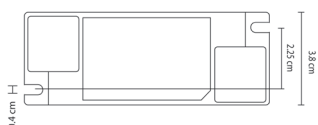




<b>ARTIGO (REFERÊNCIA)</b> <i>Producto   Product</i>	<b>LS-21-700 MI IP20</b>
<b>SÉRIE</b> <i>Serie   Series</i>	<b>LS</b>
<b>TIPO</b> <i>Tipo   Type</i>	<b>Transformador</b> <i>Transformador   Transformer</i>
<b>TECNOLOGIA</b> <i>Tecnología   Technology</i>	<b>Corrente constante AC/DC 700mA</b> <i>Corriente constante   Constant current</i>
<b>CÓDIGO DE BARRAS</b> <i>Código de barras   Barcode</i>	--
<b>COR</b> <i>Color   Colour</i>	<b>Branco</b> <i>Blanco   White</i>
<b>MATERIAL</b> <i>Material   Material</i>	<b>Plástico</b> <i>Plástico   Plastic</i>

<b>DIÂMETRO (D.)</b> <i>Diámetro   Diameter</i>	--
<b>ALTURA (A.)</b> <i>Altura   Height</i>	<b>2,5cm</b>
<b>COMPRIMENTO (C.)</b> <i>Longitud   Length</i>	<b>10cm</b>
<b>LARGURA (L.)</b> <i>Ancho   Width</i>	<b>3,8cm</b>
<b>PESO</b> <i>Peso   Weight</i>	--



## INFORMAÇÃO GERAL

*Información General | General Information*

<b>Índice de proteção</b> <i>Índice de Protección   Protection Index</i>	<b>IP20</b>
<b>Classe de proteção</b> <i>Clase de protección   Protection class</i>	<b>II</b>
<b>Fator de potência</b> <i>Factor de potencia   Power factor</i>	<b>0,85</b>
<b>Número de LED</b> <i>Número de LED   LED number</i>	--
<b>Secção de entrada</b> <i>Sección de entrada   Input section</i>	--
<b>Secção de saída</b> <i>Sección de salida   Output section</i>	--

## INFORMAÇÃO TÉCNICA

*Información técnica | Technical information*

<b>Tensão de entrada</b> <i>Voltaje de entrada   Input voltage</i>	<b>220-240Vac</b>
<b>Frequência</b> <i>Frecuencia   Frequency</i>	<b>50/60Hz</b>
<b>Potência</b> <i>Potencia   Power</i>	<b>21W</b>
<b>Corrente de entrada (máx)</b> <i>Corriente de entrada (máx)   Input current (max)</i>	<b>0,18A</b>
<b>Tensão de saída</b> <i>Voltaje de salida   Output voltage</i>	<b>18..30Vdc 40Vdc</b>
<b>Corrente de saída</b> <i>Corriente de salida   Output current</i>	<b>700mA</b>
<b>Eficiência (%)</b> <i>Eficiencia   Efficiency</i>	<b>85</b>
<b>Temperatura ambiente (Ta)</b> <i>Temperatura ambiente   Ambient temperature</i>	<b>45°C</b>
<b>Temperatura Invólucro (Tc)</b> <i>Temperatura de la carcasa   Case temperature</i>	<b>75°C</b>
<b>Isolação</b> <i>Aislamiento   Insulation</i>	<b>SELV</b>

## PROTEÇÕES

*Protecciones | Protections*

<b>Proteção curto circuito (SCP)</b> <i>Protección contra cortocircuitos   Short circuit protection</i>	<b>Sim</b> <i>Sí   Yes</i>
<b>Proteção sobrecarga (OPP)</b> <i>Protección de sobrecarga   Overload protection</i>	<b>Sim</b> <i>Sí   Yes</i>
<b>Proteção sobreaquecimento (OTP)</b> <i>Protección contra sobrettemperatura   Over temperature protection</i>	--
<b>Proteção sobretensões (OVP)</b> <i>Protección contra sobretensiones   Overvoltage protection</i>	<b>Sim</b> <i>Sí   Yes</i>
<b>Proteção de sobrecarga (L-N)</b> <i>Protección de sobrecarga   Surge protection</i>	--
<b>Tremulação</b> <i>Parpadeo   Flicker</i>	<b>Sim</b> <i>Sí   Yes</i>
<b>Potência sem carga</b> <i>Energía sin carga   No-load power</i>	<b>&lt;0,5W</b>
<b>Função regulação</b> <i>Función de regulación   Dimming function</i>	--

