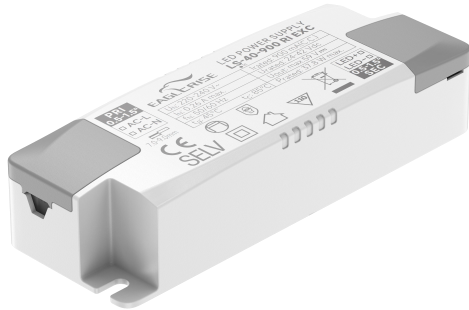


# 40W Constant Current power supply



■ Approve



## Features

- Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor: 0.95
- Efficiency: 89%
- 5 years warranty
- IP20

## Applications

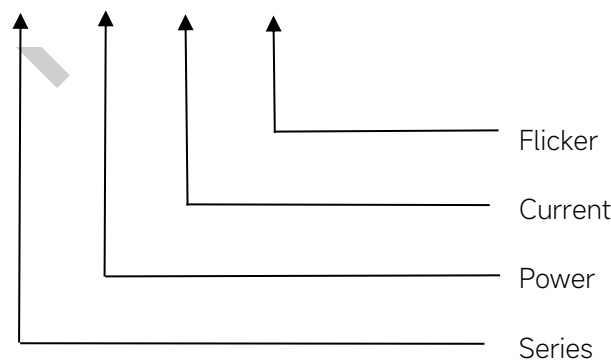
- LED panel, LED down light
- LED spot light

## ◆ Description

LS-40-XXX RI EXC is a 40W constant current LED driver with 700 to 1050mA output current. With its compact dimensions from 116 x 41 x 26mm. It is easy to integrate in LED Panel, spot and down lights product. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

## ◆ Model code

### LS-40-XXX RI EXC



## ◆ Specification

Output	Constant Current (mA)	700	750	800	850	900	950	1000	1050	
	Voltage Range(VDC)	24-42						24-40	24-38.5	
	Unload voltage Max.	59VDC								
	Current Accuracy	±5%								
	Output HF current ripple(≥1KHz)	±5%								
	Output LF current ripple(≤120Hz)	±50%								
	Efficiency(Typ.)	89%@Full load,230V								
Input	Rated input voltage	220-240VAC								
	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@Full load,230V	0.95							≥0.95	
	Input Current max (mA)	200	220	230	250	260	270	270	290	
	Start-up time	< 0.5S								
	No Load Power	≤0.5W								
	Standby Power	≤0.5W								
	THD (Typ.)	<15%								
Protection	Over Load Protection	103-120%								
		YES/Auto Resume								
	Over Voltage Protection	59VDC								
		YES/Auto Resume								
Short circuit Protection	YES/Auto Resume									
Environment	Operating Temperature	-20°C~+45°C								
	Humidity	20%-90%RH								
	Tc	85°C								
	Storage Temperature	-25°C~+60°C								
	Life time	> 50000h@Tc=75°C								
	Ripple&Noise	≤20dB(A)@10cm								
Surface	Dimension	116X41X26(LXWXH)mm								
	material	PP								
Standards	Safety	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								

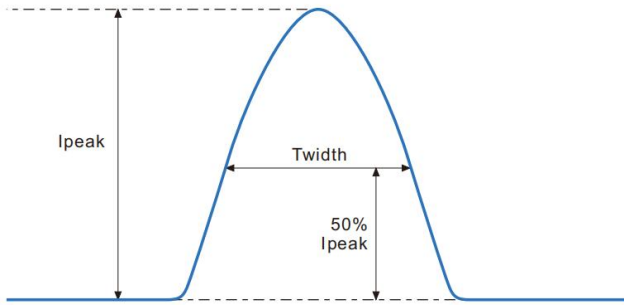
Note	<p>1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple &amp; Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF &amp; 47 uF parallel capacitor.</p> <p>3.Data are typical values obtained from test samples</p> <p>4.Switch and dimmer are not recommended to connect between this product output and luminaries.</p>
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### ◆ Model list

Number	Model number	Output			
		Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
1	*LS-40-700 RI EXC	700	24-42	59	29.4
2	LS-40-750 RI EXC	750			31.5
3	LS-40-800 RI EXC	800			33.6
4	LS-40-850 RI EXC	850			35.7
5	*LS-40-900 RI EXC	900			37.8
6	LS-40-950 RI EXC	950			39.9
7	LS-40-1000 RI EXC	1000	24-40		40
8	*LS-40-1050 RI EXC	1050	24-38.5		40.4

