Constant Voltage Driver

Model:CV250W24CG

Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
CV250W24CG	0-10.42A	≤1.5A	≤275W	75-250W	≥0.95	93%	24V	23.5-24.5V

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Voltage
	Output Features	Isolation SELV
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC or 180-280VDC
	Frequency	50/60Hz
	Power Factor	≥0.95 (230VAC，full load)
	THD	≤7% (230VAC，full load)
	No-load Power Consumption	≤0.5W, @230VAC,Dim to OFF
	Inrush Current	≤70A/16us (230VAC，full load)
Output	Output Voltage	24VDC+5%
	No load Voltage	24VDC+5%
	Output Current	10.42A (Max. output)
	Max. Output Powe	250W
	Efficiency	≥94% (230VAC，full load)
	Current Ripple(< 120 Hz)	±5% (Imax-Imin)/(Imax+Imin)
	Output Voltage Ripple	<480mVPK-PK (1%)
	Line Regulation	±1%
	Load Regulation	±2%
	PstLM	≤1
	SVM	≤0.4
	Overshoot	<105%Vo
	Current Accuracy	±5%
	Started Delay Time	≤0.5S(230VAC，full load)
Protection	Short Circuit Protection	Auto Recovery
	Over Current Protection	Auto Recovery
	Over Voltage Protection	110%-150%Vo, Auto Recovery

	Over Temperature Protection	90<Tc<110℃, Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	3000V 5mA 60S between P-S
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	I/P to O/P <0.7mA
Environment	Ta/Operation Temperature	-25….+50℃
	Ts/Storage Temperature	-25….+85℃
	Tc/Enclosure Temperature	90℃
	Humidity	10%....90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Independent
	PRI Wire preparation	0.75-2.0□/ 8-9mm
	SEC Wire preparation	0.75-2.0□/ 8-9mm
	Dimension	270*50*31mm (L*W*H)
Standards	Certification	CE
	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

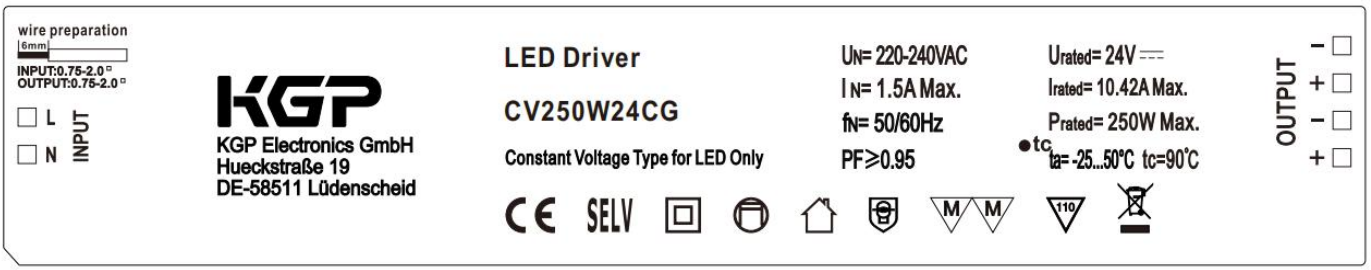
Remark:

1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ 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. During the PUSH DIM test, the number of parallel connections must be less than 64 PCS
4. Do not install upside down.

2. Connected quantities of different current Breaker

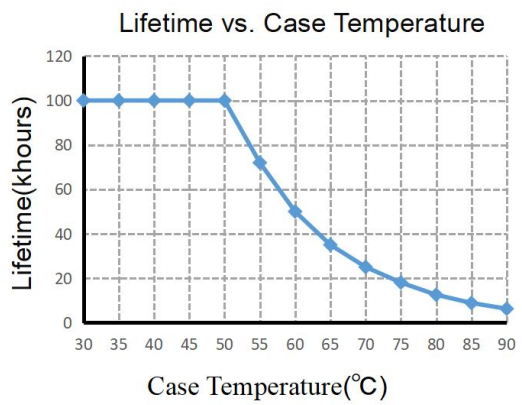
TYPE	LV250W24CG Connected quantities of different current Breaker						Input Voltage	Inrush Current <70A	Time
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		9	12	14	18	22	@230VAC	67	250μs
TYPE C		14	19	23	29	36			
TYPE D		23	30	37	46	57			

