



Constant Voltage Driver

Model: CV120W24CG-4



Model	Rated Input Voltage	Input Power	Input Current	PF	Output Power Range	Output Voltage	Output Current	Efficiency (typ.)	Cementing product
CV120W24CG-3	220-240VAC	≤135W	≤0.65A	≥0.95	120W	24V	5000	93%	Y

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

* Recommended minimum power is 10% load.

1. Parameters

Category	Item	Technical Norm							
Features	Output Type	Constant Voltage							
	Dimmable Type	Non-dimmable							
	Output Features	Isolation SELV							
	IP Grade	IP20							
	Insulation Class	Class II							
Input	Rated Input Voltage	220-240VAC							
	Range of AC Input Voltage	198-264VAC							
	Frequency	Rate:50/60Hz, Range:47~63Hz							
	Power Factor	≥0.95, 220-240VAC, Rated Load, see graphs							
	THD	≤10% 230VAC, Rated Load, see graphs							
	Standby Power Consumption	≤0.5W, @230VAC, NO Load							
	Inrush Current	<55A 50A 272us (230VAC, full load)							
Output	Output Voltage	23.3-25.2VDC							
	No load Voltage	24-25.2VDC							
	Output Voltage Ripple	<2% Vp-p							
	PstLM	≤1							
	SVM	≤0.4							
Output	Line Regulation	±1%							
	Load Regulation	±2%							
	Start-up Time	≤0.5S (220-240VAC)							
	Voltage rise time	≤0.1S (0 to 90%)							
	Hold-up time & Turn off time (Typical)	<table border="1"> <thead> <tr> <th>Model</th> <th>Hold-up time(mS)</th> <th>Turn-off time(mS)</th> <th>230VAC, LED Rated Load, Hold-up time measure from AC input turn-off to output voltage drop to 90%, turn-off time measure from AC input turn-off to output</th> </tr> </thead> <tbody> <tr> <td>120W</td> <td>32</td> <td>254</td> <td></td> </tr> </tbody> </table>	Model	Hold-up time(mS)	Turn-off time(mS)	230VAC, LED Rated Load, Hold-up time measure from AC input turn-off to output voltage drop to 90%, turn-off time measure from AC input turn-off to output	120W	32	254
Model	Hold-up time(mS)	Turn-off time(mS)	230VAC, LED Rated Load, Hold-up time measure from AC input turn-off to output voltage drop to 90%, turn-off time measure from AC input turn-off to output						
120W	32	254							

					voltage drop to 10%
	Efficiency	120W	≥92%	93% typ.	230VAC, Rated Load, at output terminals, see graphs
Protection	Short Circuit Protection	Auto Recovery			
	Over Current Protection	Auto Recovery			
	Over Voltage Protection	Auto Recovery			
	Insulation voltage	I/P to O/P,3KVac/5mA/1min			
	Insulation resistance	>100M ohm @ 500VDC			
	Leakage current	I/P to O/P < 250μA			
Environment	Ta/Operation Temperature	-25....+50°C			
	Ts/Storage Temperature	-25....+85°C			
	Tc/Enclosure Temperature For Safety	90°C (for 120W)			
	Storage Humidity	5%-95%			
	Operation Humidity	10%-90%			
	Atmosphere	86-108KPa			
Construction	Connection Method	Push-in Terminal			
	Cable Terminals	PRI	1 terminal block(L, N)		
		SEC	2terminals block(+,-)		
	Installation	Independent			
	PRI Wire Cross Section	0.75mm ² -2.5 mm ² wire prepatation 6-7mm			
	SEC Wire Cross Section	2*0.5mm ² -2.5 mm ² wire prepatation 6-7mm			
	SEC Cable Length	Max. 3M			
	Cable diameters range	PRI	3-10mm		
		SEC	3-10mm		
	Dimension	120W	253*42.5*31mm (L*W*H)		
Standards	Certification	ENEC CCC UKCA SAA CB CE EAC			
	Safety Standards	EN 61347-1:2015/A1:2021;EN 61347-2-13:2014/A1:2017 EN IEC 62384:2020;EN 62493:2015/A1:2022 AS61347.2.13:2018;AS/NZS61347.1:2016 Inc A1 GB 19510.1-2009;GB 19510.14-2009;GB 19510.1-2023 GB 19510.213-2023,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 61547:2023 EN IEC 55015:2019/A11:2020 EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021 BS EN IEC 55015:2019 BS EN IEC 55015:2019+A11:2020 BS EN IEC 61000-3-2:2019/A1:2021 BS EN 61000-3-3:2013+A2:2021 BS EN IEC 61547:2023			
	Performance	EN62384			
	Surge	L-N:2KV;L,N-PE:1KV			
Others	RoHS	2011/65/EU			

