

12W Constant Current – IP65



Features

- Class II, SELV, Built-in
- Input Voltage 100-240VAC
- Protections: SCP/OLP/OVP
- PowerFactor 0.92C
- Efficiency $\geq 81\%$
- IP65 Ingress protection
- 5 years warranty

Applications

- Outdoor-Wall
- light Lawn light

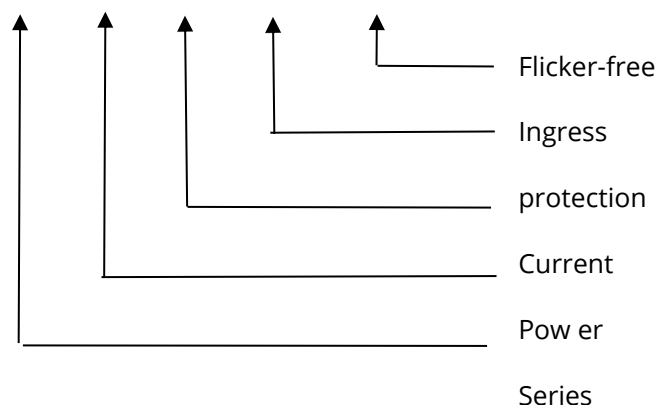


Description

CH-12-XXX IP65 LB1 is a 12W constant current LED driver that operates from 90-264Vac input with 250 to 700mA output current. With it's compact dimensions from $\Phi 55 \times 26\text{mm}$ it is easy to integrate in Outdoor-Wall light lights and Lawn lights. To ensure trouble-free operation, protection is provided against output short circuit and over Load

