

30W Constant Voltage Slim-US Series



■ Approve

CECB  SELV

Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor > 0.95
- Efficiency ≥85%
- 2 slots
- 5 years warranty

Applications

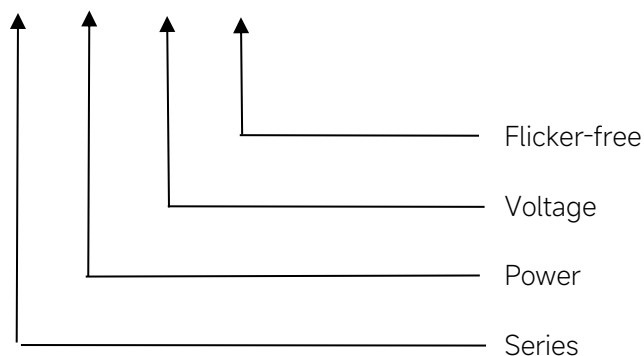
- LED strips

◆ Description

US-30-24 LR2 is a 30W constant voltage LED driver that operates from 198-264Vac input with 24V output voltage. With it's slim dimensions from 261 x 30x 17mm. it is easy to integrate in LED strips product. To ensure trouble-free operation, protection is provided against output short circuit, over Load and over temperature.

◆ Model code

US-30-24 LR2

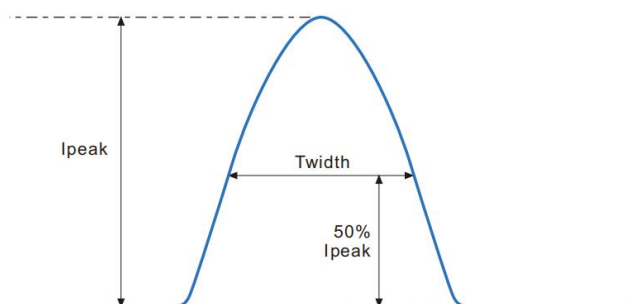


◆ Specification

Output	Constant Voltage	24VDC
	Current Range	0-1.25A
	Voltage Accuracy	±5%
	Output HF current ripple(≥1KHz)	±1%
	Output LF current ripple(≤120Hz)	±1%
	SVM	≤0.4
	Pst	≤1
	Efficiency(Typ.)	≥85%
Input	Rated input voltage	220-240VAC
	Range of input voltage	198-264VAC
	Frequency(Hz)	50/60 Hz
	Power Factor	> 0.95@Full load,230V
	Input Current max	0.24A
	Start-up time	< 0.5S
	No Load Power	≤0.5W
	THD (Typ.)	< 8%@Full load, 220VAC
Protection	Over Load Protection	105-150% YES/Auto Resume
	Over Voltage Protection	> 25.2VDC YES/Auto Resume
	Short circuit Protection	YES/Auto Resume
	Over Temperature Protection	YES/Auto Resume
Environment	Operating Temperature	-20°C~+45°C
	Humidity	20%-90%RH
	Tc	85°C
	Storage Temperature	-40°C~+60°C
	Life time	> 50000h@Tc=85°C,230VAC
Surface	Dimension	261X30X17(LXWXH)mm
standards	EN 61347-1; EN61347-2-13; EN62384; EN55015; EN61000-3-2 ; EN61000-3-3; EN 61547;	
Others	ErP	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.Dimmers are not recommended for this product.	

