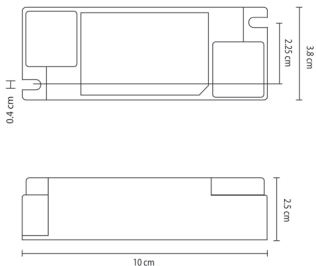




ARTIGO (REFERÊNCIA) <i>Producto Product</i>	LS-21-350 MI IP20
SÉRIE <i>Serie Series</i>	LS
TIPO <i>Tipo Type</i>	Transformador <i>Transformador Transformer</i>
TECNOLOGIA <i>Tecnología Technology</i>	Corrente constante AC/DC 350mA <i>Corriente constante Constant current</i>
CÓDIGO DE BARRAS <i>Código de barras Barcode</i>	--
COR <i>Color Colour</i>	Branco <i>Blanco White</i>
MATERIAL <i>Material Material</i>	Plástico <i>Plástico Plastic</i>

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



INFORMAÇÃO GERAL
Información General | General Information

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

INFORMAÇÃO TÉCNICA
Información técnica | Technical information

Tensão de entrada <i>Voltaje de entrada Input voltage</i>	220-240Vac
Frequência <i>Frecuencia Frequency</i>	50/60Hz
Potência <i>Potencia Power</i>	21W
Corrente de entrada (máx) <i>Corriente de entrada (máx) Input current (max)</i>	0,18A
Tensão de saída <i>Voltaje de salida Output voltage</i>	30..60Vdc 70Vdc
Corrente de saída <i>Corriente de salida Output current</i>	350mA
Eficiência (%) <i>Eficiencia Efficiency</i>	85
Temperatura ambiente (Ta) <i>Temperatura ambiente Ambient temperature</i>	45°C
Temperatura Invólucro (Tc) <i>Temperatura de la carcasa Case Temperature</i>	75°C
Isolação <i>Aislamiento Insulation</i>	SELV

PROTEÇÕES
Protecciones | Protections

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

LS-21-XXX SI1

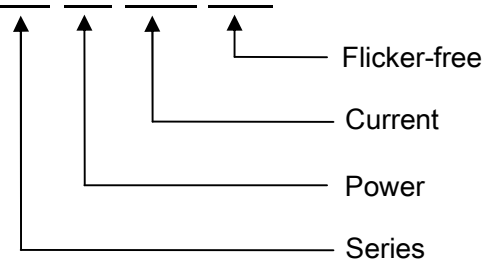


■ Applications

- LED panel
- LED spot light
- LED down light

LS-21-XXX SI1 is a 21W constant current LED driver that operates from 176-264Vac input with 300 to 700mA output current. With it's 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.

LS-21-700 SI1



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	...	700mA
	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.					

