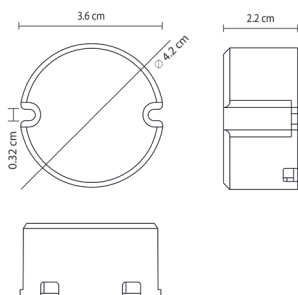


ARTIGO (REFERÊNCIA) <i>Producto Product</i>	CS-12-350 MB IP20
SÉRIE <i>Serie Series</i>	MINI-CS
TIPO <i>Tipo Type</i>	Transformador <i>Transformador Transformer</i>
TECNOLOGIA <i>Tecnología Technology</i>	Corrente constante AC/DC 350mA <i>Corriente constante Constant current</i>
CÓDIGO DE BARRAS <i>Código 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>	4,2cm
ALTURA (A.) <i>Altura Height</i>	2,2cm
COMPRIMENTO (C.) <i>Longitud Length</i>	--
LARGURA (L.) <i>Ancho Width</i>	--
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>	12W max.14W
Corrente de entrada (máx) <i>Corriente de entrada (máx) Input current (max)</i>	0,12A
Tensão de saída <i>Voltaje de salida Output voltage</i>	22..40V 50Vdc
Corrente de saída <i>Corriente de salida Output current</i>	350mA
Eficiência (%) <i>Eficiencia Efficiency</i>	83
Temperatura ambiente (Ta) <i>Temperatura ambiente Ambient temperature</i>	60°C
Temperatura Invólucro (Tc) <i>Temperatura de la carcasa Case Temperature</i>	90°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>Protección 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>Energia sin carga No-load power</i>	<0,5W
Função regulação <i>Función de regulación Dimming function</i>	--

12W Constant Current -CS Series

CS-12-XXX MB



■ Approve

SELV CE

■ Features

- Class II, SELV, Built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.85C
- Efficiency $\geq 81\%$
- 5 years warranty

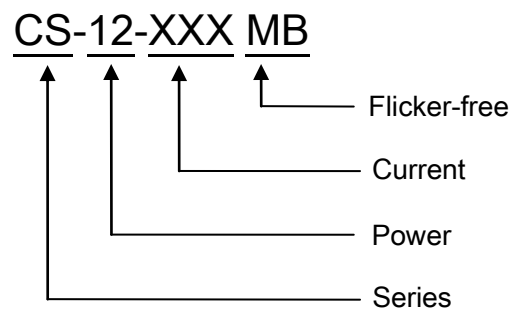
■ Applications(Typ.)

- Spot light
- Wall light
- COB light

■ Description

CS-12-XXX MB is a 12W constant current LED driver with 250mA to 700mA output current. With its compact dimensions from $\Phi 42 \times 22$ mm it is easy to integrate in spot light, wall light and COB light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

■ Model code



12W Constant Current -CS Series

CS-12-XXX MB

■ Specification

Input	Rated input voltage	220-240VAC				
	Range of input voltage	198-264VAC				
	Rated input voltage(DC)	198-254VDC				
	Range of input voltage(DC)	176-280VDC				
	Frequency(Hz)	0/50/60 Hz				
	Power Factor	0.85C@Full Load, 240VAC				
	Input Current max	0.12A MAX. @Full load, 198VAC				
	Start-up time	< 0.5S				
	Unload Power Consumption	≤0.5W				
	Inrush Current	10A Max./300μs@230V, Full Load , 50%Ipk-50%Ipk				
	THD	< 70%@Full Load, 230VAC				
	Leakage Current	< 0.7mA(240VAC)				
Output	Constant Current Max.	250mA	300mA	350mA	...	700mA
	Unload voltage Max.	55VDC	50VDC	50VDC	...	25VDC
	Voltage Range(VDC)	27-48VDC	24-42VDC	22-40VDC	...	11-17VDC
	Rated power	12W Max.	12.6W Max.	14W Max.	...	11.9W 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% @Full Load , 230VAC				
	Output LF current ripple(<120Hz)	≤±3% @Full Load, 230VAC				
	Efficiency(Typ.)	≥83%			...	≥81%
Protection	Over Load Protection	103-120% Protection type: Auto Resume				
	Over Voltage Protection	> 55VDC	> 50VDC	> 50VDC	...	> 25VDC
		Protection type: Auto Resume				
	Short circuit Protection	Protection type: Auto Resume				
Environment	Operating Temperature	-20°C...+60°C				
	tc	90°C				
	Storage Temperature	-20°C...+60°C				
	Life time	> 30,000h@ta=60°C; > 50,000h@ta=50°C				
	Humidity	20%-90%RH				
Others	Dimension	Φ42X22(DXH)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 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. 3.Output current can be from 250mA to 700mA. Please see Model list below and contact EAGLERISE for details.					