### ◆ Inrush Current

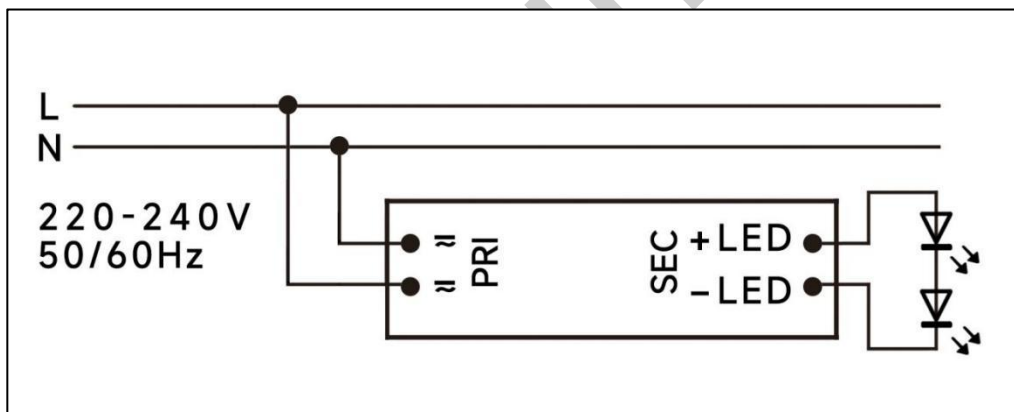
$I_{peak}$	Twidth	B10	B16	B20	C10	C16	C20
6.08A	36 $\mu$ s	27pcs	44pcs	55pcs	27pcs	44pcs	55pcs