◆ Inrush Current

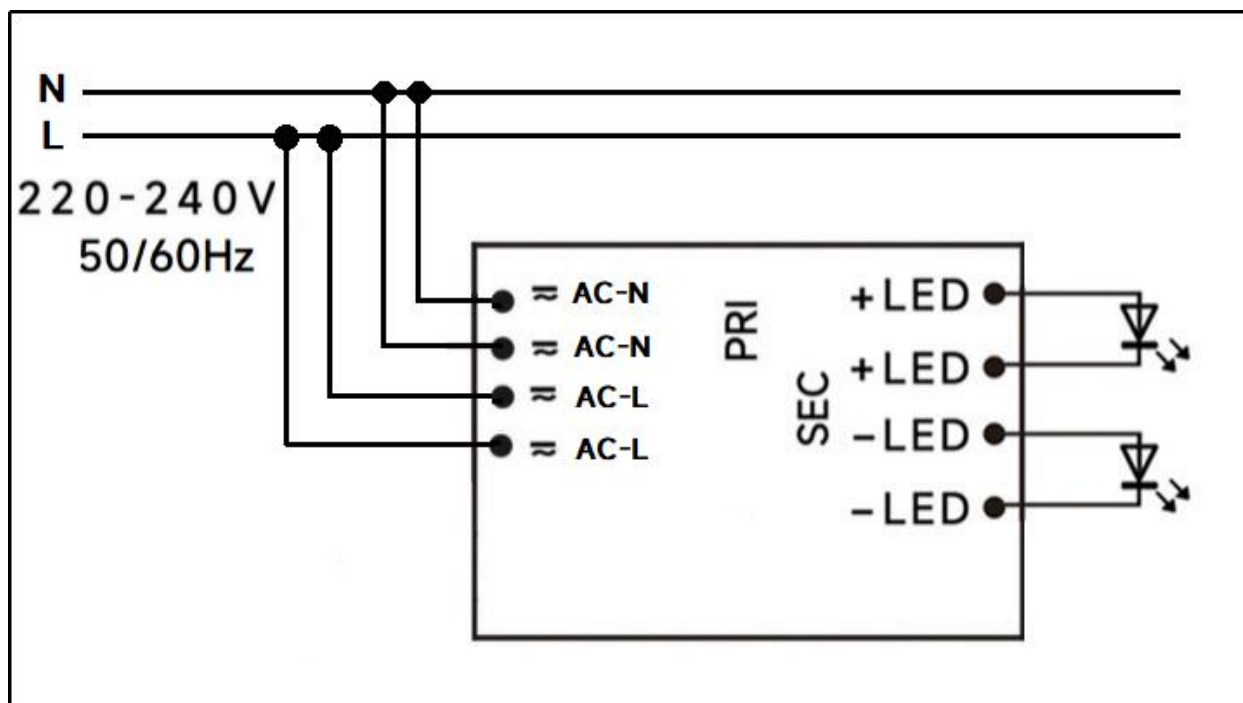
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
15.5A	184μs	28pcs	46pcs	57pcs	33pcs	53pcs	66pcs



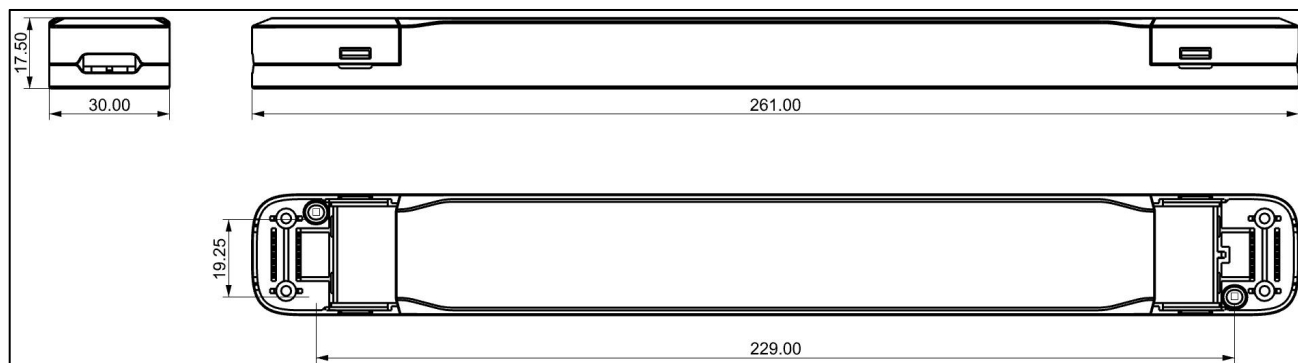
Remarks:

- 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 ² (With A side caps: 0.75...1.5 mm ²)
	Input wire gauge.	16...20 AWG (With A side caps: 16...22 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