Model code

CH-12-XXX IP 65 LB1



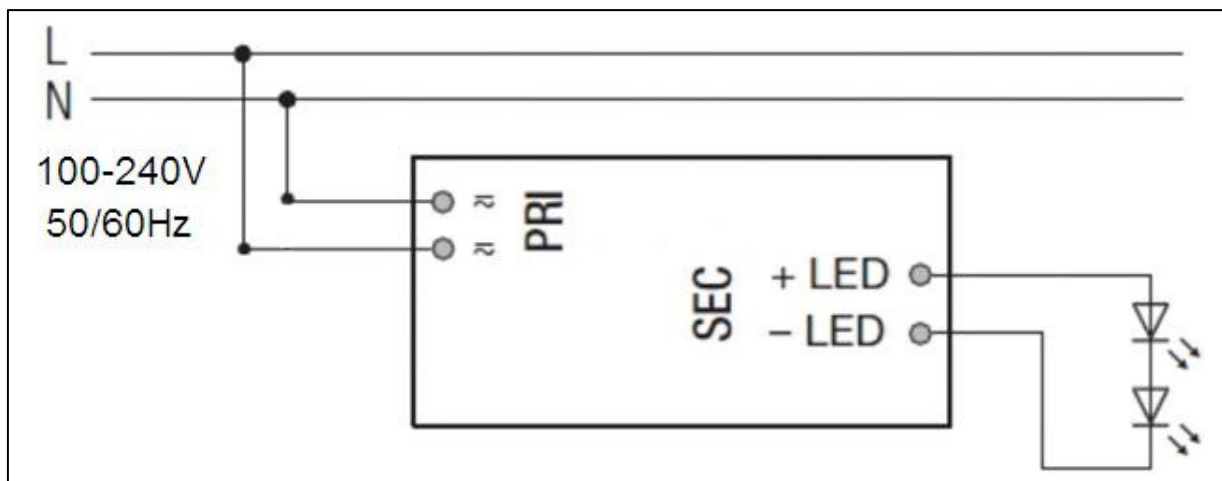
Specification

Output	Constant Current	250mA	350mA	500mA	...	700mA
	Voltage Range	29-48VDC	20-35VDC	14-24VDC	...	10.5-17.5VDC
	Unload voltage Max.	60VDC	45VDC	34VDC	...	28VDC
	Current Accuracy	±5%				
	Output HF current ripple(≥1KHz)	±5%				
	Output LF current ripple(≤120Hz)	±5%				
	SVM	≤0.4				
	Pst	≤1				
	Efficiency(Typ.)	≥81%				
Input	Rated input voltage	100-240VAC				
	Range of input voltage	90-264VAC				
	Frequency(Hz)	50/60Hz				
	Displacement factor	≥0.9				
	Power Factor	0.92C				
	Input Current max	0.19A				
	Start-up time	<0.5S				
	No Load Power	≤0.5W				
	THD(Typ.)	<10%				
Protection	Over Load Protection	103-120%				
		YES/Auto Resume				
	Over Voltage Protection	>60VDC	>45VDC	>34VDC	...	>28VDC
		YES/Auto Resume				
Environment	Short circuit Protection	YES/AutoResume				
	Operating Temperature	-20°C~+50°C				
	Humidity	20%-90%RH				
	Tc	85°C				
	Storage Temperature	-25°C~+60°C				
Surface	Dimension	Φ55X26(DXH)mm				
s standards	EN61347-1; EN61347-2-13;EN62384; EN55015;EN61000-3-2 ;EN61000-3-3; EN61547;					
Others	ErP	EU2019/2020				
	RoHS	RoHS(2011/65/EU) (EU)2015/863				
Note	<p>1.All parameters NOT specially mentioned are measured at 240VAC input , full load and 25°C of ambient temperature.</p> <p>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.</p>					

