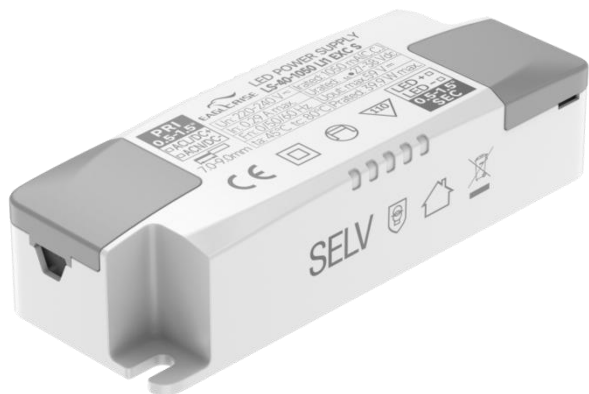


40W Constant Current power supply



■ Approve

CECB   SELV

Features

- For luminaires of protection Class II, SELV, independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: 0.95
- Efficiency: 90%
- 5 years warranty
- IP20

Applications

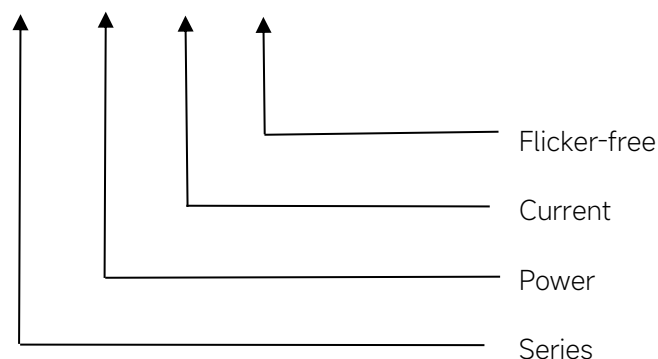
- LED panel, LED down light

◆ Description

LS-40-XXX LI1 EXC S is a 40W constant current LED driver with 600 to 1050mA output current. With its compact dimensions from 102 x 38.2 x 25mm 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 LI1 EXC S



◆ Specification

Output	Constant Current (mA)	600	650	700	750	800	850	900	950	1000	1050
	Voltage Range(VDC)	27-42								27-40	27-38
	Unload voltage Max.	59VDC									
	Current Accuracy	±5%									
	Output HF current ripple(≥1KHz)	±3%									
	Output LF current ripple(≤120Hz)	±3%									
	SVM	≤0.4									
	Pst	≤1									
	Efficiency(Typ.)	89%@230V full load							90%@230V full load		
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)	176-280VDC									
	Frequency(Hz)	0/50/60 Hz									
	Displacement factor	≥0.9									
	Power Factor(Typ.230VAC)	0.95@230V full load									
	Input Current max (mA)	170	190	200	220	230	250	260	270	270	290
	Start-up time	< 0.5S									
	No Load Power	≤0.5W									
	THD (Typ.)	600-850mA<15%, 900-1050mA<10%									
Protection	Over Load Protection	103-145%									
		YES/Auto Resume									
	Over Voltage Protection	59VDC									
		YES/Auto Resume									
capability	Short circuit Protection	YES/Auto Resume									
	Surge capability (L-N)	1KV									
Environment	Surge capability (L/N-Ground)	NA									
	Operating Temperature	-20℃~+45℃									
	Humidity	20%-90%RH									
	Tc	80℃									
	Storage Temperature	-25℃~+60℃									
	Life time	> 50000h@Tc=75℃									
Surface	Noise	≤25dB(A)@10cm									
	Dimension	102X38.2X25(LXWXH)mm									
Standards	material	PC									
	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;AS/NZS 61347- 1, AS/NZS 61347-2- 13;AS 61347.2.13;EN62384;									