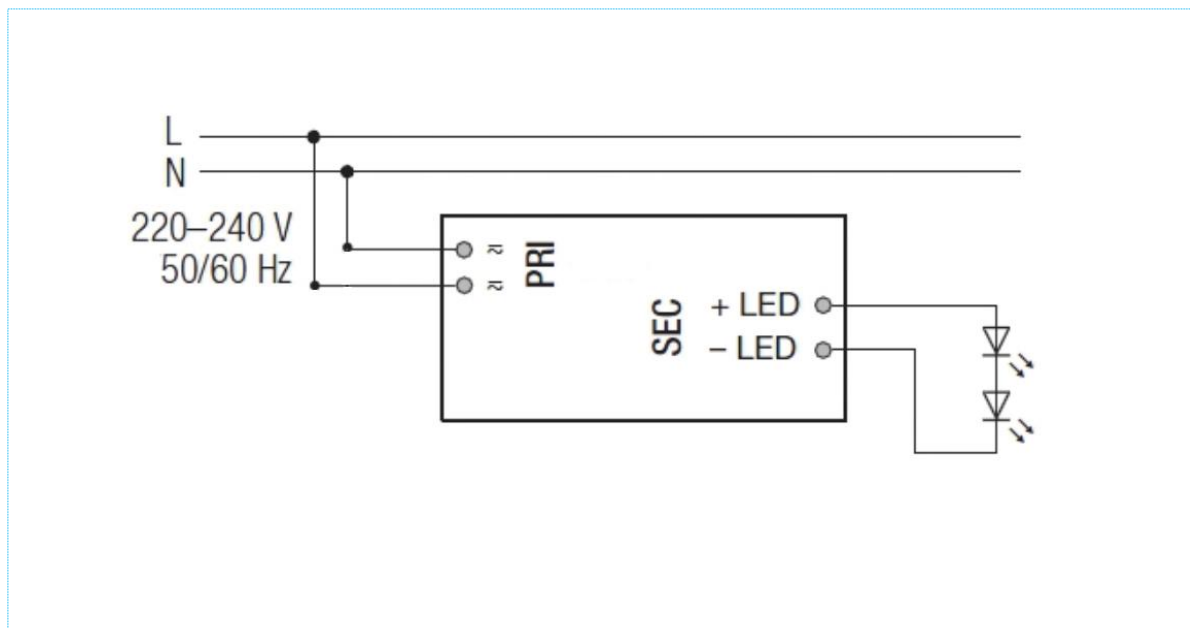
12W Constant Current -CS Series

CS-12-XXX MB

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	CS-12-250 MB	220-240	0.12	50/60	250	27-48	55	12
2	CS-12-300 MB	220-240	0.12	50/60	300	24-42	50	12.6
3	CS-12-350 MB	220-240	0.12	50/60	350	22-40	50	14
4	CS-12-400 MB	220-240	0.12	50/60	400	20-30	40	12
5	CS-12-450 MB	220-240	0.12	50/60	450	16-26	35	11.7
6	CS-12-500 MB	220-240	0.12	50/60	500	15-25	34	12.5
7	CS-12-550 MB	220-240	0.12	50/60	550	14-22	32	12.1
8	CS-12-600 MB	220-240	0.12	50/60	600	12-20	30	12
9	CS-12-700 MB	220-240	0.12	50/60	700	11-17	25	11.9

