

Constant Voltage LED Power Supply

SLT20-12VFC-1
SLT20-24VFC-1



Product description:

This type of power supply is an exclusively designed stabilized power supply for LED lamp. With constant voltage (CV) technology, it is suitable for constant voltage lamps (12/24V DC) connected in parallels. As an advantage of constant voltage (CV) technology.

The built-in protection circuit will shut down the power supply in case of such faults as: open circuit, short circuit, over load or 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

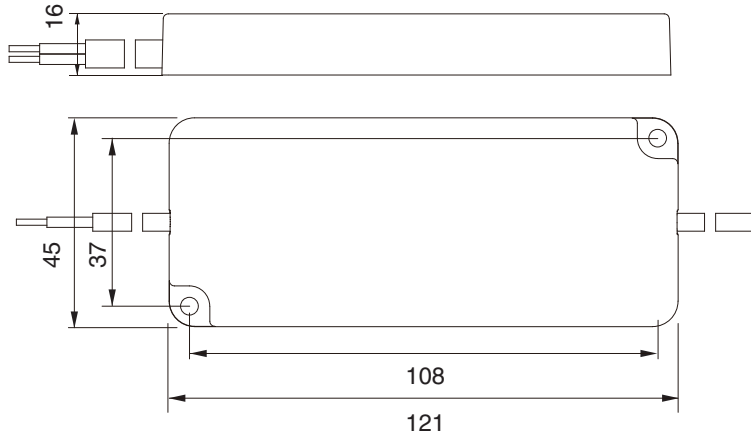
Characteristics:

- Independent power supply for constant voltage LED lamp
- Special design screw terminal for field connection
- New harmonic requirements meet
- Class II protection against electric shock from direct and indirect contact
- SELV output
- Open circuit, short circuit, over load and over temperature protection
- Auto restart after fault conditions removal
- Quiet design, working noise is less than 20dB
- No load power consumption $\leq 0.5W$
- Efficiency $\geq 81\%$ (AC230V, full load)

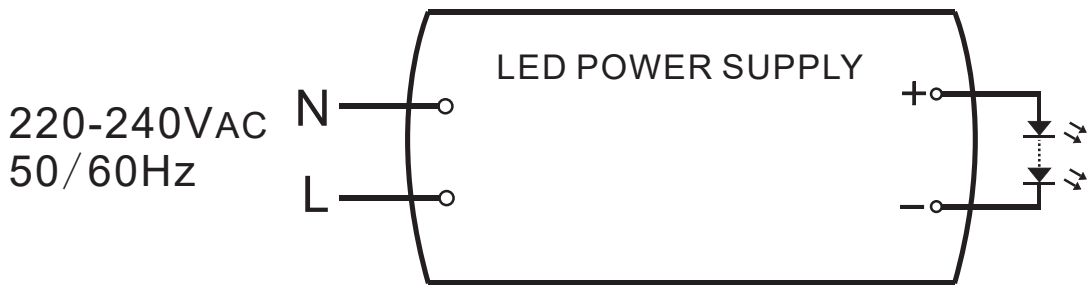
Specifications :

| Model | SLT20-12VFC-1 | SLT20-24VFC-1 | |
|------------------|---|--------------------------|------------------|
| Output | turn on time(S) | ≤0.5 | ≤0.5 |
| | output power(W) | 20 | 20 |
| | output votage(V) | 12 | 24 |
| | output voltage tolerance ¹ | ±3% | ±3% |
| | ripple voltage(mV) | 900(Vp-p) | 1200(Vp-p) |
| | working current range(A) | 0-1.67 | 0-0.84 |
| | dimming interface | No | |
| | dimming range | n/a | |
| Input | rated supply voltage(Vac) | 220-240 | 220-240 |
| | voltage range(Vac) | 198-264 | 198-264 |
| | line frequency(Hz) | 50/60 | 50/60 |
| | input current(mA) | 130 | 130 |
| | efficiency ² | ≥82%@full load | ≥83%@full load |
| | average efficiency ³ | ≥80% | ≥81% |
| | no load power consumption(W) | ≤0.5 | ≤0.5 |
| | power factor ² | ≥0.85C@full load | ≥0.85C@full load |
| | inrush current(Ipk) | 15A/100uS | 15A/100uS |
| Protection | over voltage protection | YES | YES |
| | short circuit protection | YES | YES |
| | over temperature protection | YES | YES |
| | automatic restart | YES | YES |
| | over load protection | YES | YES |
| | surge capacity | L-N: 500V | L-N: 500V |
| Ambient and Life | Ta(°C) | -20...45 | -20...45 |
| | Tc max.(°C) | 90 | 90 |
| | Storage Temperature(°C) | -30...80 | |
| | ambient humidity range | 5%...85%, Not condensing | |
| | nominal life-time(hrs) | 30'000@Tc=90 C | |
| Other | weight(g) | 70 | 70 |
| | dimensions (LxWxH)(mm) | 121x45x16 | |
| | casing material | Plastic | |
| | housing colour | Grey+Blue | |
| | type of protection | IP44 | |
| | protection class | ClassII | |
| Note | <p>1. Tolerance:includes set up tolerance, line regulation and load regulation.</p> <p>2. Tested at full load,230Vac.Refer to"Power Factor" and "EFFICIENT"curve graphs.</p> <p>3. 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.</p> <p>4. All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature.</p> <p>5. 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.</p> | | |

