# Constant Voltage LED Power Supply Phasecut Dimmable

SLD120-24VL-E





#### Product description:

This type of dimmable power supply is an exclusively designed stabilized power supply for LED lamp. With constant voltage (CV) technology, it is suitable for constant voltage lamps(24Vdc) connected in parallel. The output current of the converter could be dimmed between 5%-100% by trailing or leading edge dimmers.

The built-in protection circuit will shut down the power supply in case of such faults as: open circuit, short circuit, over load and over temperature. The power supply will restart automatically after fault correction.

#### Standards:

EN61347-1

EN61347-2-13

EN61547

EN55015

EN61000-3-2

EN61000-3-3

EN62384

EN62493

#### **Characteristics:**

- Independent dimming power supply for constant voltage led lamp
- Terminal block for quick connection
- The output current of the power supply could be dimmed between 5%-100% by trailing edge or leading edge dimmers.
- Ripple free in all dimming range
- With function ground terminal suitable for Class I application
- Open circuit, short circuit, over load and over temperature protection
- Auto restart after fault conditions removal
- warranty: 5 years



Page: 1 of 5



## Specifications:

Model		SLD120-24VL-E
Output	turn on time(S)	0.5
	output power(W)[1]	120
	output votage(V)	24
	output voltage tolerance[2]	±5%
	ripple voltage[3]	500mV
	working current range(A)	0.5-5.0 with dimmer/0-5.0 without dimmer
	dimming interface	trailing or leading edge or Intelligent dimming system
	dimming range <sup>[4]</sup>	5%-100%
Input	rated supply voltage(Vdc)	
	rated supply voltage(Vac)	220-240
	voltage range(Vac)	198-264
	line frequency(Hz)	50/60
	input current(mA) <sup>[5]</sup>	630
	efficiency <sup>[5]</sup>	90.0%
	average efficiency <sup>[6]</sup>	87.0%
	Typ. input power inno-load operation	-
	power factor <sup>[5]</sup>	0.95
	THD (at 230 V, 50 Hz, full load)	10%
Protection	inrush current(lpk) Max. ECG no. on circuit	55A/190us
	breaker 10 A (B)/16A(B)/25A(B)	7/12/18
	over voltage protection	YES
	short circuit protection	YES
	over temperature protection	YES
	automatic restart	YES
	over load protection	YES
	surge capability	L-N: 2KV, LN-PE:4KV
Amblent and Life	Ta(°C)	-2045
	Tc max.(°C)	85
	Storage Temperature(°C)	-3080
	ambient humidity range	5%85%RH, Not condensing
	nominal life-time(hrs)[7]	30'000@Tc=85 C
	audible noise(dB)	<30
	MTBF	0.1%/1000h@Ta=25℃
	Suitable for fixtures with prot. class	Class I or Class II
Other	weight(g)	665
	dimensions (L×W×H)(mm)	223×64×32
	casing material	Plastic
	housing colour	White
	type of protection	IP20
	protection class	ClassII

Last update: 06 Jun, 2018

Page: 2 of 5



[1]: Measurement precision for output power +/- 10%.

- [2]: Tolerance:includes set up tolerance, line regulation and load regulation.
- [3]: Tested at ripple peak value of 100Hz/120Hz and withour dimmer.
- [4]: The dimming range varies according to the test without dimmer.
- [5]: Tested at full load,230Vac.Refer to "Power Factor" and "EFFICIENT" curve graphs. Minimum power factor is rated value 0.05.

Note

[6]: Calculate the model's average efficiency for each test voltage by testing at 100%, 75%, 50%, and 25% of rated current and then computing the simple arithmetic erage of these four values.

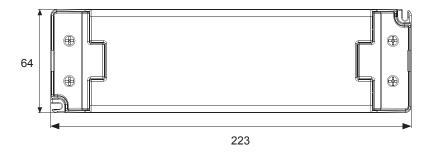
[7]: Life-time with dimmer is depented to the difference dimmer.

All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature.

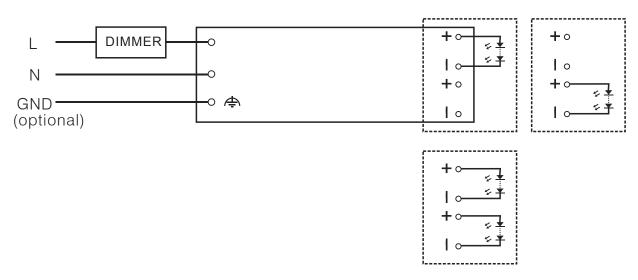
The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.

## Dimensions (mm):





#### Wiring diagram:

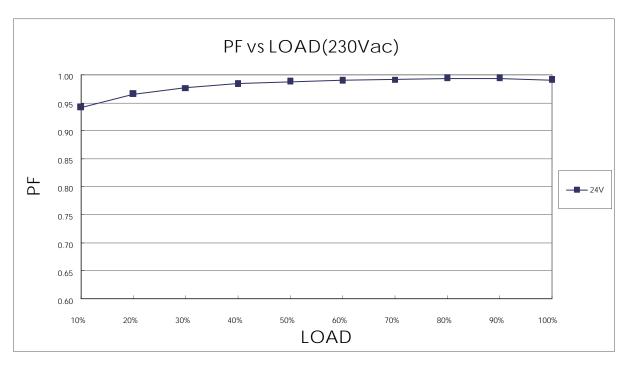


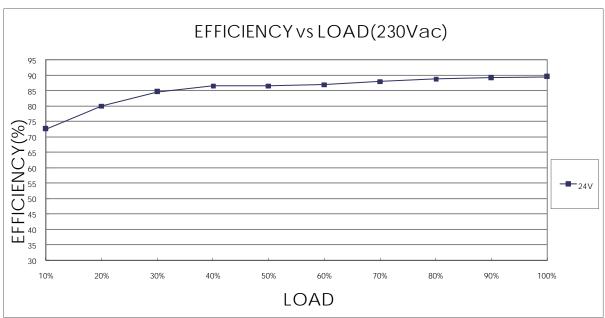
Last update: 06 Jun, 2018

Page: 3 of 5

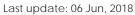


### Electrical curves (Reference):





note
For constant current power supply, "LOAD" means the percentage of the maximum rated output voltage.
For constant voltage power supply, "LOAD" means the percentage of the maximum rated output current.



Page: 4 of 5



# Sales & Technical Support:

#### Self Electronics Co.,Ltd.

Add: No. 1345 Ju Xian Road, Ningbo Hi Tech Park, Ningbo, China Tel: 0086-574-28805765,28805658(For English Assistance) 0086-574-28805678 (For Chinese Assistance)

Fax: 0086-574-28805656 E-mail: sales@self-ecg.com http://www.self-ecg.com

#### **SELF ELECTRONICS GERMANY GMBH**

Add:August-Horch-Str. 7,51149 Koeln Tel: 0049 2203 18501-0 Fax: 0049 2203 18501-199

E-mail: saleseu@self-electronics.com

#### Self Electronics Co.,Ltd.,Shenzhen Office

Add: Room2007, Xinglang Xuan, Xinghe Mingju, Fuming Road, Futian District, Shenzhen Tel: 0086-755-83558850, 83558851 Fax: 0086-755-83558840



Last update: 06 Jun, 2018

Page: 5 of 5

<sup>\*</sup>Due to continuous improvements and innovations, specifications are subjected to change without notice.