

## 100W Constant Voltage Slim-US Series

US-100-XX LR1



☒ Approve



### Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OTP
- Power Factor >0.95
- Efficiency ≥88%
- 5 years warranty

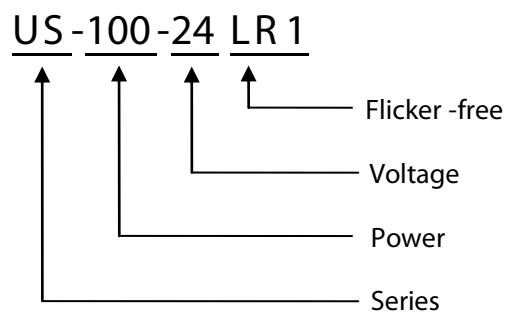
### Applications

- LED strips
- kitchen light
- bathroom light

### Description

US-100-XX LR1 is a 100W constant voltage LED driver that operates from 198-264Vac input with 12V、 24V or 48V output voltage. With it's slim dimensions from 365 x 30 x 18mm it is easy to integrate in LED strips, kitchen light and bathroom light products. To ensure trouble-free operation, protection is provided against output short circuit, over Load and over temperature.

### Model code



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### ■ Specification

Input	Rated input voltage	220-240VAC		
	Range of input voltage	198-264VAC		
	Range of input voltage(VDC)	176-250VDC		
	Frequency(Hz)	0/50/60 Hz		
	Power Factor	> 0.95@Full Load, 230VAC		
	Input Current max	0.78A MAX. @Full Load, 198VAC		
	Start-up time	< 0.5S		
	Unload Power Consumption	≤0.5W		
	Inrush Current	60A Max. @Full Load, 230VAC		
	THD	< 8% Typ. @Full Load, 230VAC		
	Leakage Current	< 0.7mA(240VAC)		
	Output	Constant Voltage	12VDC	24VDC
Current Range		0-8.33A	0-4.17A	0-2.08A
Rated power		100W Max.		
Voltage Accuracy		±5%		
Voltage Regulation		±1% @Full Load		
Load Regulation		±2%		
Hold-up Time		20ms max.@Full Load		
Ripple& Noise *Note.2		≤±2%@Full Load,230VAC		
Output LF current ripple(<120Hz)		≤±1%		
Efficiency(Typ.)		≥88%	≥91%	≥91%
Protection	Over Load Protection	105-150% Protection type: Auto Resume		
	Short circuit Protection	Protection type: Auto Resume		
	Over Temperature protection	Protection type: Auto Resume after restart		
Environment	Operating Temperature	-20°C...+45°C		
	tc	90°C	85°C	85°C
	Storage Temperature	-40°C...+60°C		
	Life time	> 50,000h@Full Load , 230V, ta=40°C	> 50,000h@Full Load , 230V, ta=45°C	> 50,000h@Full Load , 230V, ta=45°C
	Temperature coefficient	±0.03%/°C(0-45°C)		
	Humidity	20%-90%RH		
Others	Dimension	365X30X18(LXWXH)mm		
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13; EN62493; EN62384		
	Withstand voltage	Input-Output : 3750V/5mA/1min		
	Isolation resistance	Input-Output : ≥4MΩ@500VDC		
	EMI	EN55015; EN61000-3-2 Class C; EN61000-3-3		
	EMS	EN 61547; EN 61000-4-2; EN 61000-4-5 —1000V;		
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.			

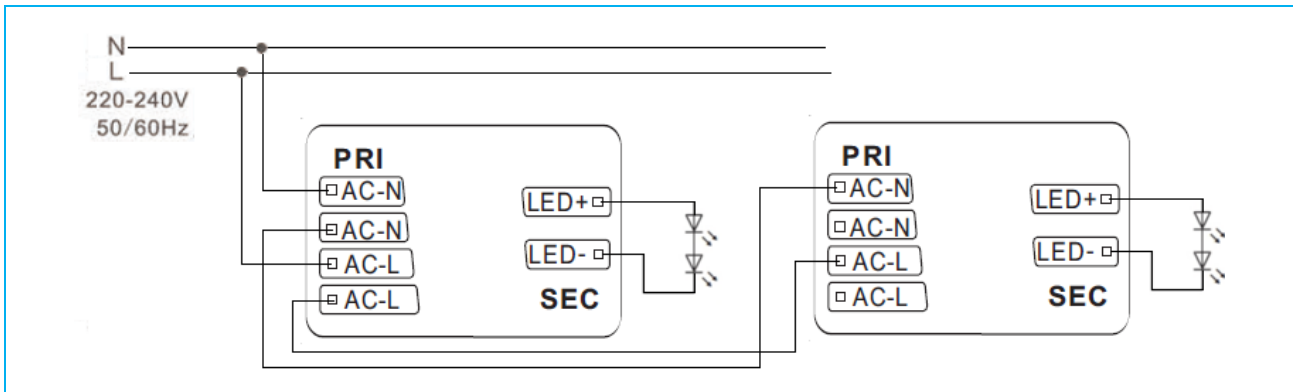
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### US-100-XX LR1