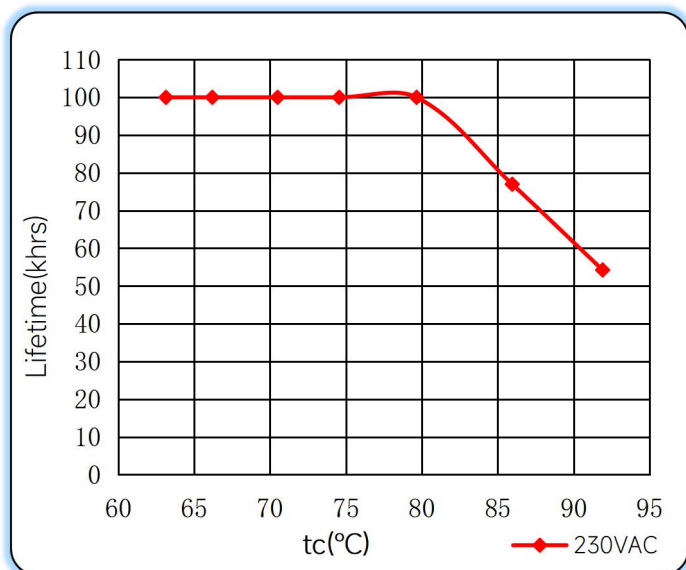
◆ Recommended wire

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

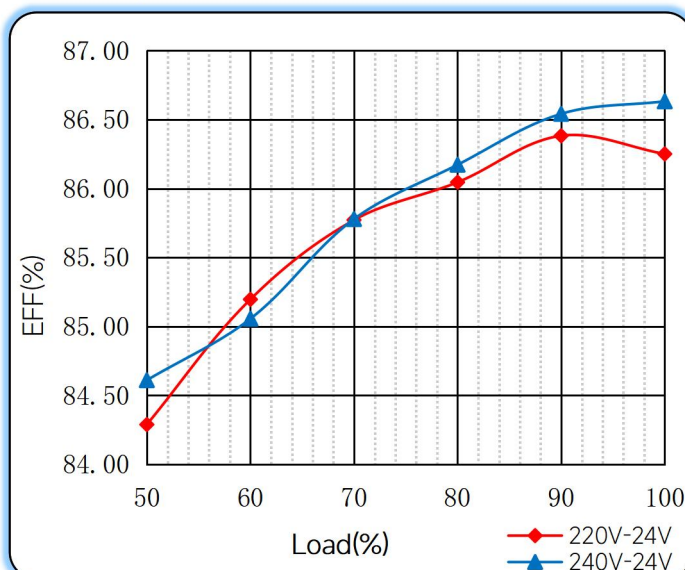
Note: Solid wire is risky to use on an angled terminal. Stranded wire is recommended for this kind of use.