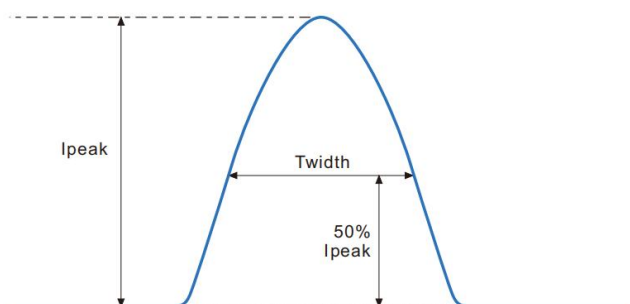
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN55015, EN61000-3-2, EN61000-3-3, EN61547,EN 62493;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547
	ErP	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	1.All parameters not specially mentioned are measured at 230VAC input , 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 DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered. 5.The over-temperature protection of the product is provided by the IC. 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	LS-40-600 LI1 EXC S	600	27-42	59	25.2
2	LS-40-650 LI1 EXC S	650			27.3
3	LS-40-700 LI1 EXC S	700			29.4
4	LS-40-750 LI1 EXC S	750			31.5
5	LS-40-800 LI1 EXC S	800			33.6
6	LS-40-850 LI1 EXC S	850			35.7
7	LS-40-900 LI1 EXC S	900			37.8
8	LS-40-950 LI1 EXC S	950			39.9
9	LS-40-1000 LI1 EXC S	1000	27-40		40
10	LS-40-1050 LI1 EXC S	1050	27-38		39.9

◆ Inrush Current

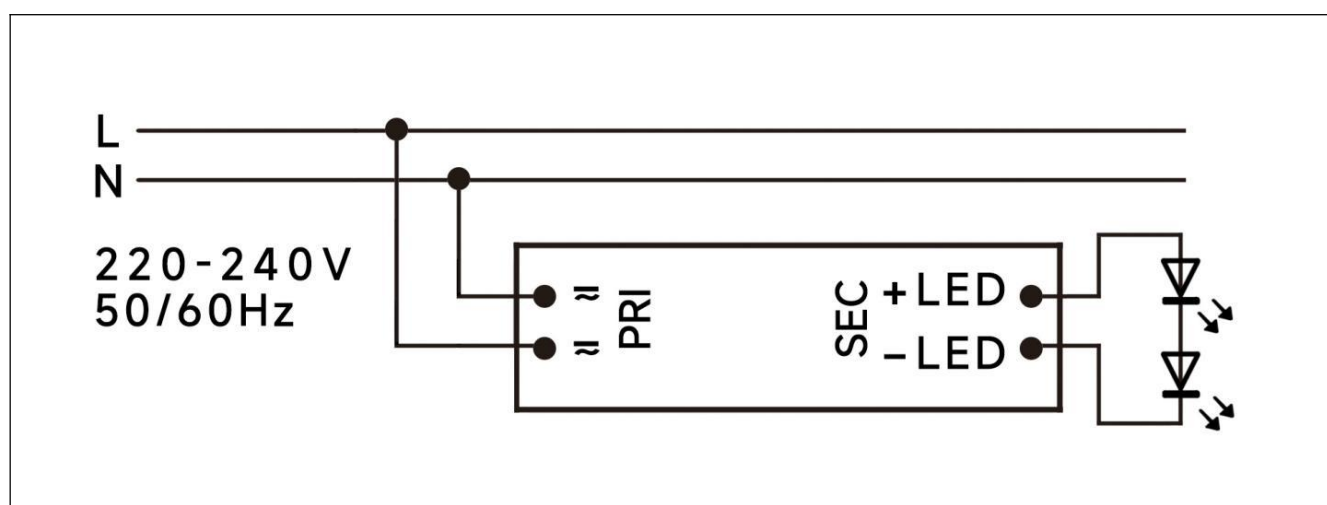
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
29.8A	134μs	20pcs	33pcs	41pcs	27pcs	44pcs	55pcs



