	No Load Power	≤0.5W			
	THD (Typ.)	<10%@full load, 230Vac			
Protection	Over Load Protection	110-150%			
		YES/Auto Resume			
	Over Voltage Protection	> 59VDC			
		YES/Auto Resume			
capability	Short circuit Protection	YES/Auto Resume			
	Surge capability (L-N)	2KV			
Environment	Operating Temperature	-20℃~+35℃			
	Humidity	20%-90%RH			
	Tc	75℃			
	Storage Temperature	-40℃...+85℃			
	Life time	> 50000h@Tc=75℃			
	Noise	≤25dB(A)@20cm			
Surface	Dimension	133x31x44.5mm(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			
	ErP	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 consider 4.Switch and dimmer are not recommended to connect between this product output and luminaries. 5.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. 6.The over-temperature protection of the product is provided by the IC.
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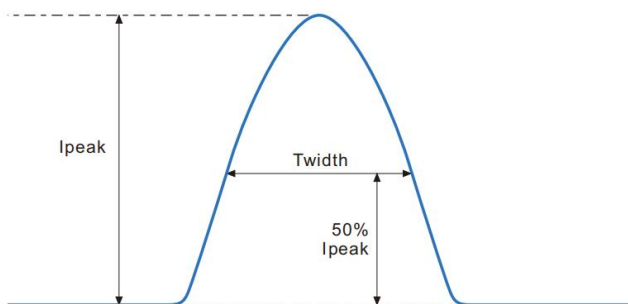
◆ Parameter

Number	Output				Switch position			
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)	1	2	3	4
1	300mA	9-40V	59VDC	12W	--	--	--	--
2	350mA			14W	ON	--	--	--
3	400mA			16W	--	ON	--	--
4	450mA			18W	ON	ON	--	--
5	500mA			20W	--	--	ON	--
6	550mA			22W	ON	--	ON	--
7	600mA			24W	--	ON	ON	--
8	650mA			26W	ON	ON	ON	--
9	700mA			28W	--	--	--	ON
10	750mA			30W	ON	--	--	ON
11	800mA			32W	--	ON	--	ON
12	850mA			34W	ON	ON	--	ON
13	900mA			36W	--	--	ON	ON
14	950mA			38W	ON	--	ON	ON
15	1000mA			40W	--	ON	ON	ON
*16	1050mA	9-38V		40W	ON	ON	ON	ON

* Factory default

◆ Inrush Current

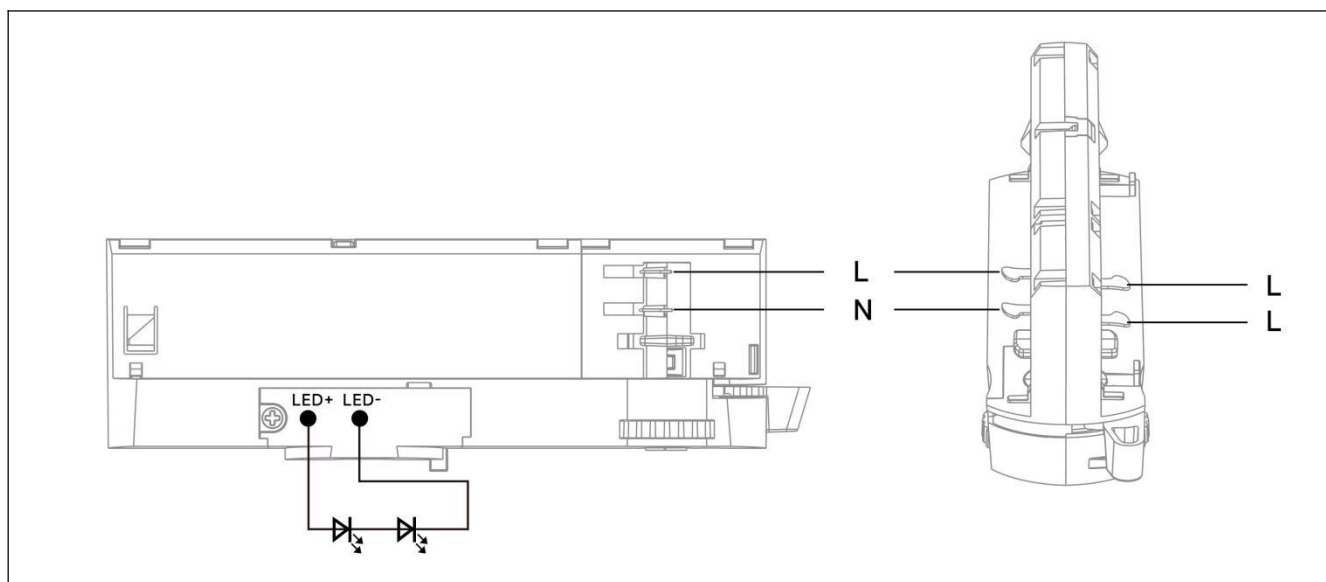
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
20.3A	136μs	29pcs	47pcs	59pcs	29pcs	47pcs	59pcs