	Audible Noise	<20dB @ 20cm distance, 14 ± 1dB background
	Life Time	50 Khrs @Tc max; Max Failure rate <= 1.0 %
	Warranty	5 years, Failure rate <=1%

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. Output ripple should be measured at the output end which has with 0.1uF/50V ceramic capacitance and 47uF/50V Aluminum capacitance connected in parallel. Measured using oscilloscope with bandwidth limited to 20MHz.

2. Connected quantities of different current Breaker

TYPE	CV120W24CG-4 Connected quantities of different current Breaker						Input Voltage	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	12	16	19	24	30	@230VAC	50	272	
TYPE C	19	25	31	38	48				
TYPE D	31	40	49	61	77				

3. Label

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LED Driver LED控制装置

CV120W24CG-4

Constant Voltage Type for LED Only

U_N= 220-240VAC
 I_N= 0.65A Max.
 f_N= 50/60Hz
PF ≥ 0.95

U_{rated}=24VDC const.
 I_{rated}= 5000mA Max.
 P_{rated}= 120W Max.
 ta= -25...50°C tc= 85°C

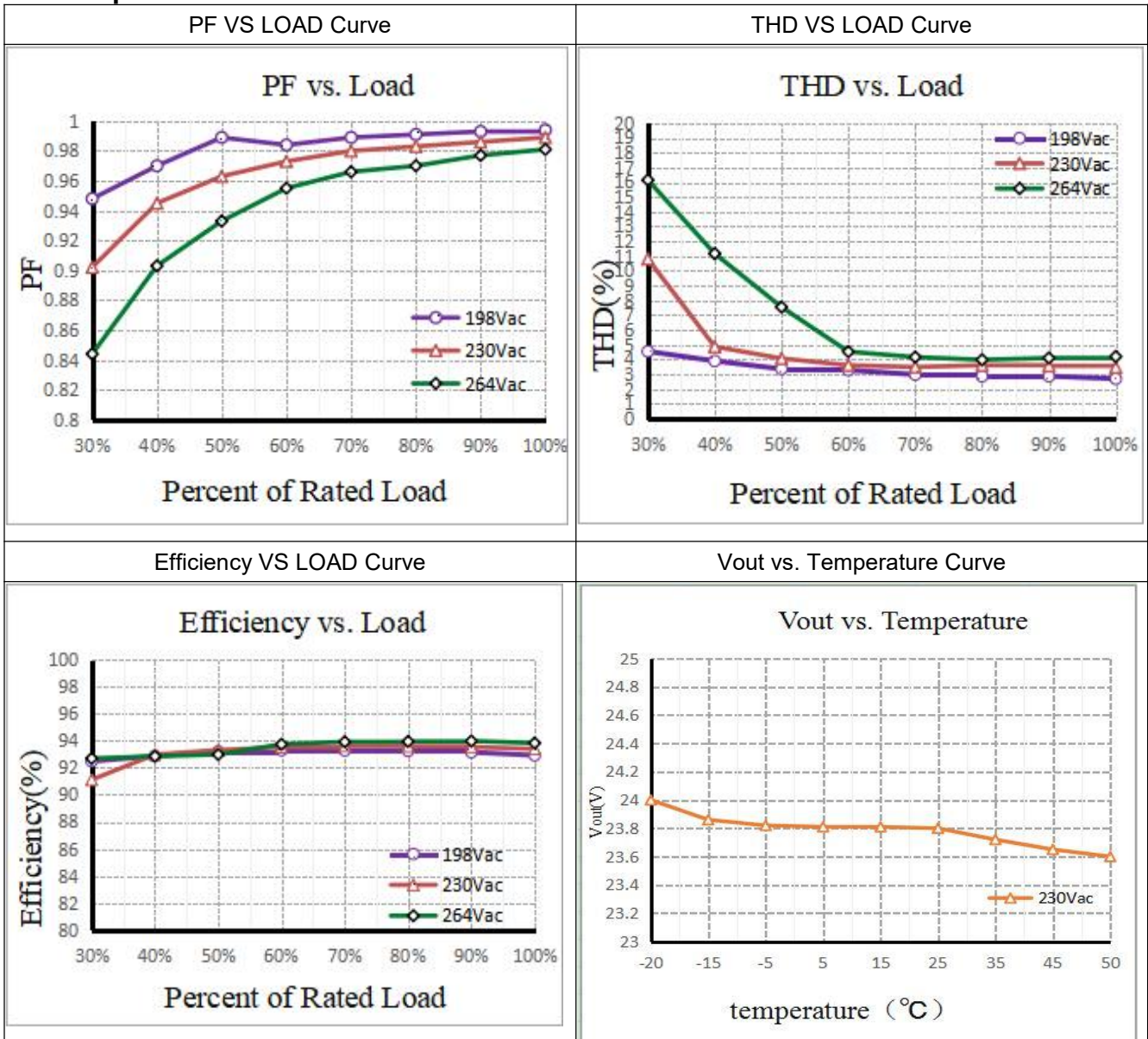


LED+ + □
 LED- - □
 U_{out}=25VDC Max.
 wire preparation
 8mm PRI 0.75-2.5
 SEC 0.5-2.5

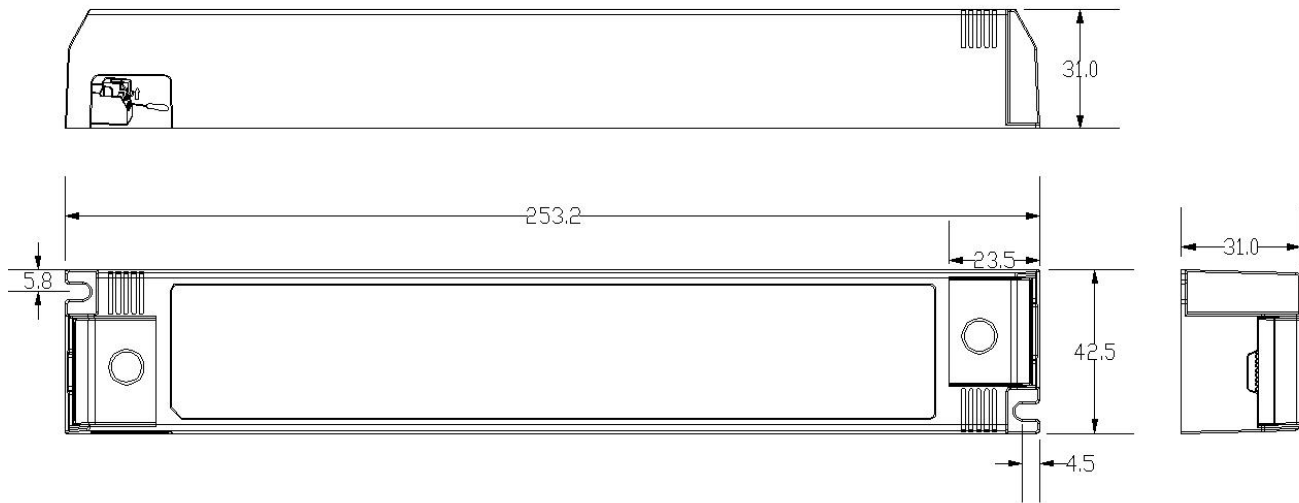


Note: Silk screen or laser engraving.

4. Graph



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)
With white box and manual	CV120W24CG-4	420*270*180	35	0.332	11.62	12.36

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 3 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	REMARK
2025-09-27	V1.0	Initial release.