



### Constant Voltage Driver

Model:CV180W24CG-4



Model	Rated Input Voltage	Input Power	Input Current	PF	Output Power Range	Output Voltage	Output Current	Efficiency (typ.)	Cementing product
CV180W24CG-4	220-240VAC	≤201W	≤0.89A	≥0.95	180W	24V	7500	93%	Y

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

\* Recommended minimum power is 5% 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 >0.9 230VAC 30% Load			
	THD	≤10%	230VAC, Rated Load, see graphs		
		<20%	230VAC 30% Load		
	No Load Power Consumption	≤0.5W, @230VAC,NO Load			
	Inrush Current	≤55A/750us (230VAC, full load)			
Output	Output Voltage	23.3-24.7VDC			
	No load Voltage	24-25VDC			
	Output Voltage Ripple	≤600mV (AC Vp-p)			
	Line Regulation	≤1%			
	Load Regulation	≤2%			
	filcker	SVM ≤0.4, PstLM ≤1.0			
	Start-up Time	≤0.5S (220-240VAC)			
	Voltage rise time	≤0.1S ( 0 to 90%)			
	Hold-up time & Turn off time (Typical)	Model	Hold-up time(m S)	Turn-off time(mS)	230VAC, LED Rated Load, Hold-up time measure from AC input turn-off to output voltage drop to 90%,
		180W	46	296	

					turn-off time measure from AC input turn-off to output voltage drop to 10%
	Efficiency	180W	≥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,3.75KVac/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			
	Storage Humidity	5%-95%			
	Operation Humidity	10%-90%			
	Atmosphere	86-108KPa			
Construction	Connection Method	Terminal			
	Cable Terminals	PRI	1 terminal block(L, N)		
		SEC	2terminals block(+,-)		
	Installation	Independent			
	PRI Wire Cross Section	0.75mm <sup>2</sup> -2.5 mm <sup>2</sup> wire prepatation 6~7mm			
	SEC Wire Cross Section	2*0.75mm <sup>2</sup> -2.5 mm <sup>2</sup> wire prepatation 6~7mm			
	SEC Cable Length	Max. 3M			
	Cable diameters range	PRI	3-10mm		
		SEC	3-10mm		
	Dimension	180W	253*42.5*31mm (L*W*H)		
Standards	Certification	ENEC CCC UKCA SAA CB CE EAC			
	No outputF1 is damaged	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	EN62384:2020			
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	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 <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
TYPE B	12	16	19	24	30	@230VAC	50	680	
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**  
**CV180W24CG-4**  
 Constant Voltage Type for LED Only

Un= 220-240VAC  
 In= 0.89A Max.  
 fn= 50/60Hz  
**PF≥0.95** etc

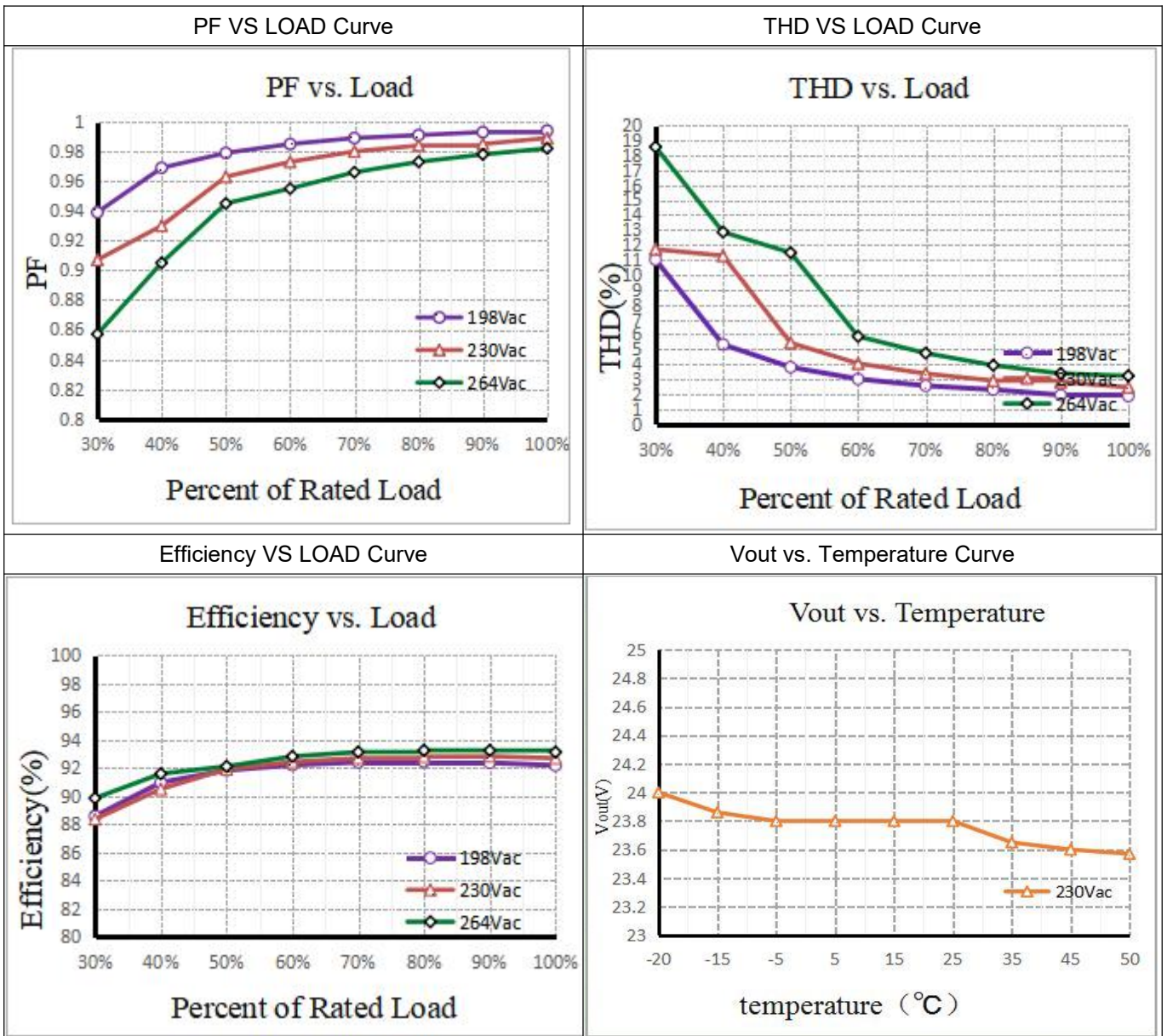
Urated= 24VDC const.  
 Irated= 7500mA Max.  
 Prated= 180W Max.  
 ta= -25...50°C tc= 90°C

