



Constant Voltage Driver

Model: CV12WXXCG-M



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
CV12W12CG-M	0-1A	0.085A	≤14.5W	0-12W	≥0.8	83%	12V	13V
CV12W24CG-M	0-1.5A	0.085A	≤14.3W	0-12W	≥0.8	84%	24V	25V

* Test result @230V, 50Hz, Full Load.

* Recommended minimum full load power is 10% load.

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Voltage
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Frequency	50-60Hz
	Input Current	≤0.085A (230VAC, full load)
	Input Power	≤14.5W (230VAC, full load)
	Power Factor	≥0.8 (230VAC, full load)
	THD	≤70% (230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤30A/150us (230VAC, full load)
Output	Output Voltage Range	12VDC+5% or 24VDC+5%(Potentiometer adjusts output voltage±2V)
	No Load Voltage	12VDC+5% or 24VDC+5%(Potentiometer adjusts output voltage±2V)
	Output Current	0-1000mA @12V
		0-500mA @24V
	Max. Output Power	12W
	Efficiency	≥84% (230VAC, full load)
Current Ripple(< 120 Hz)	±5% (Imax-Imin)/(Imax+Imin)	

	Output Voltage Ripple	<120mV _{PK-PK} (0.5%)@12V
		<240mV _{PK-PK} (0.5%)@24V
	Line Regulation	±1%
	Load Regulation	±2%
	PstLM	≤1
	SVM	≤0.4
	Overshoot	<105%Vo
Started Delay Time	≤0.5S(230VAC, full load)	
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	Over Current Protection	110%-150%Vo, Auto Recovery
	Over Temperature Protection	/
	No-load Protection	/
	Insulation voltage	3750V 5mA 60S between P-S
	Insulation resistance	>100M ohm @ 500VDC
Leakage current	I/P to O/P <0.7mA	
Environment	Ta/Operation Temperature	-20.....+40°C
	Ts/Storage Temperature	-25.....+85°C
	Tc/Enclosure Temperature	90°C
	Humidity	10%....90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Independent
	PRI Wire preparation	0.75-2.5 [±] / 8-9mm
	SEC Wire preparation	0.5-2.5 [±] / 8-9mm
	Dimension	118.3*43*21.6mm (L*W*H)
Standards	Certification	CE EAC
	Safety Standards	EN 61347-1:2015/A1:2021 EN 61347-2-13:2014/A1:2017 EN IEC 62384:2020 EN 62493:2015 AS61347.2.13:2018 AS/NZS61347.1:2016 Inc A1 BS EN 61347-1:2015/A1:2021 BS EN 61347-2-13:2014/A1:2017 BS EN 62493:2015 BS EN IEC 62384:2020
	EMC Standards	EN IEC 55015:2019 EN IEC 55015:2019/A11:2020 EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021 EN 61547:2009
	Performance	EN62384:2020
	Surge	L-N/2KV
Others	RoHS	complied to 2011/65/EU
	REACH	EU Regulation (EC) No 1907/2006

	Life Time	50000h @Ta/ Tc
	Warranty	5years ,F.R. < 10000ppm
	Noise	≤ 24dB @Background noise ≤18dB ,Interval≥15cm

Remark:

1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.
2. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
3. Do not install upside down.

2. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage (V)	Inrush Current(A)	Time (μs)
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm ²	2.5mm ²	2.5mm ²	4mm ²	4mm ²			
TYPE B		50	65	80	100	125	@230VAC	12	336
TYPE C		80	104	128	160	200			
TYPE D		128	166	205	256	320			

3. Label

KGP
KGP Electronics GmbH
Hueckstraße 19
DE-58511 Lüdenscheid

Constant Voltage LED Driver
MODEL:CV12W12CG-M

L ■ INPUT: 220-240V~ 50/60Hz 85mA Max. PF>0.8 ■ -

N ■ OUTPUT: 12V--- 1A 12W Max. ■ +

PRI wire prep For LED modules only
0.75-2.5mm²
tc: 85°C ta: -25...40°C

SEC wire prep
0.5-2.5mm²
8-9mm

SELV

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Constant Voltage LED Driver
MODEL:CV12W24CG-M