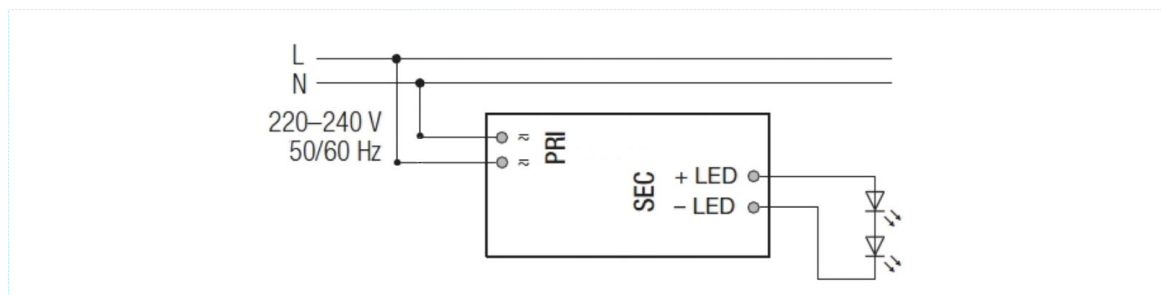
21W Constant Current -LS Series

LS-21-XXX SI1

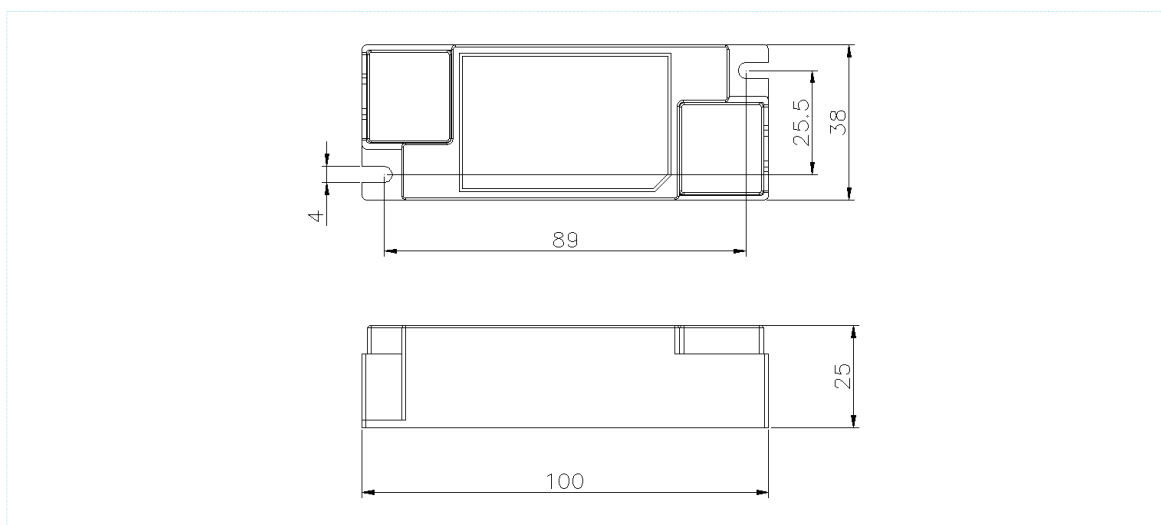
Model list

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 SI1	220-240	0.3	50/60	300	42-70	80	21
2	LS-21-350 SI1	220-240	0.3	50/60	350	36-60	70	21
3	LS-21-400 SI1	220-240	0.3	50/60	400	30-50	60	20
4	LS-21-450 SI1	220-240	0.3	50/60	450	28-46.5	57	21
5	LS-21-500 SI1	220-240	0.3	50/60	500	25-42	50	21
6	LS-21-550 SI1	220-240	0.3	50/60	550	23-38	50	21
7	LS-21-600 SI1	220-240	0.3	50/60	600	21-35	45	21
8	LS-21-650 SI1	220-240	0.3	50/60	650	19.5-32	42	21
9	LS-21-700 SI1	220-240	0.3	50/60	700	18-30	40	21