3. Label

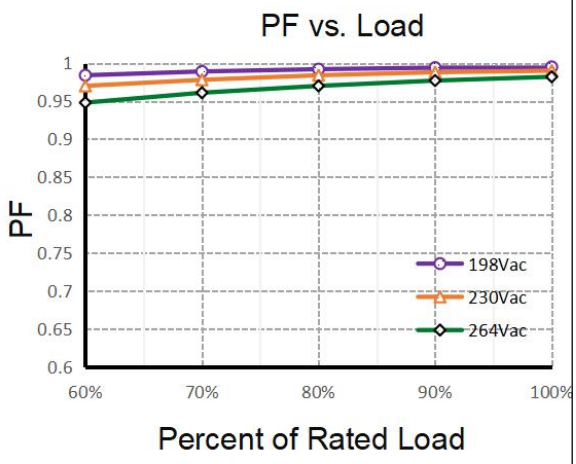


4. Electrical values

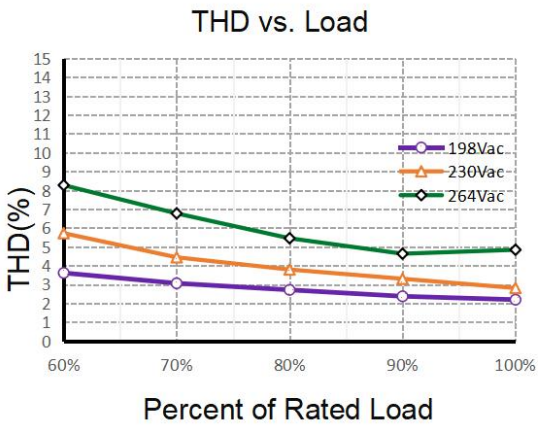
Lifetime vs. Case Temperature



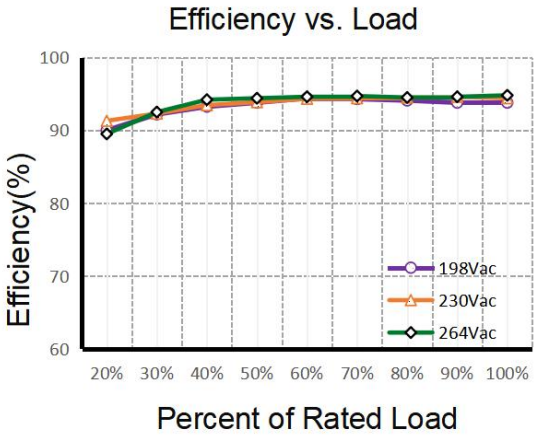
PF vs. Load



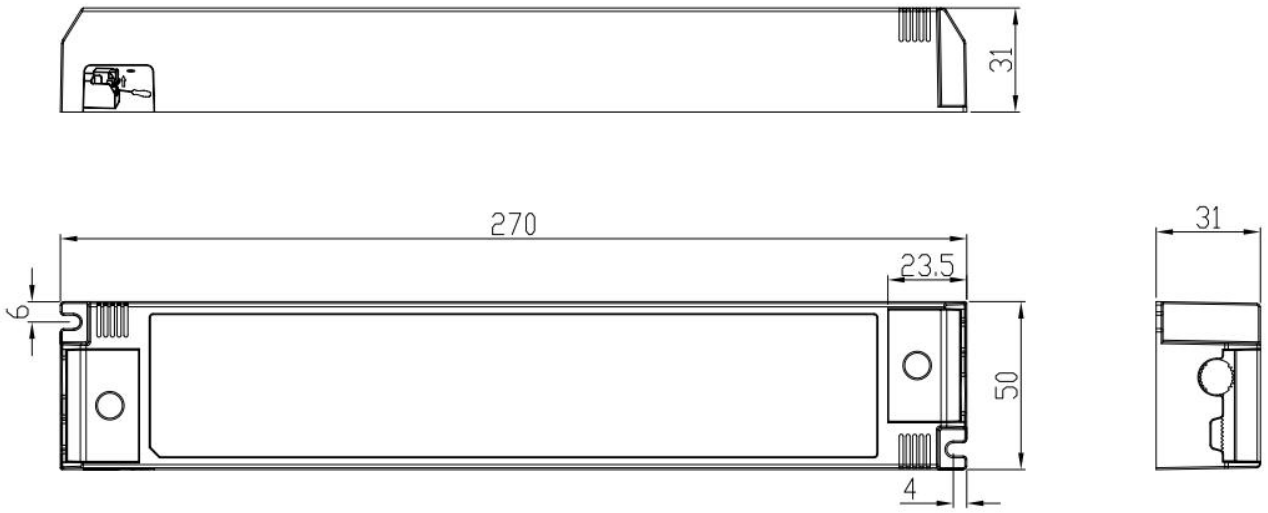
THD vs. Load



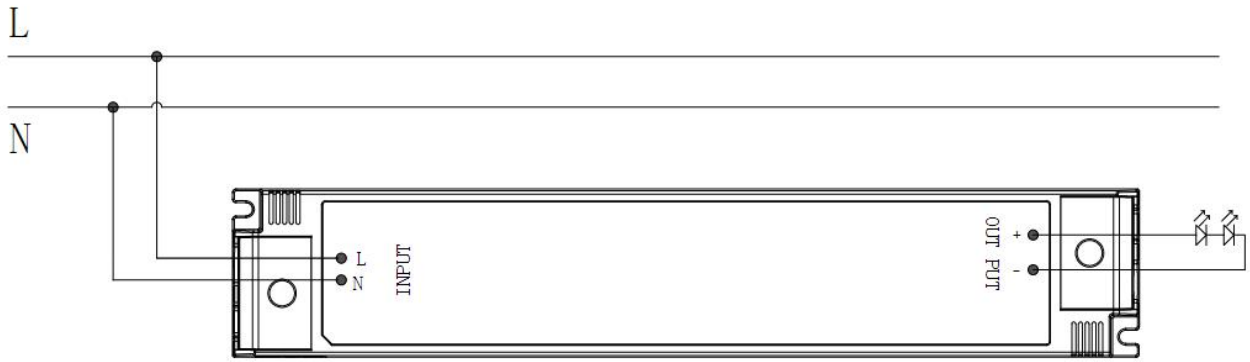
Efficiency vs. Load



5. Dimension （Unit：mm）



6. Wiring Diagram



7. Packing information

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
Industrial	CV250W24CG	275*270*225	24	0.620	15.50	14.88

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 0.5 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.

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
2024-12-12	V1.0	Initial release.