## 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

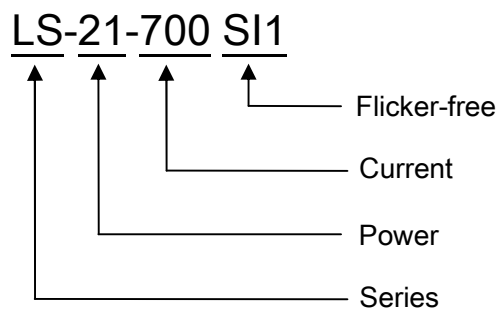
### ■ Applications

- 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



## 21W Constant Current -LS Series

LS-21-XXX SI1

### ■ 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.					

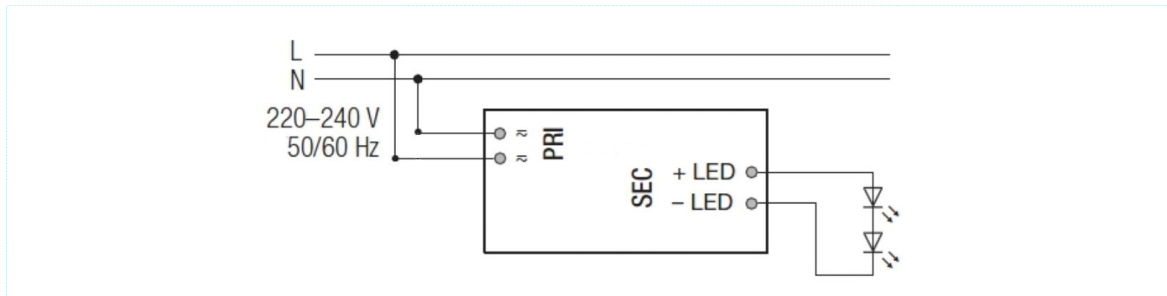
## 21W Constant Current -LS Series

LS-21-XXX S11

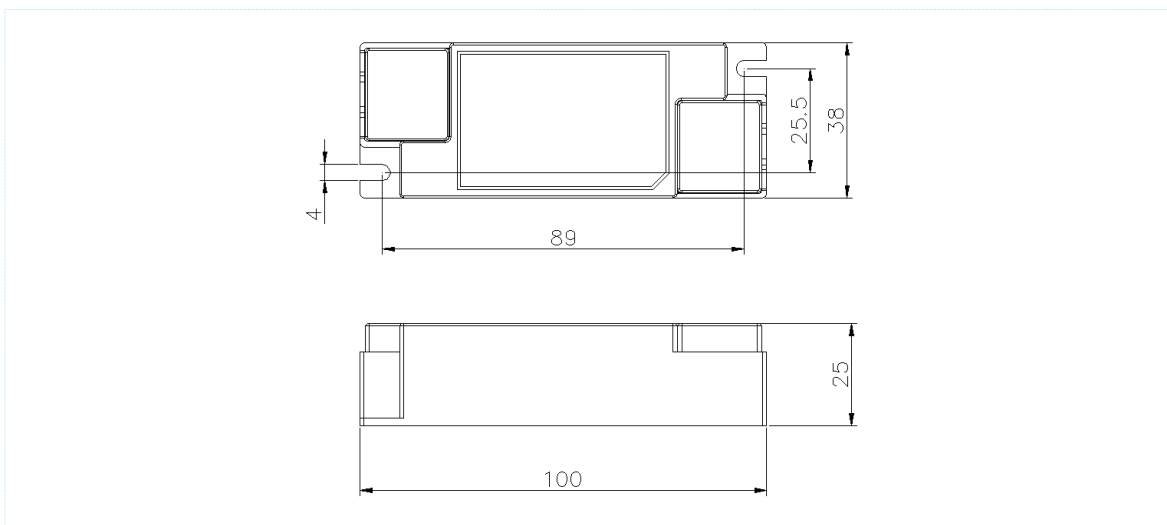