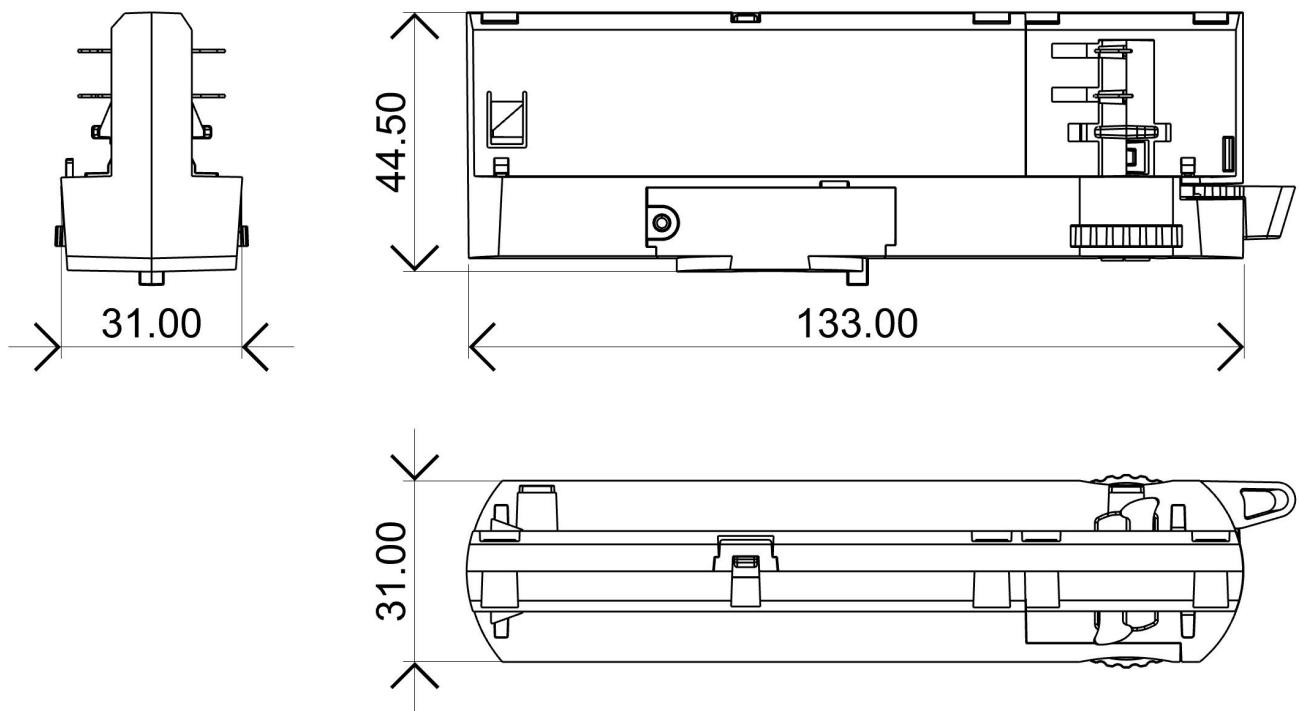
Remarks:

- 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

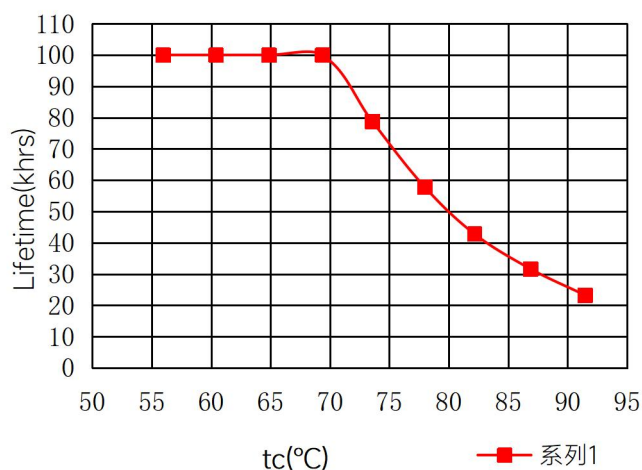
Model	Product Dimensions(mm)	weight/piece(Kg)	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
FDS-40-1050 LD2 PRO	133x31x44.5	0.09	295x255x200	40	3.6	4.01

◆ Matching brand

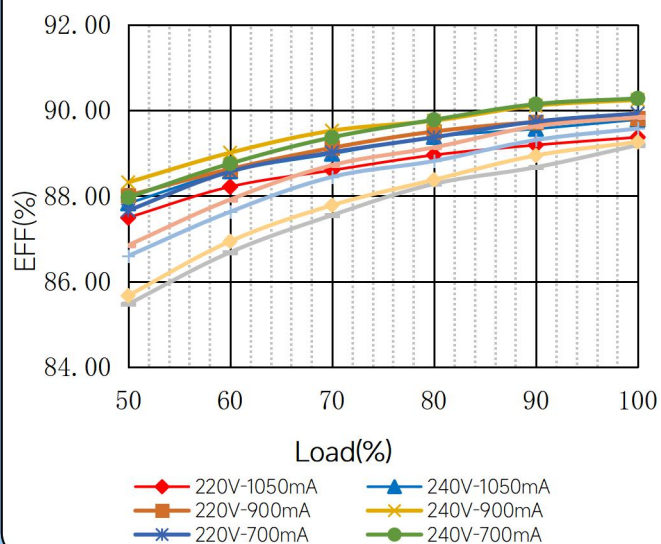
Manufacturer	Type	System	Intrack casing colour
EUTRAC	25-XX-XX/26-XX-XX	3P	Black, white, gray
IVELA	7501/7511/7512	3P	Black, white, gray
LUMISYS UNIPRO	T32/T33/34	3P	Black, white, gray
LUMISYS UNIPRO	T32F/T33F/34F	3P	Black, white, gray
NORDIC ALUMINIUM	GLOBAL Trac Pro XTS 4XXX	3P	Black, white, gray
NORDIC 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 FDS-40-1050 LD2 PRO, $I_o=700/900/1050\text{mA}$