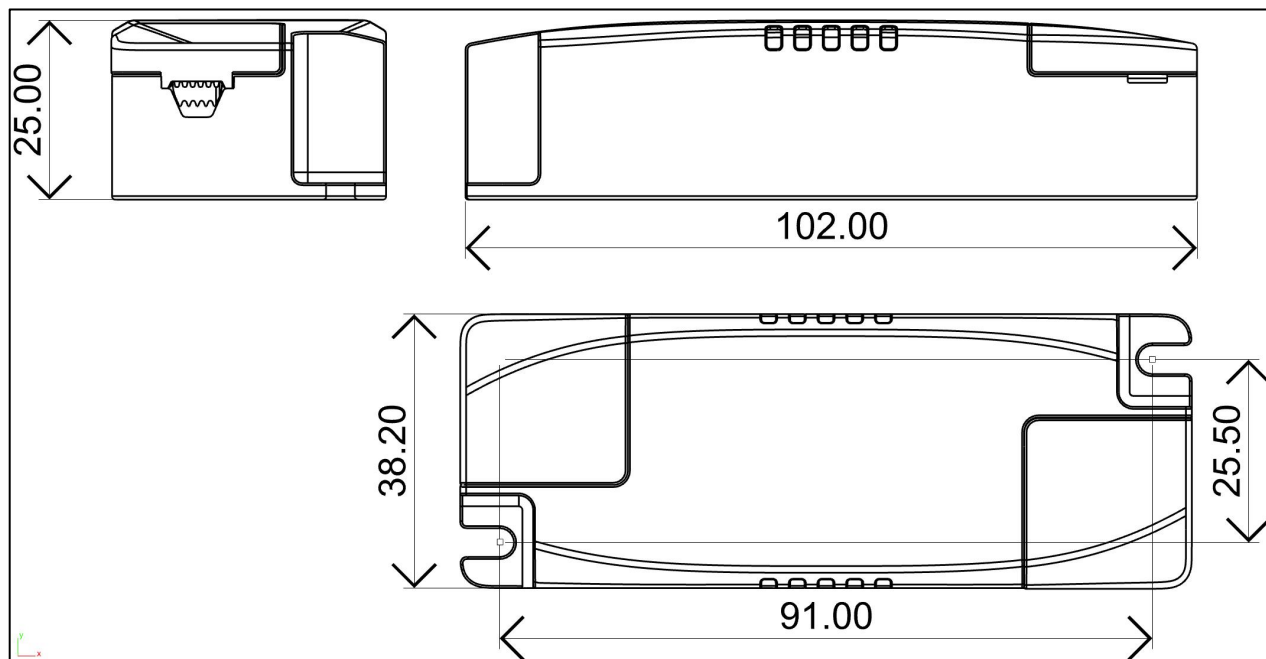
Remarks:

- 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.

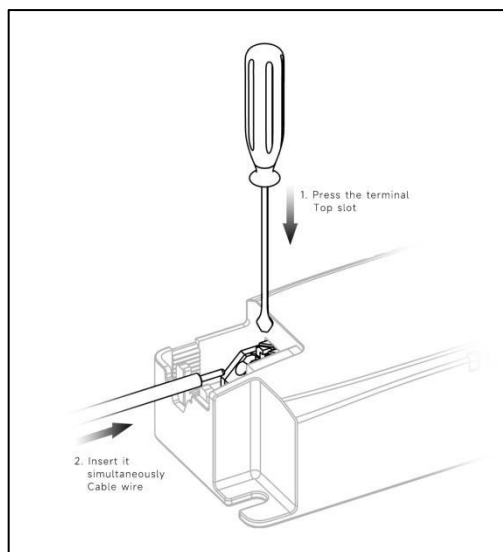
◆ Wiring diagram



◆ 2D diagram



Terminal



◆ Wiring & Connections

Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 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