◆ Curve for US-30-24 LR2

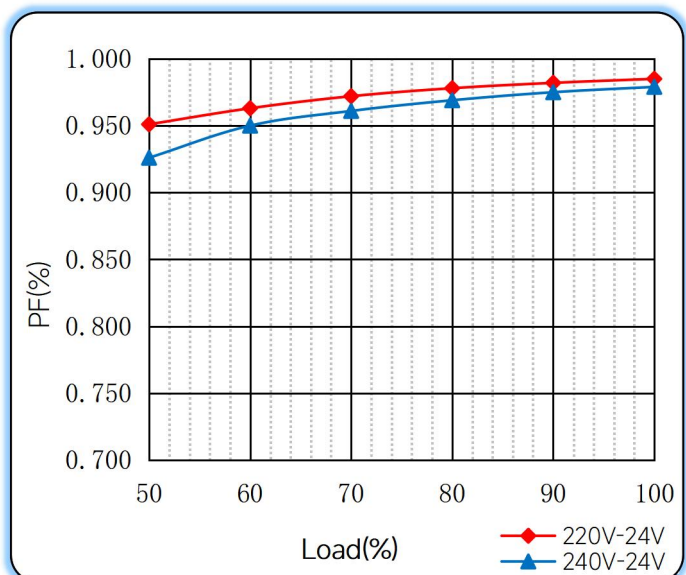
Lifetime vs. Temperature Curve



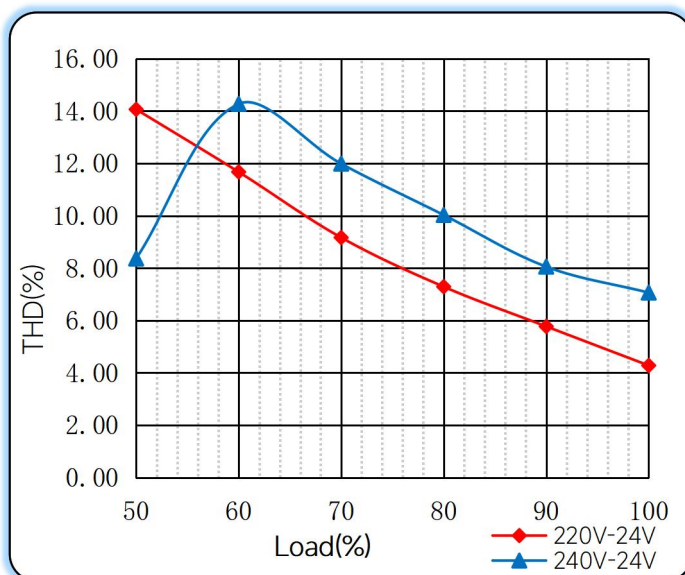
Efficiency vs. Load



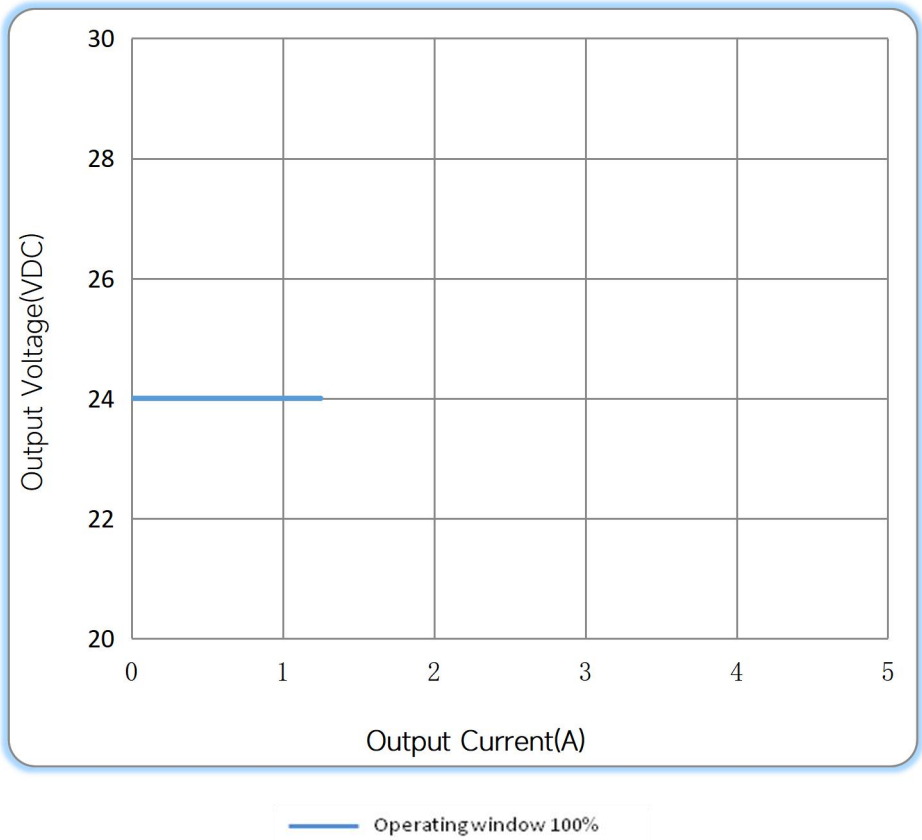
Power Factor Characteristics



THD vs. Load



◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/01/04

Tel: +86-0757-86256822, +86-0757-86256831
E-mail: sales@eaglerise.com
Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual