

## 21W Constant Current -LS Series

LS-21-XXX SI1



■ Approve



### ■ Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor : 0.6C
- Efficiency ≥85%
- 5 years warranty

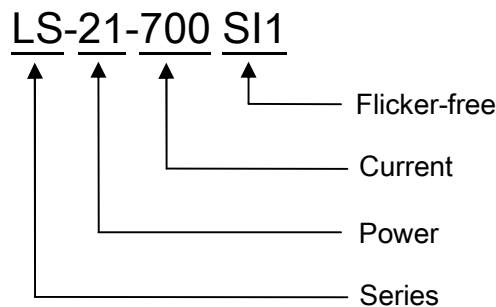
### ■ Applications

- LED panel
- LED spot light
- LED down light

### ■ Description

LS-21-XXX SI1 is a 21W constant current LED driver that operates from 176-264Vac input with 300 to 700mA output current. With its compact dimensions from 100 x 38 x 25mm it is easy to integrate in LED Panel and down light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

### ■ Model code



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### ■ Specification

Input	Rated input voltage	220-240VAC				
	Range of input voltage	176-264VAC				
	DC voltage range	176-280V				
	Frequency(Hz)	0/50/60 Hz				
	Power Factor	0.6C@Full Load,240VAC				
	Input Current max	0.3A MAX. @Full Load,176VAC				
	Start-up time	< 0.5S				
	Unload Power Consumption	≤0.5W				
	Inrush Current	30A Max.				
	Leakage Current	< 0.7mA(240VAC)				
	Output	Constant Current Max. *Note.3	300mA	400mA	500mA	...
Unload voltage Max.		80VDC	60VDC	50VDC	...	40VDC
Voltage Range(VDC)		42-70VDC	30-50VDC	25-42VDC	...	18-30VDC
Rated power		21W Max.	20W Max.	21W Max.	...	21W Max.
Current Accuracy		±5%@220-240VAC				
Voltage Regulation		±5% @Full Load, 220-240VAC				
Load Regulation		±5%@220-240VAC				
Hold-up Time		1s max.@Full Load				
Ripple& Noise *Note.2		≤±5%				
Efficiency(Typ.)		≥85%				
Protection	Over Load Protection	103-120%				
		Protection type: Auto Resume				
	Over Voltage Protection	> 60VDC	> 60VDC	> 50VDC	...	> 40VDC
	Protection type: Auto Resume					
	Short circuit Protection	Protection type: Auto Resume				
Environment	Operating Temperature	-20°C...+45°C				
	tc	80°C				
	Storage Temperature	-25°C...+60°C				
	Life time	> 50,000h@45°C				
	Humidity	20%-90%RH				
Others	Dimension	100X38X25(LXWXH)mm				
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13; EN62384				
	Withstand voltage	Input-Output : 3750V/5mA/1min				
	Isolation resistance	Input-Output : ≥4MΩ@500VDC				
	EMI	EN55015; EN61000-3-2 Class A; 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 240VAC 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.Output current can be from 300mA to 700mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.					