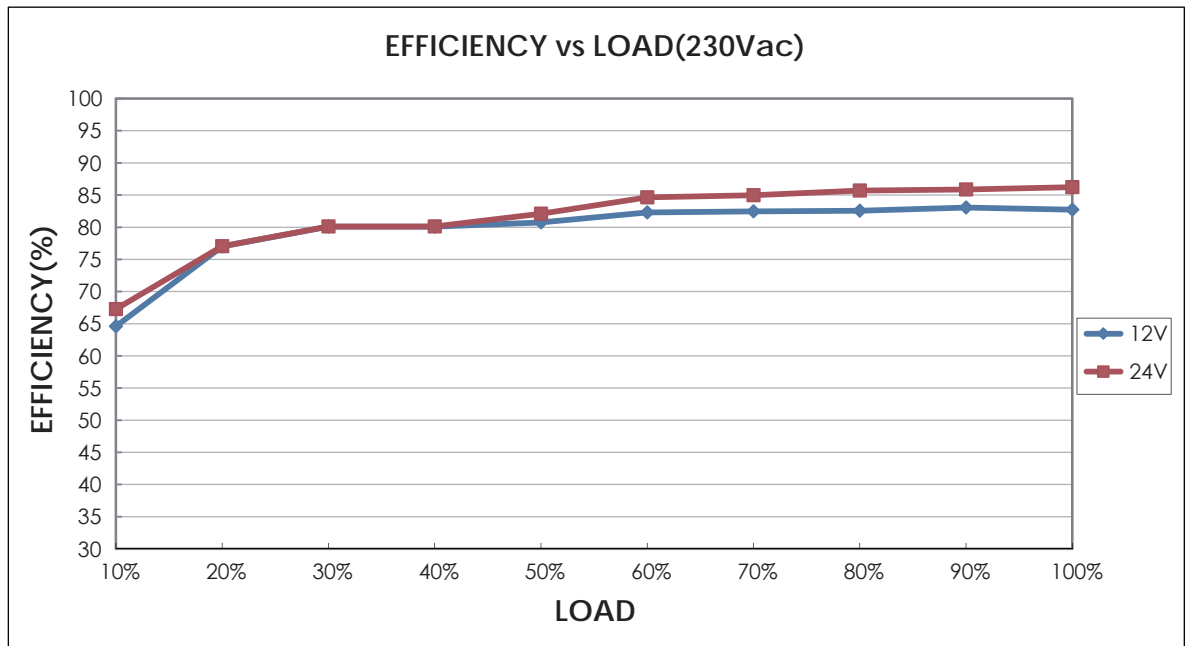
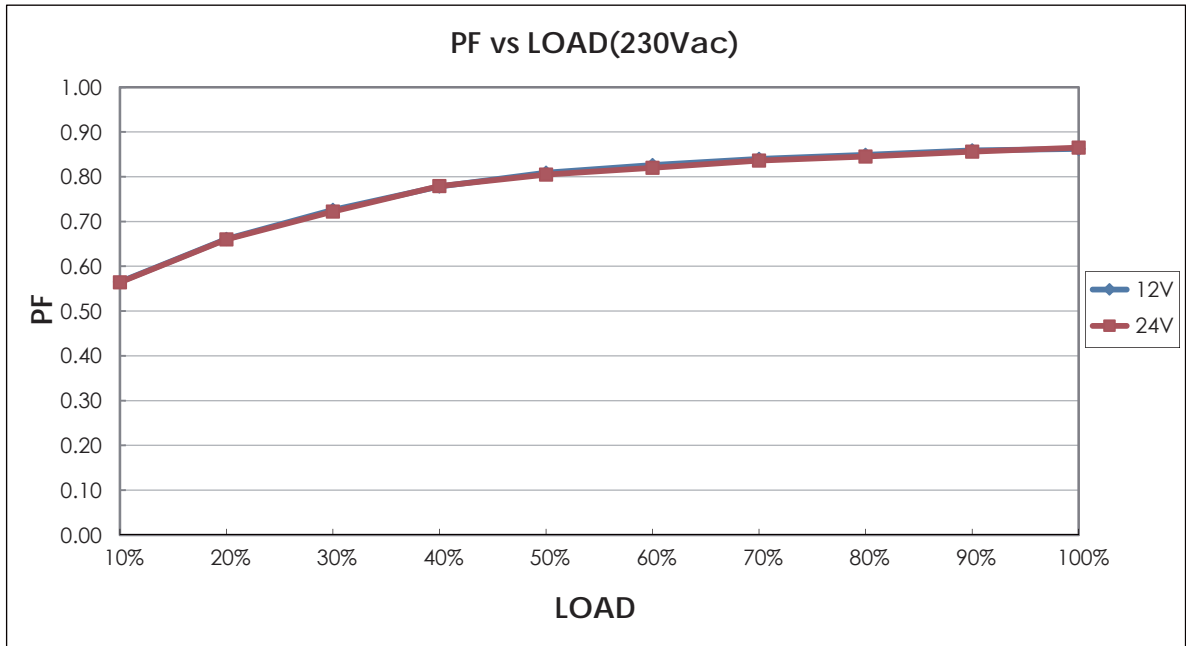
Dimensions(mm):



Wiring diagram:



Electrical curves:



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 circuit breaker Model | B10 | B13 | B16 | B20 | C10 | C13 | C16 | C20 |
|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| SLT20-12VFC-1 SLT20-24VFC-1 | 50 | 65 | 80 | 100 | 57 | 75 | 92 | 115 |

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