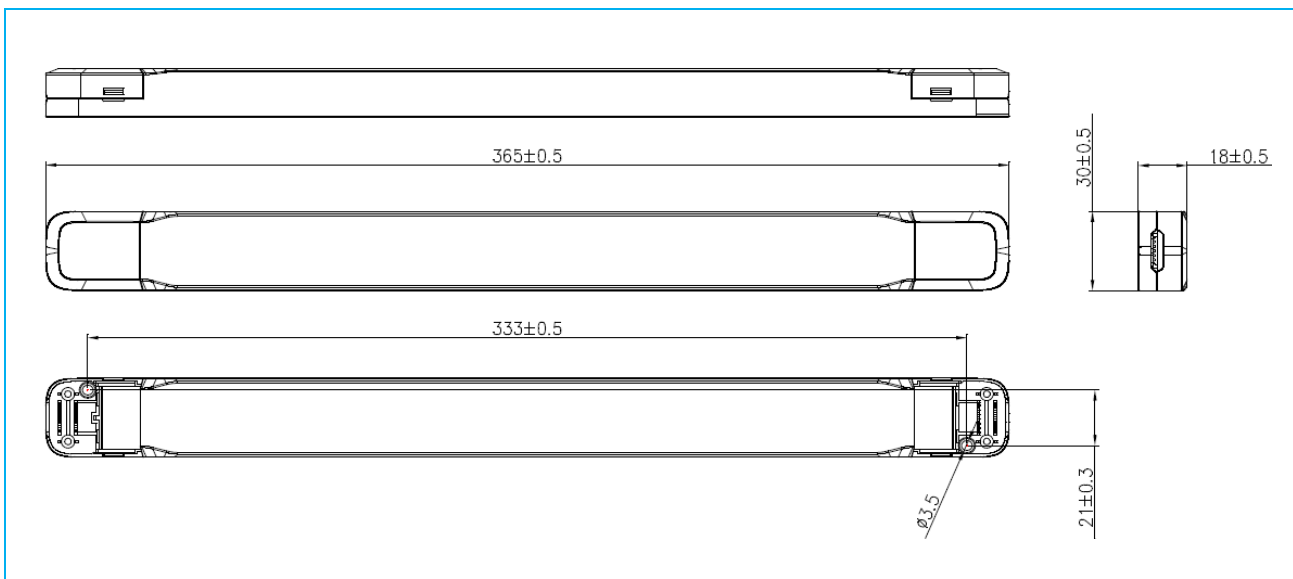
#### Model list

No.	Model number	Input			Output		
		Voltage (VAC)	Current (A)	Frequency (Hz)	Constant voltage (VDC)	Normal working current (A)	P <sub>rated</sub> (W)
1	US-100-12 LR1	220-240	0.78	50/60	12	0-8.33	100
2	US-100-24 LR1	220-240	0.78	50/60	24	0-4.17	100
3	US-100-48 LR1	220-240	0.78	50/60	48	0-2.08	100

#### Wiring diagram



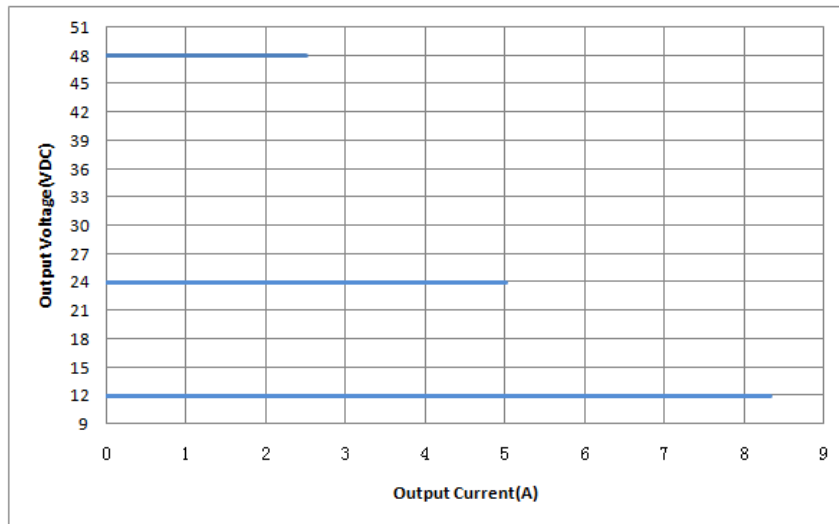
#### 2D diagram



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### ■ Operating window



— Operating window 100%