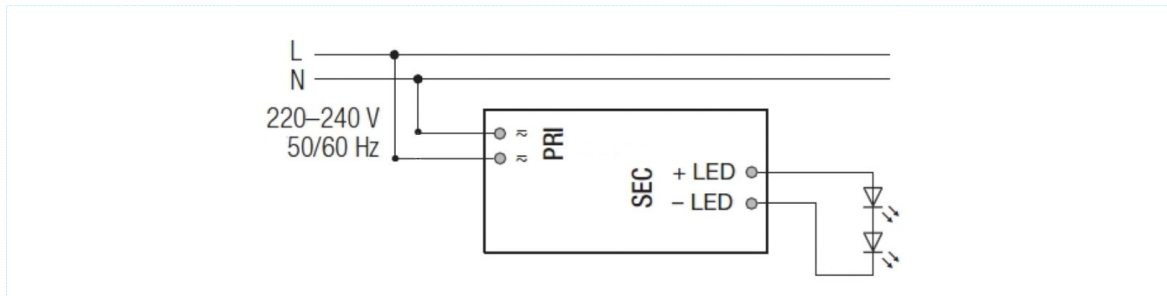
## 21W Constant Current -LS Series

LS-21-XXX S11

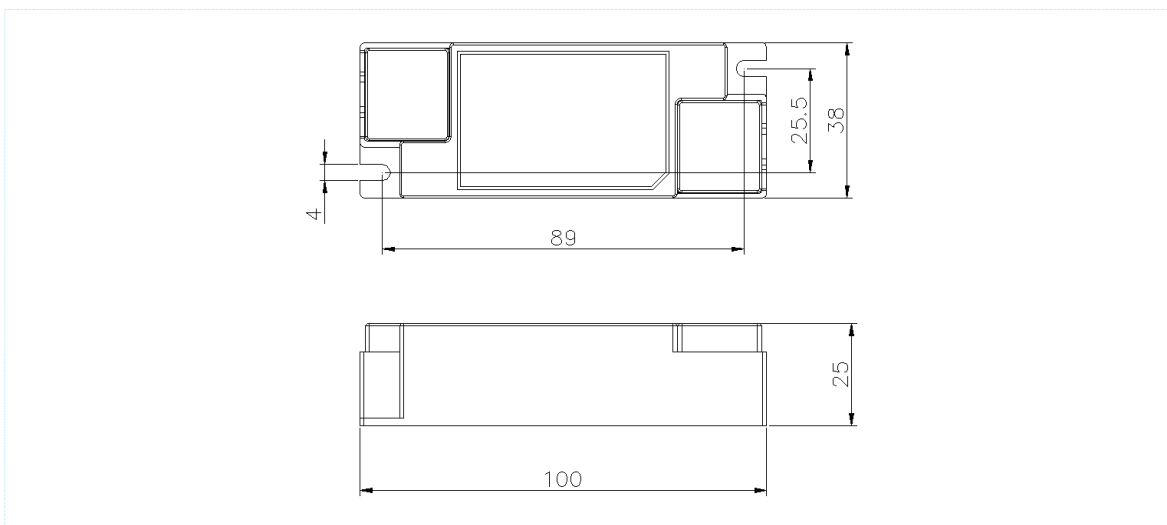
### Model list

NO.	Model number	Input			Output			Max. Prated(W)
		Voltage (VAC)	Current (A)	Frequency (Hz)	Constant current (mA)	Normal working voltage (VDC)	No load working voltage (VDC)	
1	LS-21-300 S11	220-240	0.3	50/60	300	42-70	80	21
2	LS-21-350 S11	220-240	0.3	50/60	350	36-60	70	21
3	LS-21-400 S11	220-240	0.3	50/60	400	30-50	60	20
4	LS-21-450 S11	220-240	0.3	50/60	450	28-46.5	57	21
5	LS-21-500 S11	220-240	0.3	50/60	500	25-42	50	21
6	LS-21-550 S11	220-240	0.3	50/60	550	23-38	50	21
7	LS-21-600 S11	220-240	0.3	50/60	600	21-35	45	21
8	LS-21-650 S11	220-240	0.3	50/60	650	19.5-32	42	21
9	LS-21-700 S11	220-240	0.3	50/60	700	18-30	40	21

