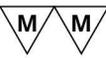




- Constant Voltage + Constant Current Mode
- Built-in active PFC function
- Protection: Over Current/Short Circuit/Over voltage Over Temperature
- Class II Power Unit, NO FG
- IP67 waterproof full sealed with Plastic Housing
- Compliance with EN55015,EN61347,EN61000-3-2
- 100,000Hours long life span, low temperature rise

CE  SELV  IP67 ROHS

TECHNICAL PARAMETERS

1. Output

| Items | Specs | Unit | Conditions |
|-------------------------|-------|-------|---|
| Rated Output voltage | 12 | VDC | Ta, rated input voltage, output with rated power |
| Rated Output Current | 16 | A | Ta, rated input voltage |
| Rated Output Power | 192 | W | Ta, rated input voltage |
| Tcase Max | 85 | °C | Ta:50°C ,230VAC,full load |
| Efficiency | ≥92 | % | 25°C, rated input voltage, output with max. rated power |
| Line Regulation | ±1.0 | % | / |
| Load Regulation | ±2 | % | / |
| Voltage tolerance | ±2 | % | / |
| Ripple & Noise (max) | ≤120 | mVp-p | Measured at 20MHZ of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf & 47 uf parallel capacitor |
| Setup time, Rise time | ≤150 | ms | 25°C , full load |
| Switch off Hold Up time | 18 | ms | 230VAC, full load |

2. Input

| Items | Specs | Unit | Conditions |
|-----------------------------------|----------------------|------|-------------------------|
| Rated Input voltage | 200-240 | VAC | 25°C |
| Input voltage range | 180-264 | VAC | 25°C |
| Input Frequency | 47-63(Typical 50/60) | Hz | 25°C |
| Input Current Max | <2.0 | A | Vin=180Vac, Full Load |
| Power Factor | >0.95 | | 230VAC, full load |
| THD | <15% | | (@full load/230VAC) |
| Inrush Current | ≤60 | A | 220Vac, full load, 25°C |
| Leakage Current | <0.25 | mA | 240VAC |
| No Load Standby power consumption | <0.5 | W | |

3. Protection

| | | | |
|------------------|---------------------------------------|----|--|
| Current Limiting | 1.1-1.4 times of rated output current | V | Constant current Limiting, Auto- recovery after fault condition is removed |
| Over Voltage | 14-16 | °C | Shut down output voltage, re-power on to recover |
| Over Temperature | Yes | | Hiccup Mode, Auto-recovery after fault condition is removed |
| Short circuit | Yes | | Hiccup Mode, Auto-recovery after fault condition is removed |

4. Temperature and others

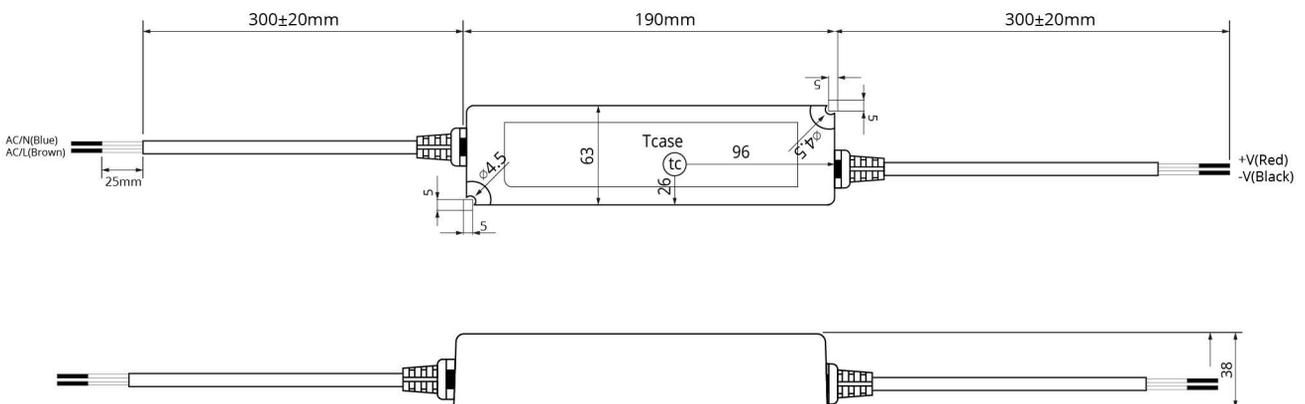
| | | | |
|-----------------------------|---|----|-------------------------|
| Operating Temperature range | -30 to +70 (Typical25) | °C | Refer to Derating Curve |
| Storage Temperature range | -40 to +80 (Typical25) | °C | |
| Humidity | 10~95 | % | NON-Condensing |
| Waterproof Level | IP67 full sealed with silicon gel | | |
| Cooling method | Air convection | | |
| Temperature Coefficient | 0.03%/°C (0-60°C) | | |
| Vibration | 10-500Hz, 5G 12min./1cycle, period for 72 min, each along X.Y. Z axes | | |
| Lifespan | 50,000hours, Max.Ta, rated input voltage, max rated output power | | |
| Dimension/Packing | 190*63*38mm (L*W*H) , 0.78Kg;20pcs/17Kg/0.029CBM | | |