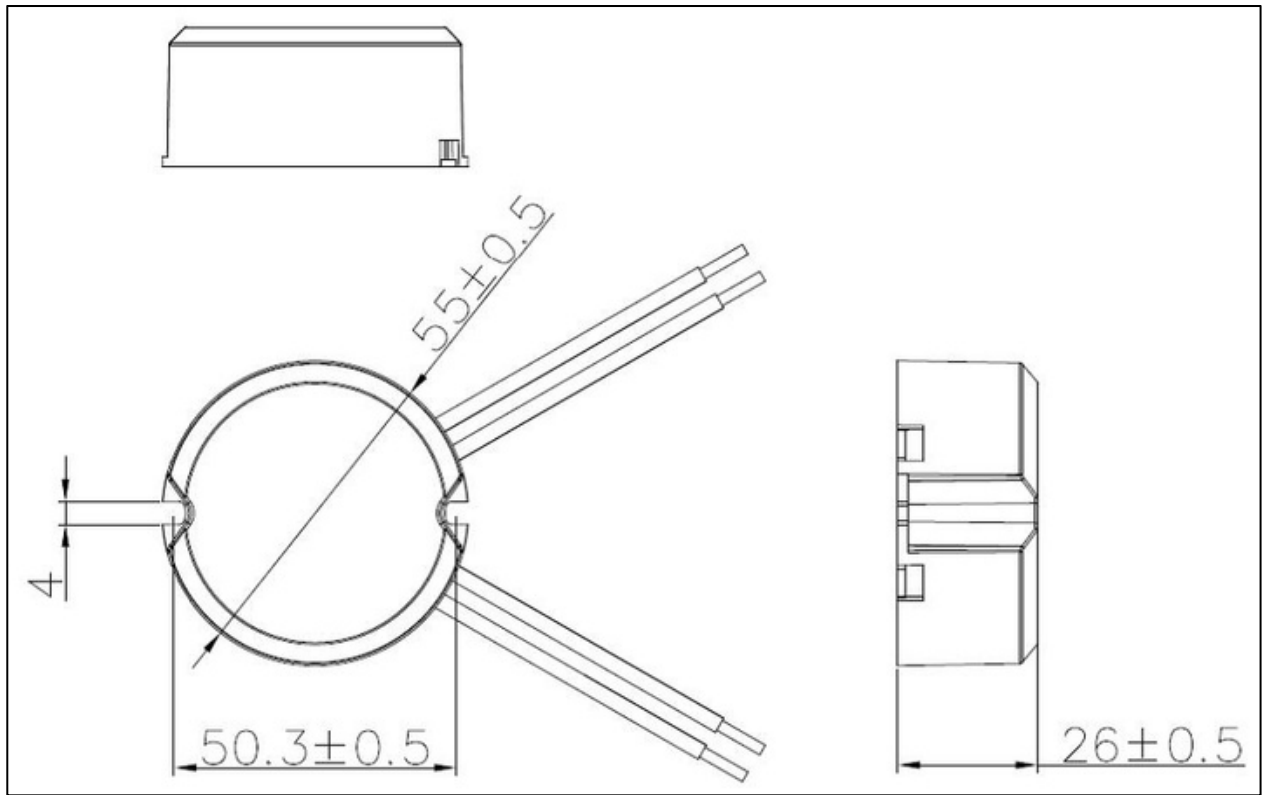
Model list

NO.	Model number	Output			Max.Prated (W)
		C onstant current (mA)	Normal working voltage (VDC)	No load working voltage (VDC)	
1	CH-12-250 IP65 LB1	250	29-48	60	12
2	CH-12-300 IP65 LB1	300	24-40	50	12
3	CH-12-350 IP65 LB1	350	20-35	45	12.3
4	CH-12-400 IP65 LB1	400	18-30	40	12
5	CH-12-450 IP65 LB1	450	16-27	37	12.2
6	CH-12-500 IP65 LB1	500	14 -24	34	12
7	CH-12-550 IP65 LB1	550	13-22	32	12.1
8	CH-12-600 IP65 LB1	600	12-20	30	12
9	CH-12-650 IP65 LB1	650	11-18.5	28	12
10	CH-12-700 IP65 LB1	700	10.5-17.5	28	12.3