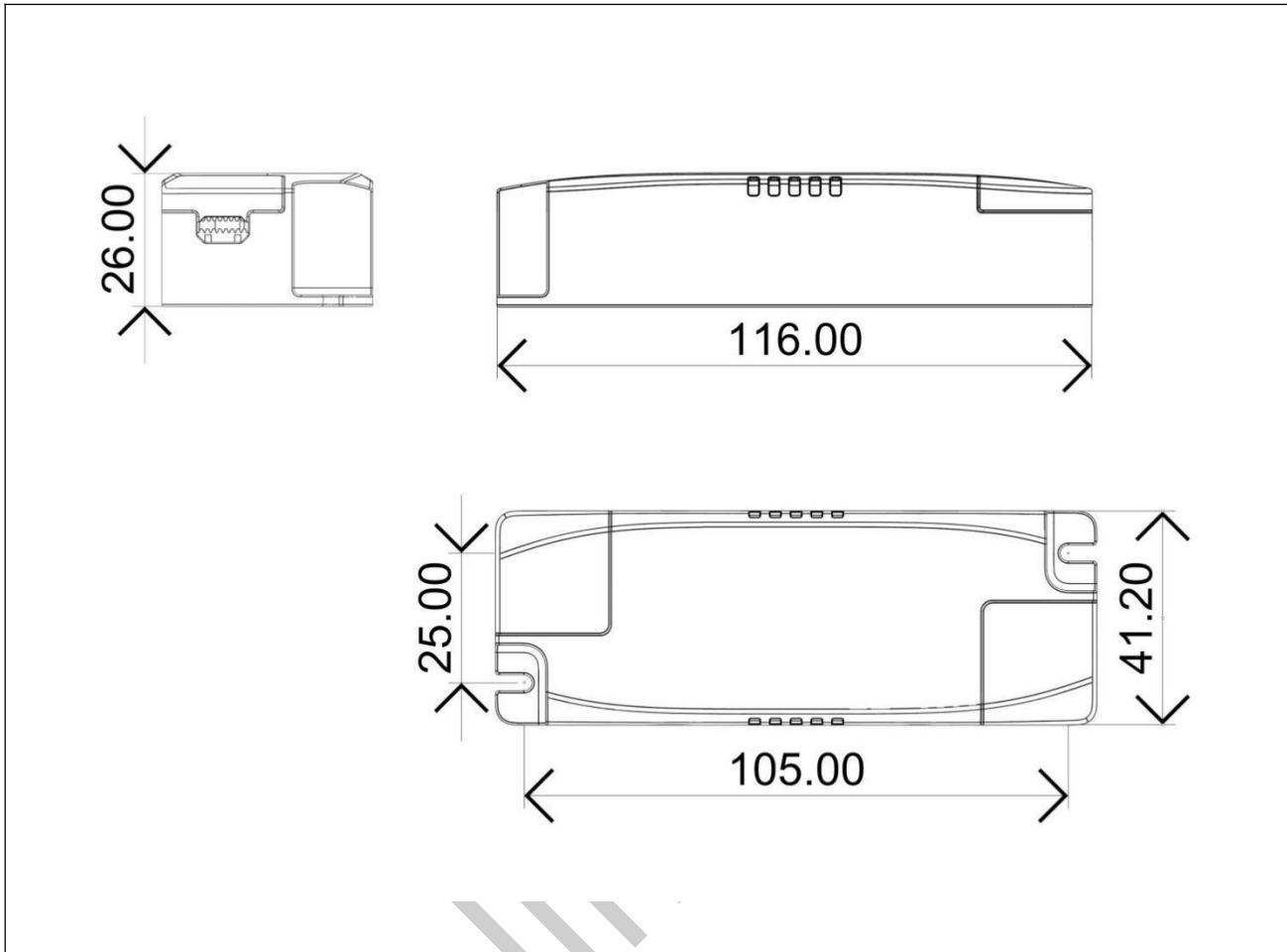


Remarks:

- 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



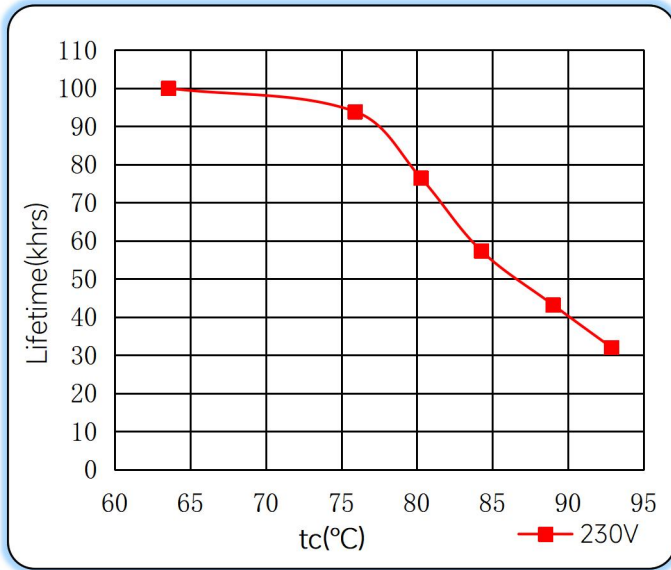
**◆ 2D diagram**

**◆ Wiring & Connections**

	Specification item	Value (Unit )
Input	Input wire cross-section	0.5...1.5 mm <sup>2</sup>
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm <sup>2</sup>
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

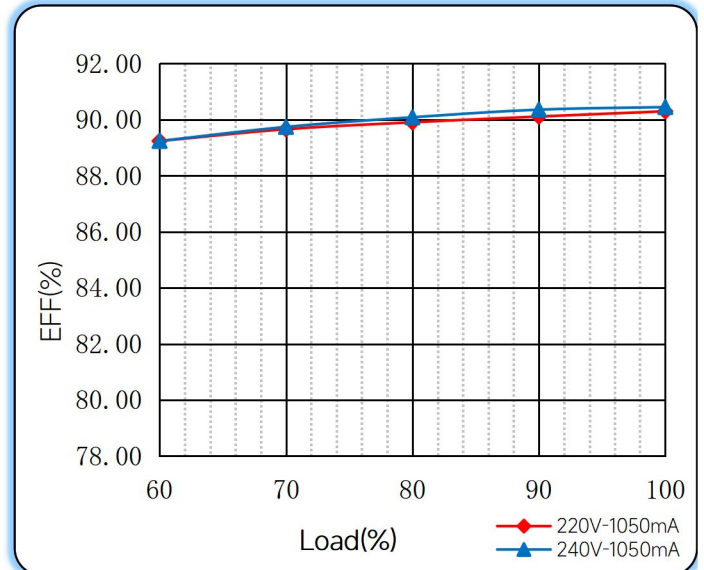
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ **Curve for LS-40-1050 RI EXC, I<sub>o</sub>=1050mA**