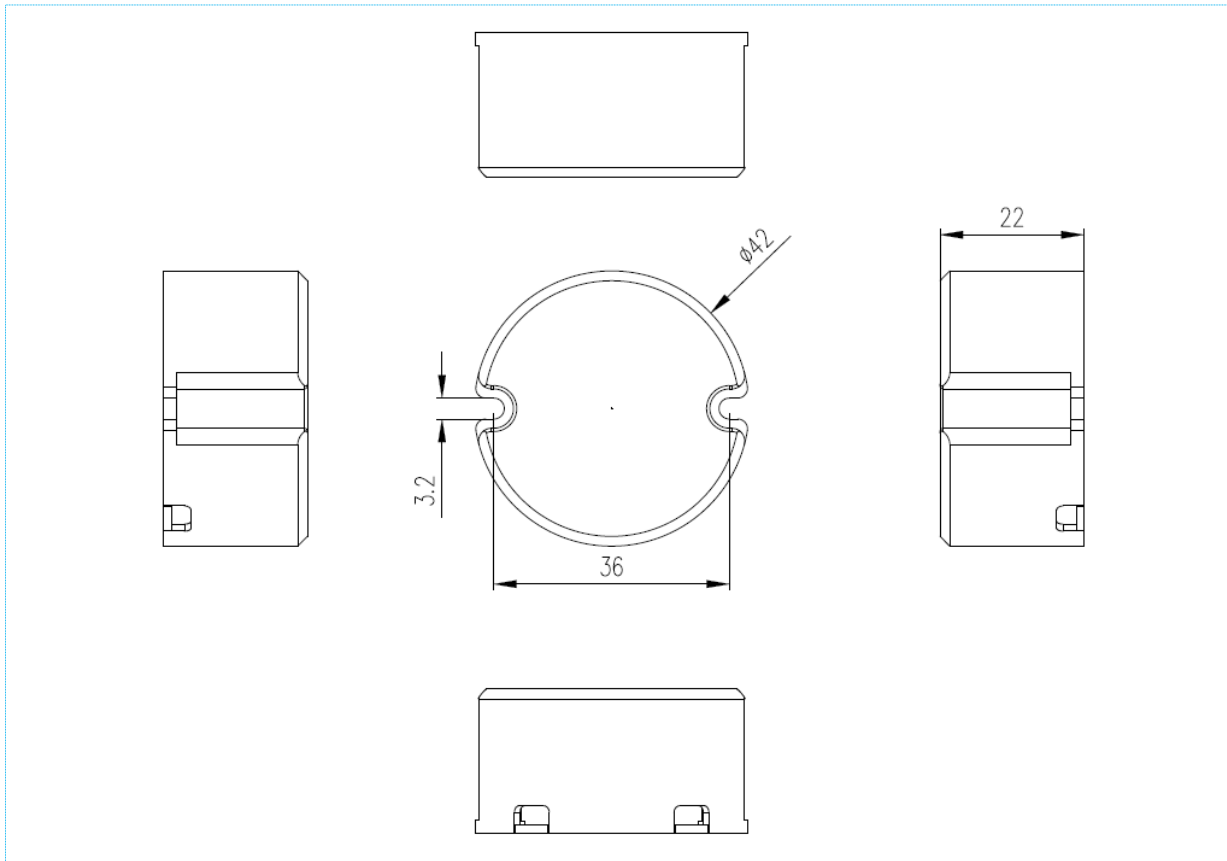
Wiring diagram



12W Constant Current -CS Series

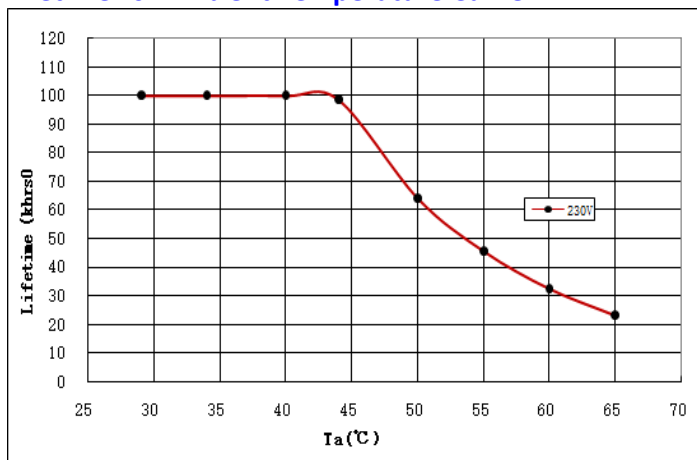
CS-12-XXX MB

■ 2D diagram

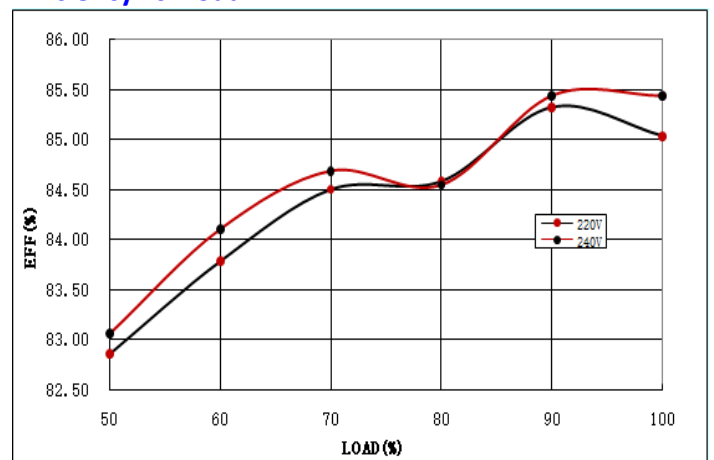


■ Curve for CS-12-300 MB