Connection diagram



2D diagram

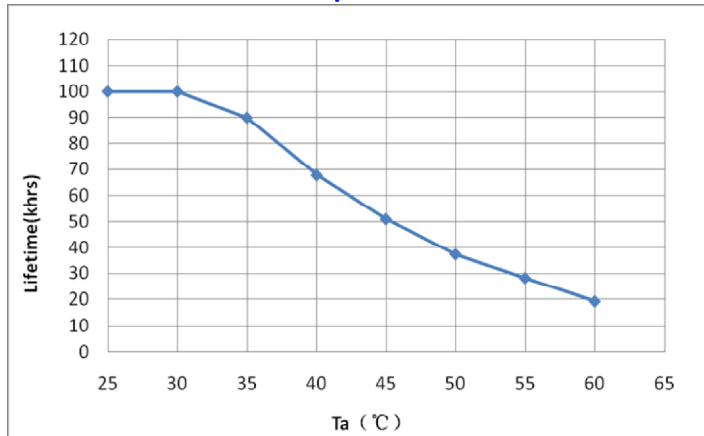


21W Constant Current -LS Series

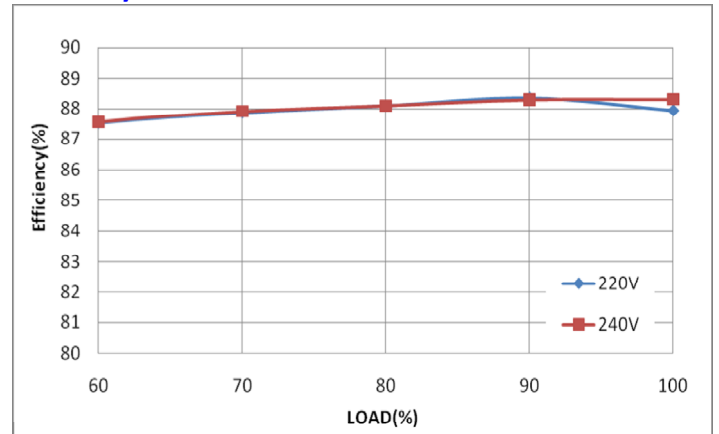
LS-21-XXX SI1

■Curve for LS-21-500 SI1

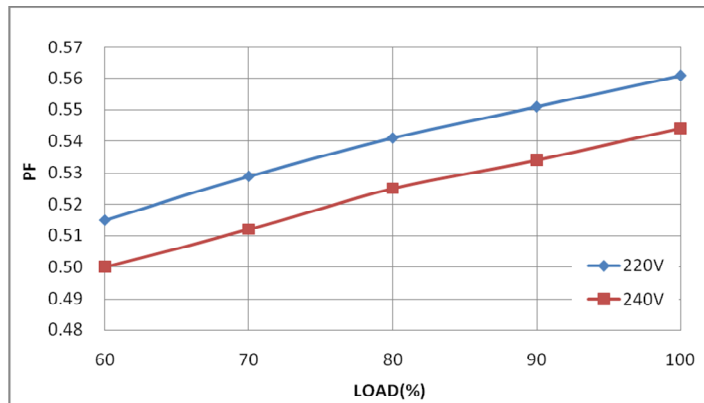
Lifetime vs. Ambient Temperature Curve



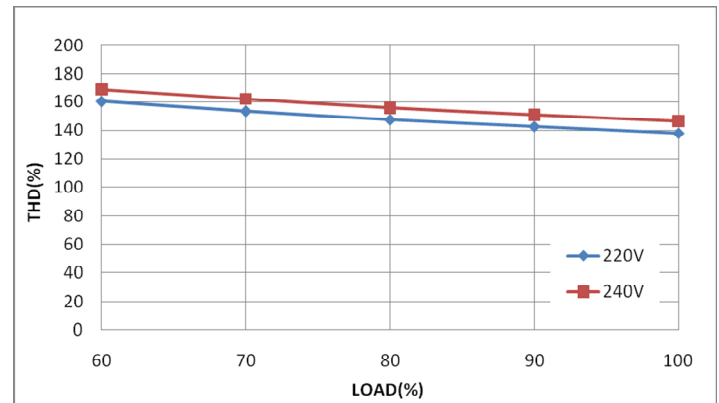
Efficiency vs. Load



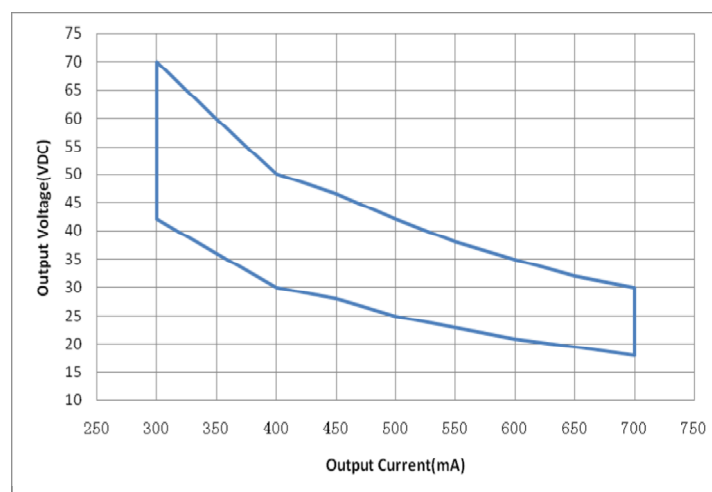
Power Factor Characteristics



THD vs. Load



■Operating window



— Operating window 100%