5. Safety & EMC standards

| | |
|-------------------------|--|
| Safety | UL8750, EN61347-1, EN61347-2-13, EN62368, IP67 Approved, Design refer to UL60950-1 |
| Withstand Voltage | I/P-O/P: 3.0KVAC |
| Isolation Resistance | I/P-O/P: >100M Ohms / 500VDC / 25%/70% RH |
| EMI Conduction | Compliance to EN55015, EN61000-3-2 Class C (@load ≥ 60%); EN61000-3-3 |
| EMS Immunity | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, light industry level (surge immunity line-line 2KV) |
| Temperature Coefficient | 0.03%/°C (0-60°C) |
| Vibration | 10-500Hz, 5G 12min./1cycle, period for 72 min, each along X.Y. Z axes |

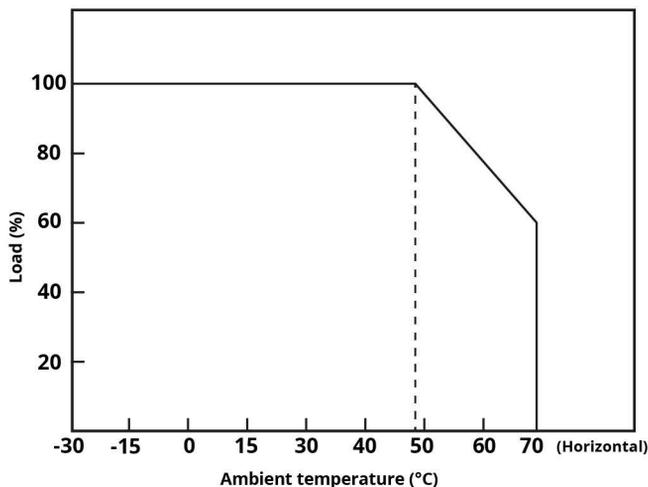
6. Mechanical mounting

| | |
|-------------------------|--|
| Case Material | Pure PC, Fire-proof level V0 |
| Mounting ways | Striped |
| Insulation type | Class II, NO FG |
| IP grade | IP67 |
| Input cables dimension | H05VV-F 2X1.0mm ² , 300±20mm, AC/N-Blue, AC/L-Brown |
| output cables dimension | H05VV-F 2X1.5mm ² , 300±20mm, V+: Red, V-: Black |
| Dimension | 190*63*38mm (L*W*H) |