Wiring diagram

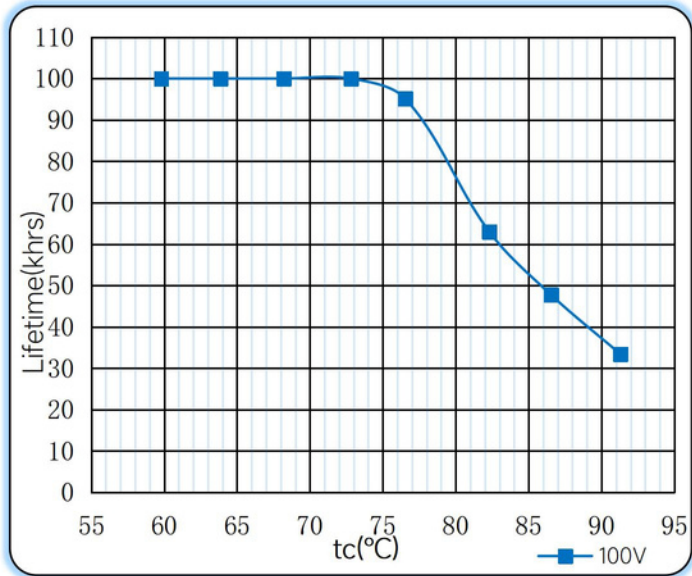


2D diagram

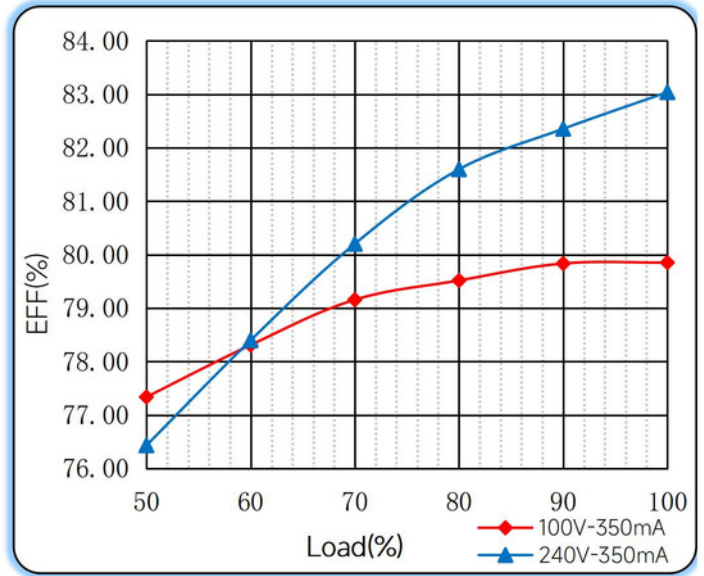


Curve for CH-12-350 IP65 LB1, I_o=350mA

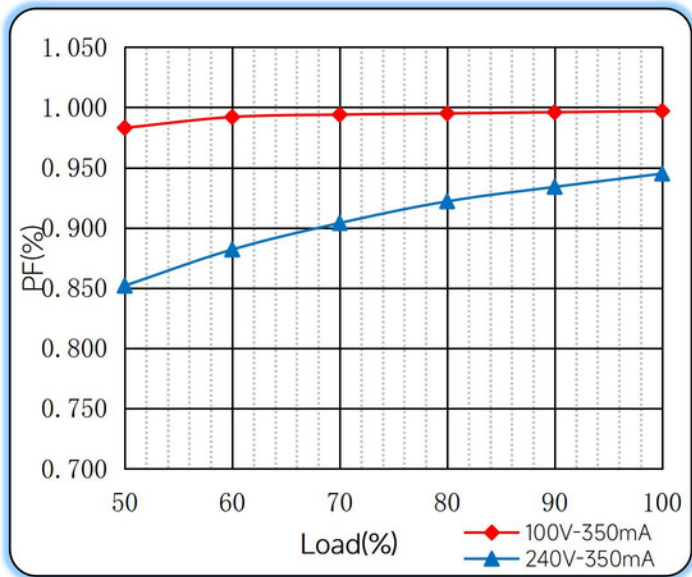
Lifetime vs. Temperature Curve



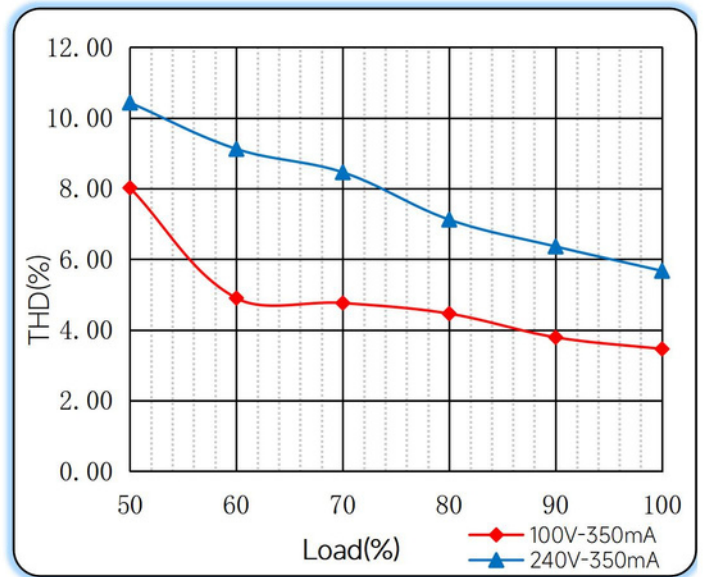
Efficiency vs. Load



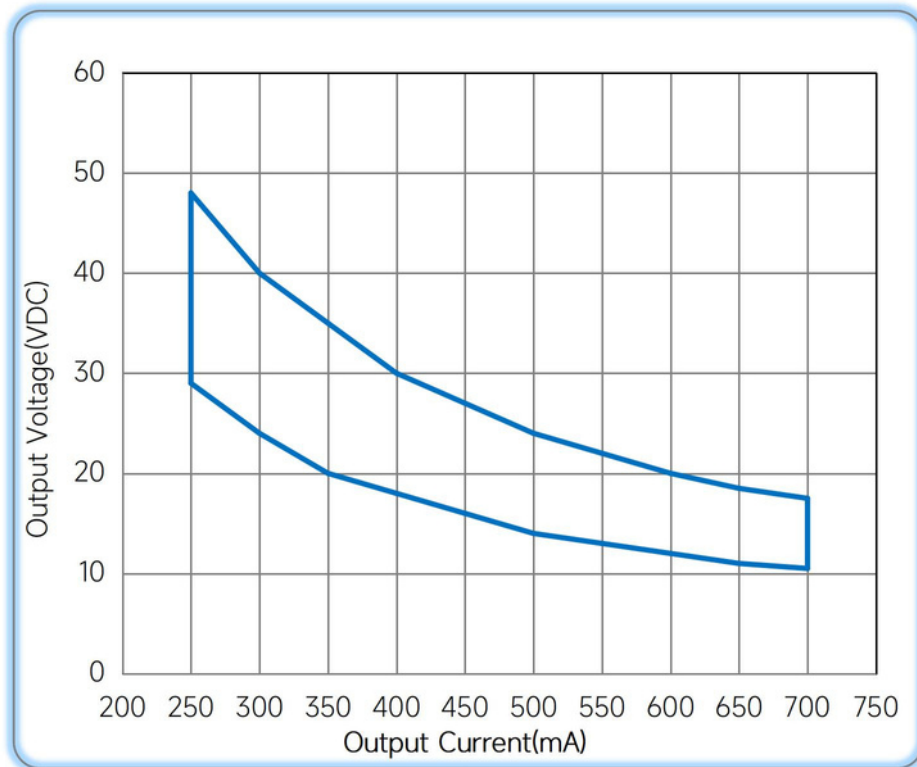
Power Factor Characteristics



THD vs. Load



Operating window



— Operating window 100%

Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/15