### Model list

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

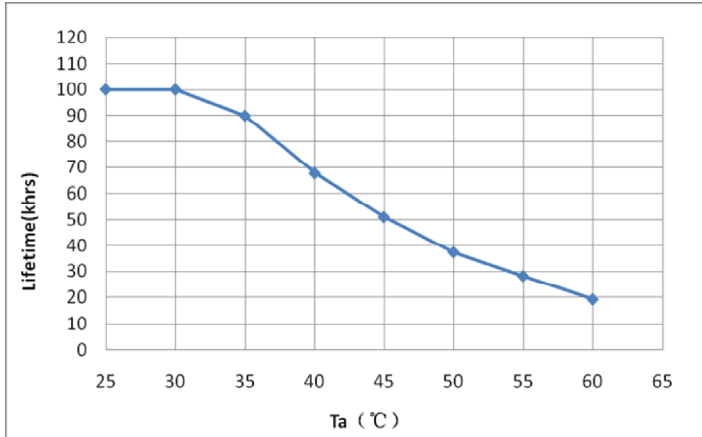


## 21W Constant Current -LS Series

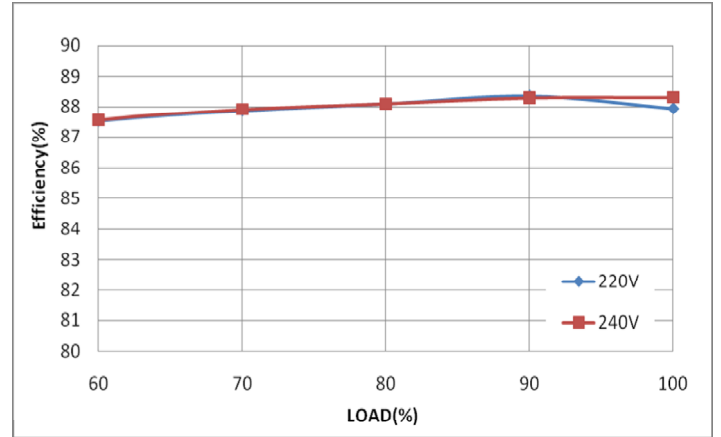
LS-21-XXX SI1

### Curve for LS-21-500 SI1

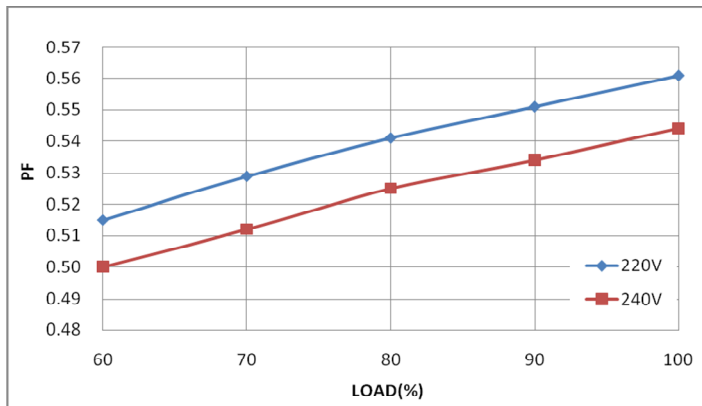
**Lifetime vs. Ambient Temperature Curve**



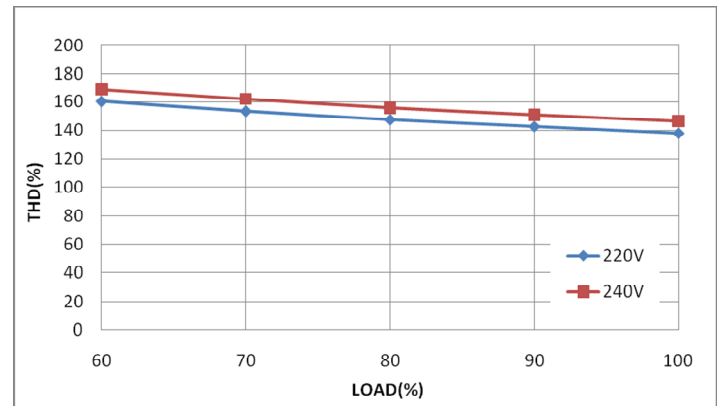
**Efficiency vs. Load**



**Power Factor Characteristics**



**THD vs. Load**



### Operating window

