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
- \bullet 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



Official version Last update: 15 May, 2020

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Specifications:

| Model | | SLD120-24VL-E | | | | |
|------------|--|--|--|--|--|--|
| | turn on time(S) | 0.5 | | | | |
| | output power(W) ^[1] | 120 | | | | |
| | output votage(V) | 24 | | | | |
| | output voltage tolerance[2] | ±5% | | | | |
| Output | 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 ^[4] | 5%-100% | | | | |
| | rated supply voltage(Vdc) | - | | | | |
| | rated supply voltage(Vac) | 220-240 | | | | |
| | voltage range(Vac) | 198-264 | | | | |
| | line frequency(Hz) | 50/60 | | | | |
| Input | input current(mA) ^[5] | 630 | | | | |
| | efficiency ^[5] | 90.0% | | | | |
| | average efficiency ^[6] | 87.0% | | | | |
| | Typ. input power inno-load operation | • | | | | |
| | power factor ^[5] | 0.95 | | | | |
| | THD (at 230 V, 50 Hz, full load) | 10% | | | | |
| | 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 | | | | |
| Protection | short circuit protection | YES | | | | |
| Trotection | over temperature protection | YES | | | | |
| | automatic restart | YES | | | | |
| | over load protection | YES | | | | |
| | surge capability | L-N: 2KV, LN-PE:4KV | | | | |
| | Ta(℃) | -2045 | | | | |
| | Tc max.(°C) | 85 | | | | |
| | Storage Temperature(°C) | -3080 | | | | |
| Ambient | ambient humidity range | 5%85%RH, Not condensing | | | | |
| and Life | nominal life-time(hrs)[7] | 30'000@Tc=85 ℃ | | | | |
| | audible noise(dB) | <30 | | | | |
| | MTBF | 0.1%/1000h@Ta=25°C | | | | |
| | Suitable for fixtures with prot. class | Class I or Class II | | | | |
| | weight(g) | 665 | | | | |
| | dimensions (L×W×H)(mm) | 223×64×32 | | | | |
| Other | casing material | Plastic | | | | |
| | housing colour | White | | | | |
| | type of protection | IP20 | | | | |
| | protection class | ClassII | | | | |



[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.
- [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

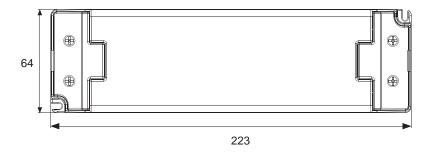
- [6]: Calculate the model's average efficiency for each test voltage by testing at 100%, 75%, 50%, and 25% of rated current and then computing the simple arithmetic erage of these four values.
- [7]: Life-time with dimmer is depented to the difference dimmer.

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

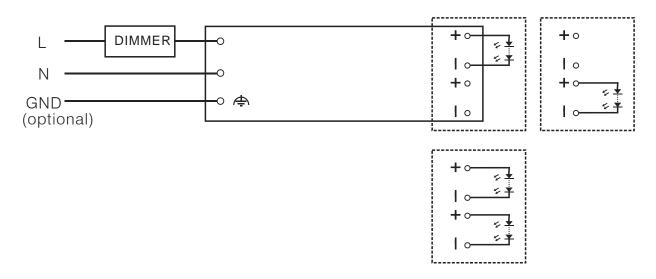
The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.

Dimensions(mm):



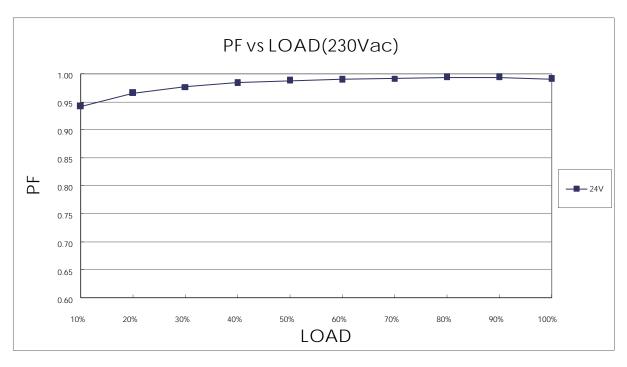


Wiring diagram:





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.



MCBS information:

| Miniature circu breaker Model Model | B10 | B13 | B16 | B20 | C10 | C13 | C16 | C20 |
|--|-----|-----|-----|-----|-----|-----|-----|-----|
| SLD120-24VL-E | 8 | 10 | 13 | 16 | 13 | 16 | 22 | 27 |

Order information:

| Order.No. Model | | Carton quantity(pcs) | Carton dimension(mm) | G.W./CTN(kg) | |
|------------------|---------------|----------------------|----------------------|--------------|--|
| 1001-210053-0131 | SLD120-24VL-E | 20 | 305x240x230 | 13.8 | |

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*Due to continuous improvements and innovations, specifications are subjected to change without notice.