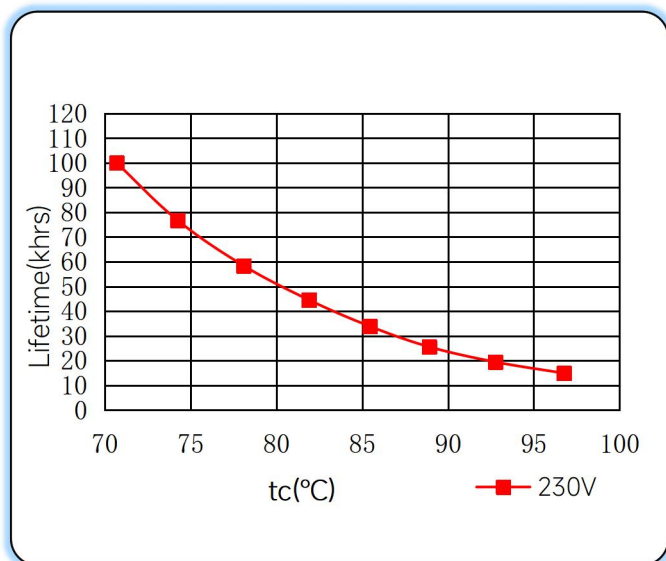
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Packaging

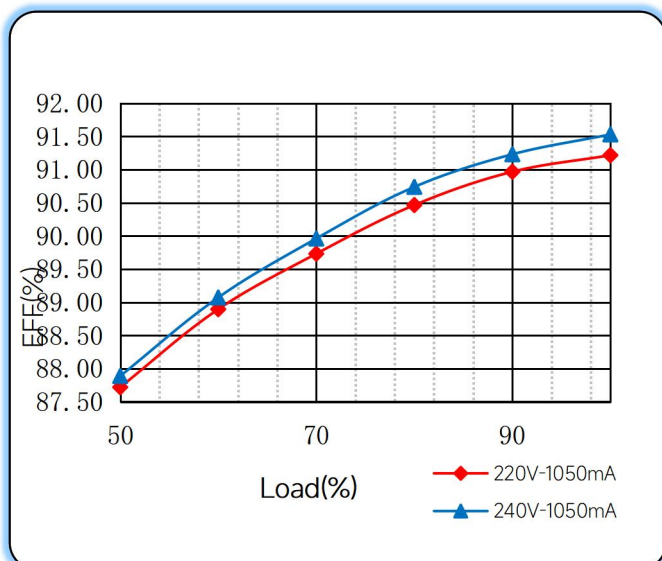
Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-40-XXX LI1 EXC S	102X38.2X25mm	0.07	370X275X215mm	150	10.5	11.66