### Connection diagram



### 2D diagram

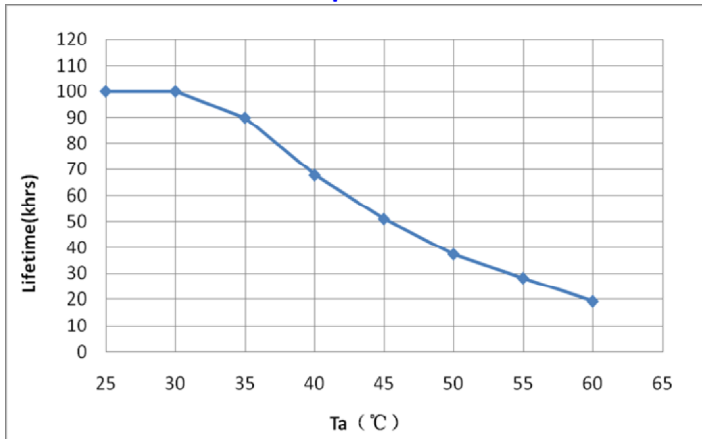


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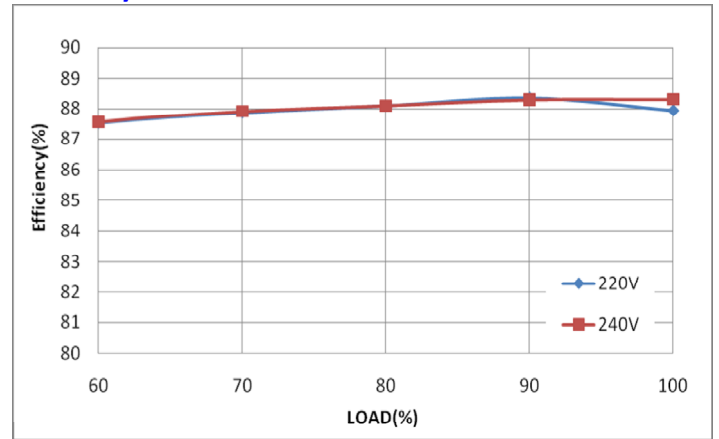
LS-21-XXX SI1

### Curve for LS-21-500 SI1

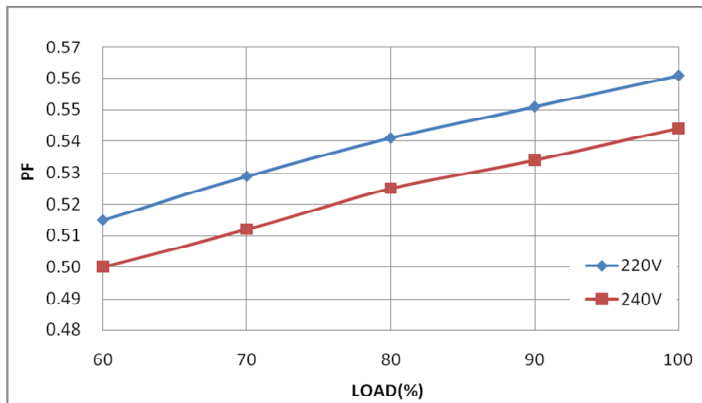
**Lifetime vs. Ambient Temperature Curve**



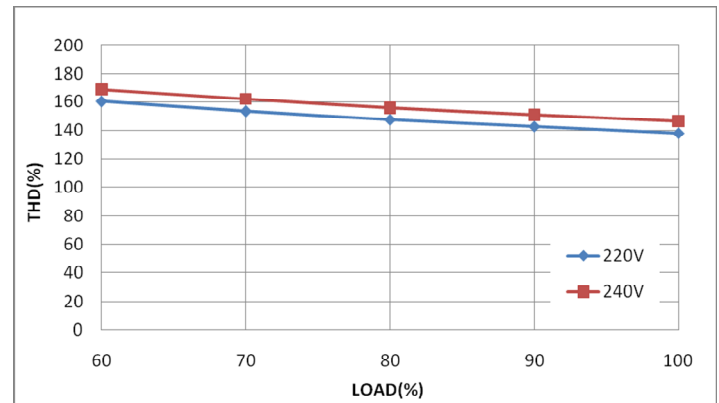
**Efficiency vs. Load**



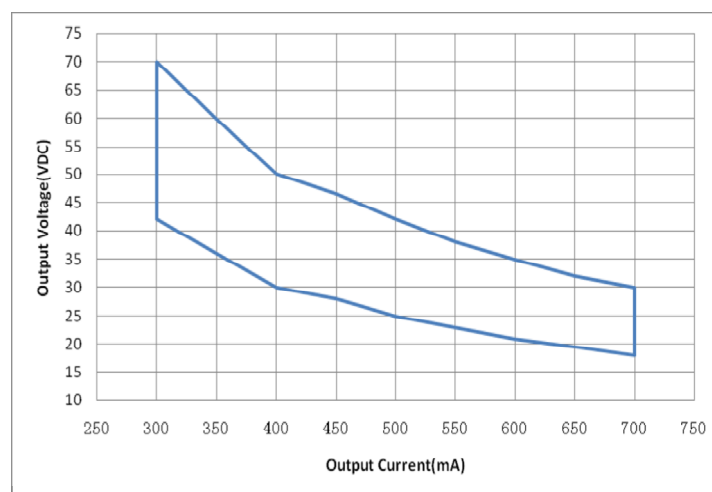
**Power Factor Characteristics**



**THD vs. Load**



### Operating window



Operating window 100%