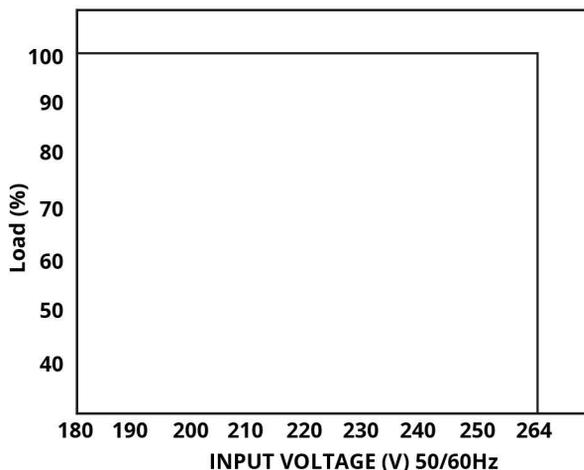


7. Characteristics & Derating

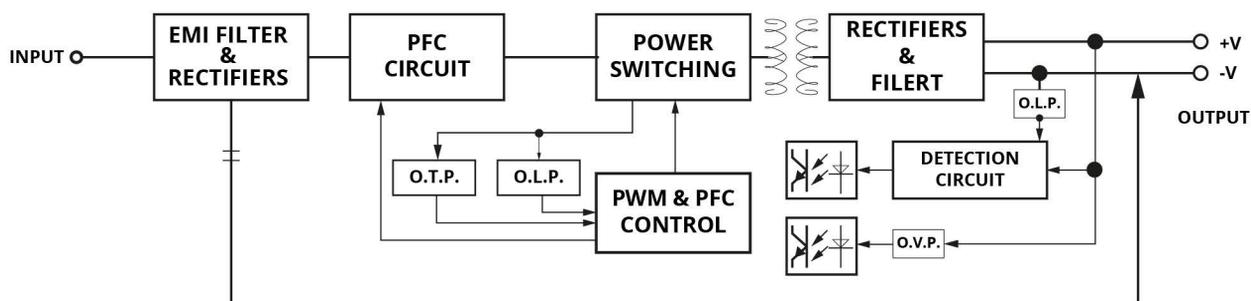
OUTPUT LOAD vs TEMPERATURE



STATIC CHARACTERISTIC

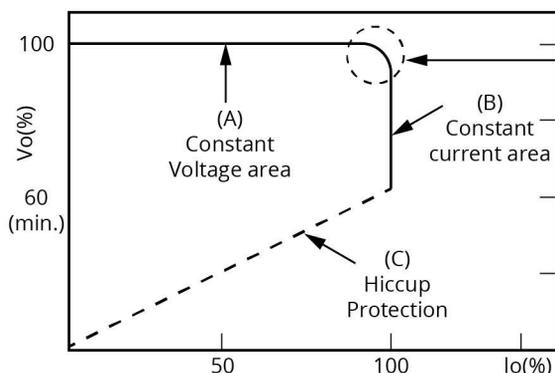


8. Block diagram



9. Driving method: CV + CC Hybrid

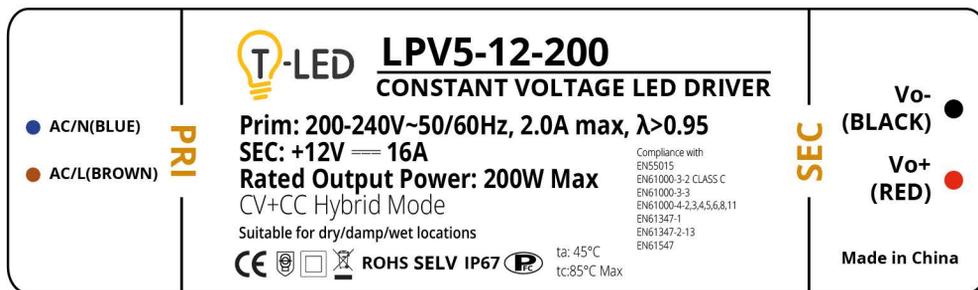
This model work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs, Constant current region: 18-24VDC.



In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems

Typical output current normalized by rated current (%)

10. Product label



NOTE:

1. All parameters not specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. De-rating may be needed under high temperature. Please refer to Static characteristic section for details.
5. Length of set up time is measured at first cold start, Turning ON/Off the driver may lead to increase of the set up time
6. The driver 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 end users must re-qualify EMC directive on the complete installation again.
7. To fulfill requirement of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains.
8. This series meet the typical life expectancy of >50,000 hours of operation when Tcase, particularly is about 70°C or Less.
9. The ambient temperature derating of 3.5°C/1000m with finless models for operating altitude higher than 2000m

11. Installation manual

1. Before commencing any installation or maintenance work, please disconnect the power supply from the utility. Ensure that it cannot be re-connected inadvertently.
2. Keep proper ventilation around the unit and do not put any object on it. 15-20cm clearance must be kept when the adjacent device is a heat source
3. Operating under high ambient temperature may cause the internal component temperature and will require a de-rating in output load
4. Install in wet condition need use waterproof connectors, make sure there is no space between the unit and lighting fixtures.
5. Output current and output wattage must not exceed the rated values on the specifications
6. Wiring
connect the ACL wire (Brown) of the LED power supply to Live (black or brown).
Connect the ACN wire (Blue) of the LED power supply to Neutral (white or blue)
7. Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not remove the case of the power supply by yourself!
8. Can't be installed under water or buried in soil directly
9. Please do not install LED power supplies in places with high ambient temperature or close to fire source
10. If the external flexible cable or cord of this switching power supply is damaged, it shall be exclusively replaced by the manufacturer or similar qualified person in order to avoid a hazard.
11. DO NOT SOAK the power supply under water.