L ■ INPUT: 220-240V~ 50/60Hz 85mA Max. PF>0.8 ■ -

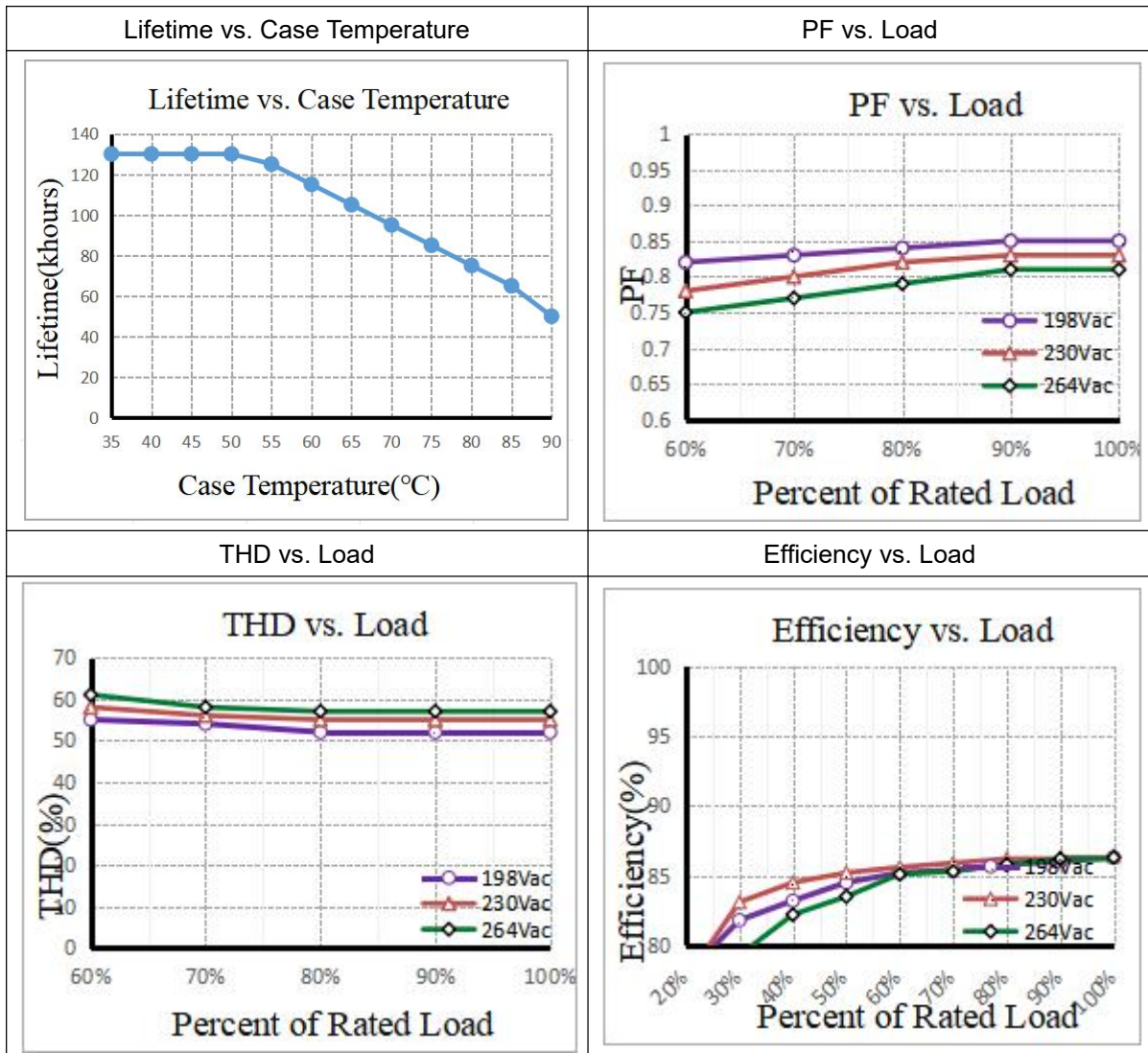
N ■ OUTPUT: 24V--- 0.5A 12W Max. ■ +

PRI wire prep For LED modules only
0.75-2.5mm²
tc: 85°C ta: -25...40°C

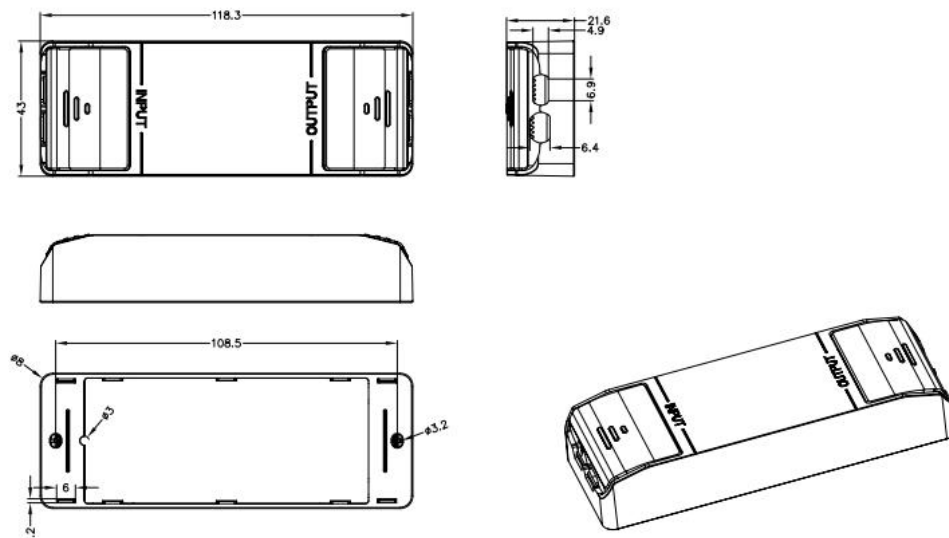
SEC wire prep
0.5-2.5mm²
8-9mm

SELV

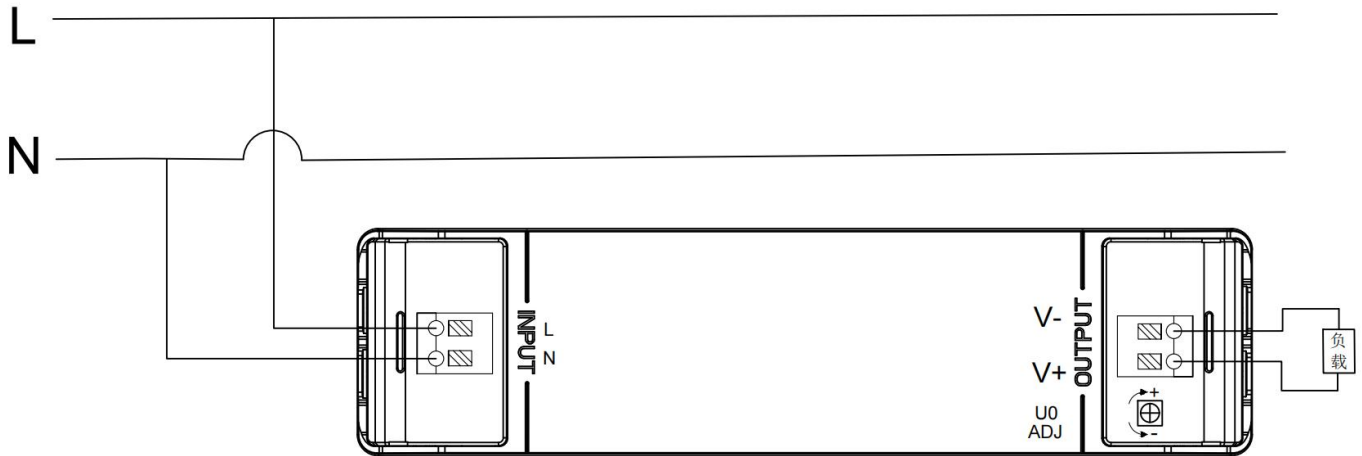
4. Electrical values



5. Dimension (Unit: mm)



6. Wiring Diagram



7. Packing information

Packing way	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
Industrial	447*240*200	80	0.068	5.44	6.21

8. Wiring instructions

- All connections must be kept as short as possible to ensure good EMI behaviour
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Advice the maximum length of output wires is 0.8 m
- Secondary switching is not permitted (Except for constant voltage)
- Incorrect wiring can damage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc.)
- Hot plug-in is not supported due to residual output voltage of > 0 V up to mains voltage. Danger to life.
- When connecting an LED load, restart the device to activate the LED output.
- This can be done via mains reset or via interface (DALI, DSI, switch DIM).

9. Replace LED module

- Mains off
- Remove LED module
- Wait for 30 seconds
- Connect LED module again
- Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs

10. REVISION HISTORY

DATE	REV	Modification details
2025-03-28	V1.0	Initial release