Lifetime vs. Ambient Temperature Curve



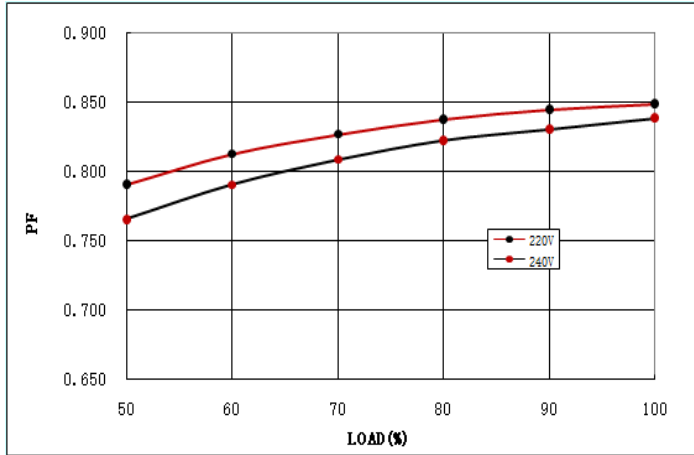
Efficiency vs. Load



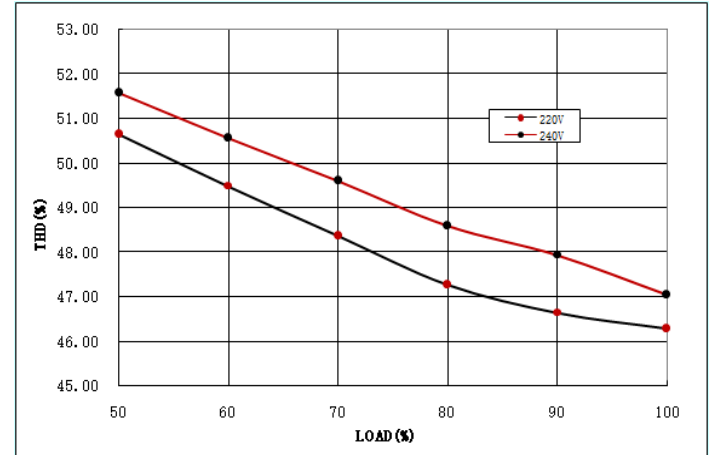
12W Constant Current -CS Series

CS-12-XXX MB

Power Factor Characteristics



THD vs. Load



■ Operating window