LED+  +  
 -  
 LED-  +  
 -  
 Uout= 25VDC Max.

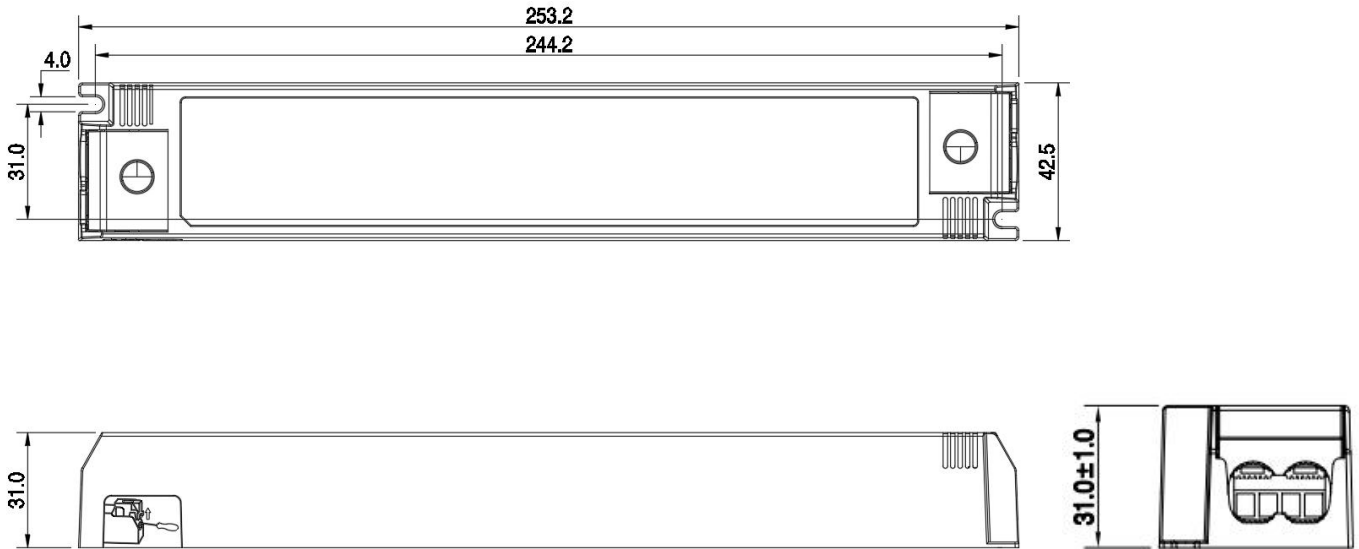
wire preparation  
  
 6mm PRI 0.75-2.5  
 SEC 0.5-2.5

**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	CV180W24CG-4	420*270*180	35	0.432	15.12	16.36

### 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)

- Advise 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.