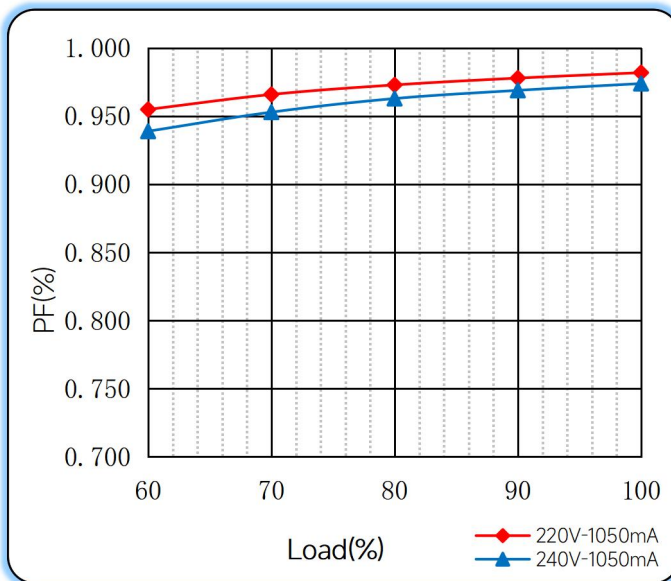
Lifetime vs. Temperature Curve



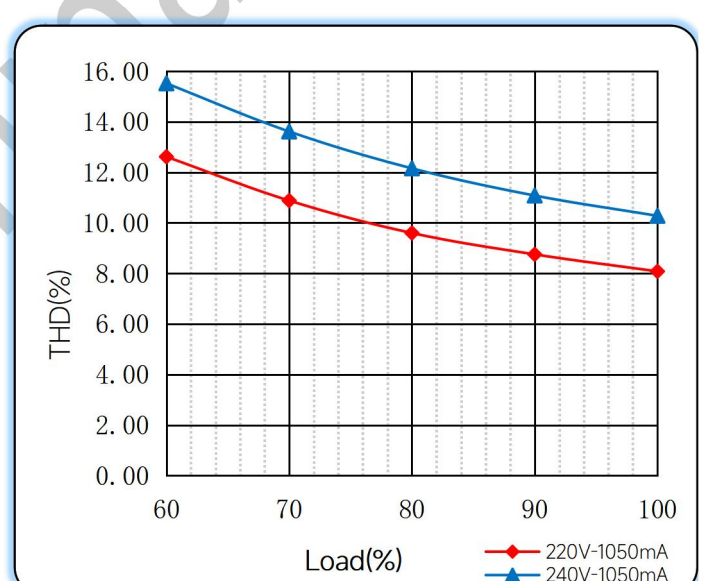
Efficiency vs. Load



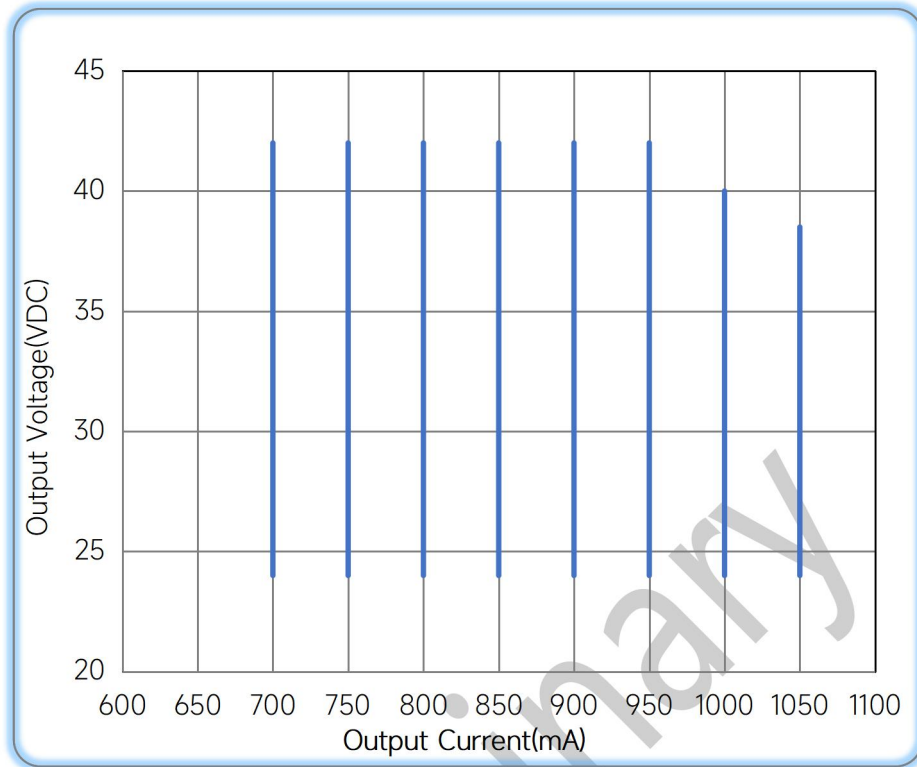
Power Factor Characteristics



THD vs. Load



◆ **Operating window**



— Operating window 100%

◆ **Revision Updates**

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2023/08/23
THD (Typ.)	< 12%	< 15%	B	2023/11/02

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

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Manual