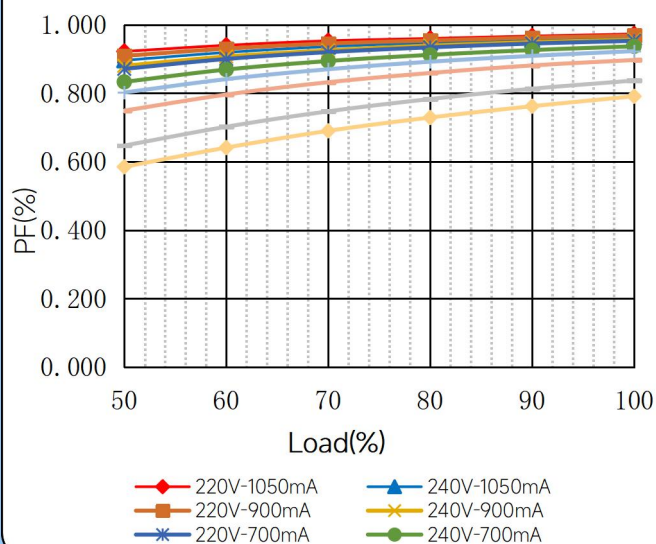
Lifetime vs. Temperature Curve



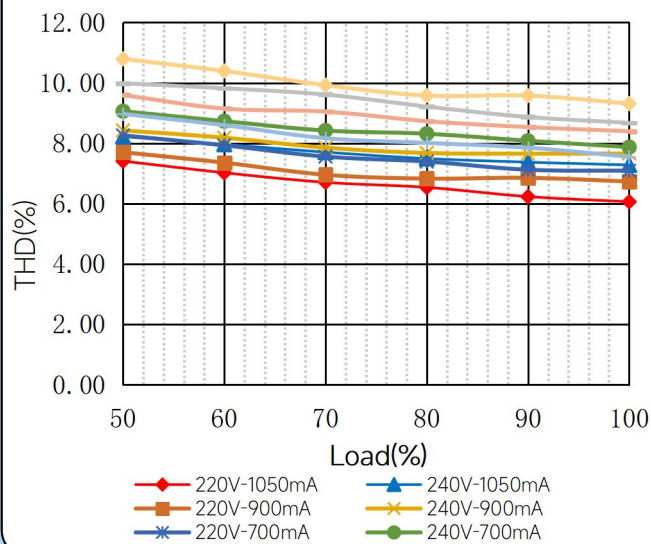
Efficiency vs. Load



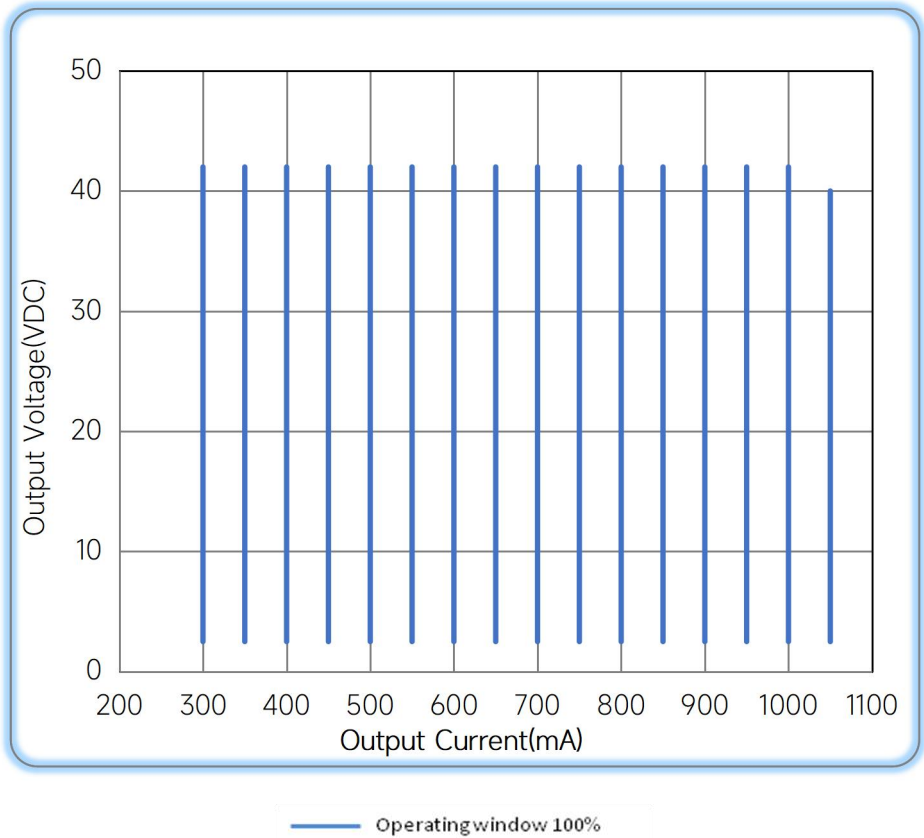
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/12/10
Over Load Protection	103-135%	110-150%	B	2025/11/04
Wiring diagram		Update	C	2025/11/24

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

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