◆ Curve for LS-40-1050 LI1 EXC S, $I_o=1050\text{mA}$

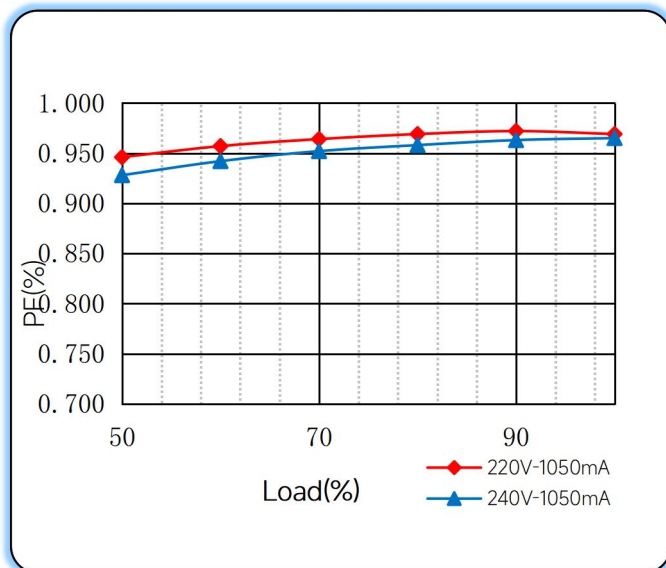
Lifetime vs. Temperature Curve



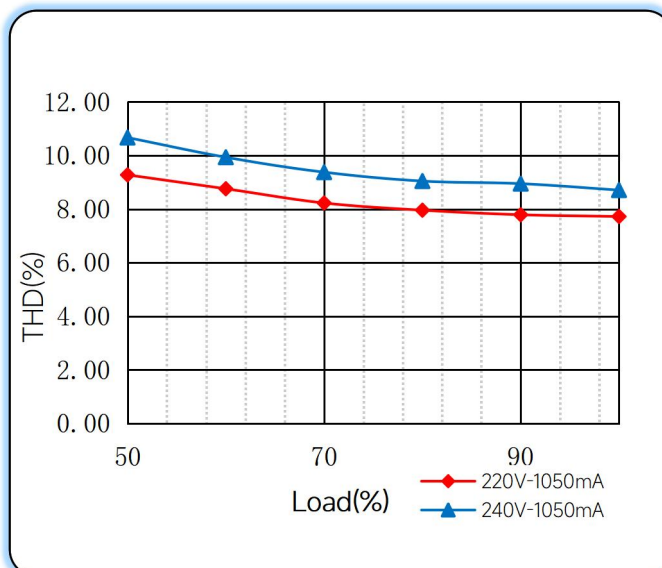
Efficiency vs. Load



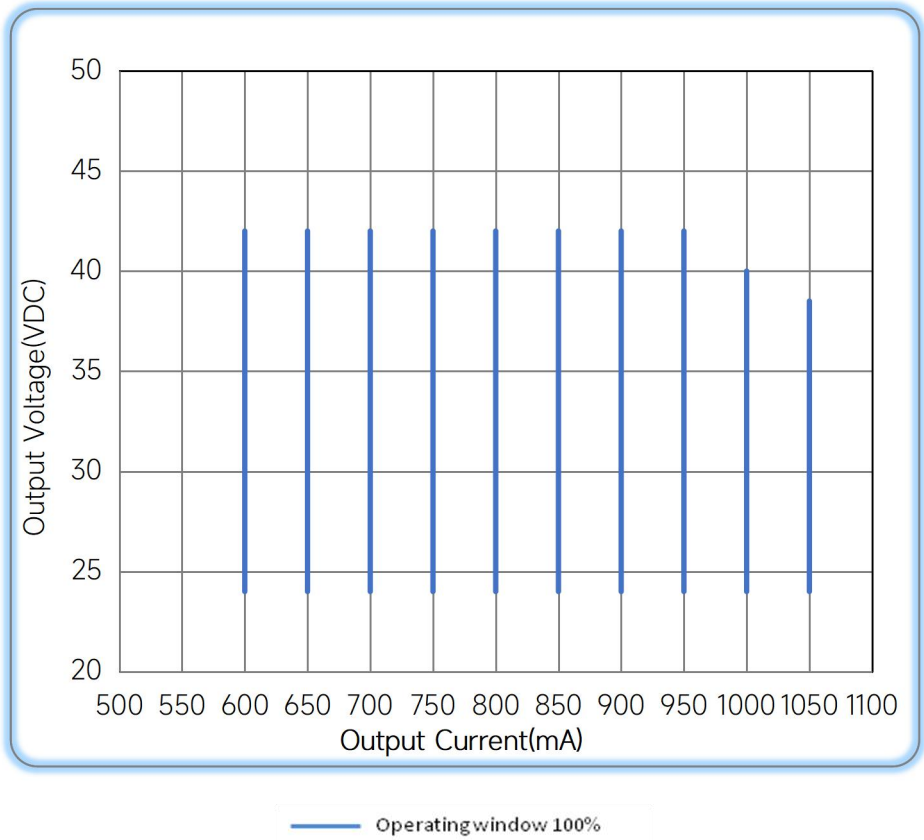
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2025/02/26
Wire type			B	2025/09/27

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

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EAGLERISE



Manual