



● Features

- ✓ Plastic case waterproof design
- ✓ IP67 waterproof level
- ✓ Working temp-30~+70°C (refer to output derating curve)
- ✓ Protection: Short circuit /Over load/Over voltage
- ✓ 100% pass high temperature aging test
- ✓ 3 years warranty

● Applications

LED-based decorative/architectural lighting,LED stage ,theater lighting and LED electronic displays

● Reference standard

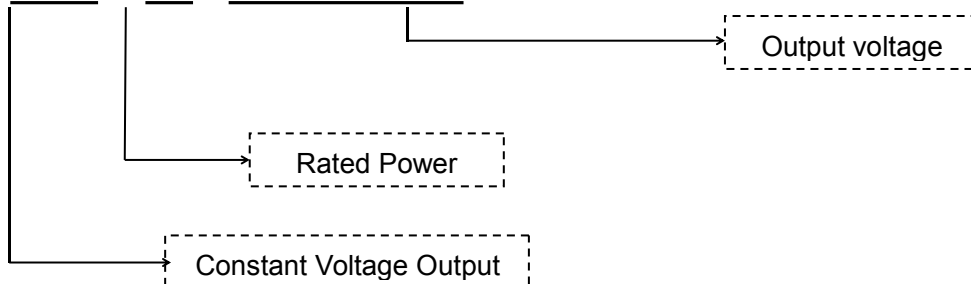
EN61547\EN61000-4-2,3,4,5,6,8,11\ GB17625.1\EN61000-3-2\EN61000-3-3\ EN55015\GB17743\ GB19150.1\14/EN61347-1, -2-13\EN62384\UL8750

● Product description

DPV-20 series is 20W IP67 plastic case LED driver,input voltage range: 90~264VAC, output voltage 5V、12V、15V、24V etc,which is suitable for LED-based decorative/architectural lighting,LED stage ,theater lighting and LED electronic displays.Plastic case waterproof design, ultra-high efficiency, compact case, good heat dissipation, to ensure the long-term stable work of this series of products.

● Product name

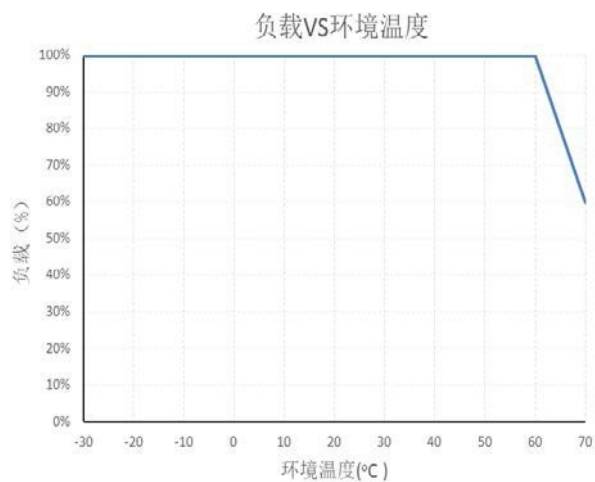
DPV – 20 – 5/12/15/24



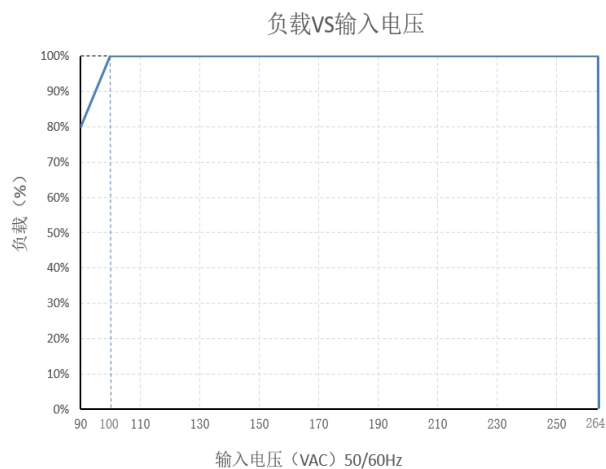
General Specifications

| Model | | DPV-20-5 | DPV-20-12 | DPV-20-15 | DPV-20-24 | DPV-20-36 | DPV-20-48 |
|-------------|---|---|-----------|-----------|-----------|-----------|-----------|
| Input | Input voltage | 90~264VAC | | | | | |
| | Input current | 0.5A/115VAC 0.3A/230VAC | | | | | |
| | Efficiency | ≥77% | ≥83% | ≥83% | ≥83% | ≥83.5% | ≥83.5% |
| | Frequency range | 47~63HZ | | | | | |
| | Leakage current | <1mA/240VAC | | | | | |
| | Inrush current | 50A/230VAC/50Hz at 50% I _{peak} ,twidth=300us,cold start | | | | | |
| | Max qty of PSUs on 16A circuit breaker | 8 units(circuit breaker of type B)/ 14 units(circuit breaker of type C) at 230VAC | | | | | |
| | No-load/standby loss | <0.5W | | | | | |
| Output | DC voltage | 5V | 12V | 15V | 24V | 36V | 48V |
| | Rated current | 3A | 1.67A | 1.33A | 0.84A | 0.56A | 0.42A |
| | Rated power | 15W | 20W | 20W | 20W | 20W | 20W |
| | Voltage regulation range | / | / | / | / | / | / |
| | Ripple & Noise | ≤80mVp-p | ≤120mVp-p | ≤120mVp-p | ≤150mVp-p | 300≤mVp-p | 350≤mVp-p |
| | Set up,rise | 1200ms/20ms (230VAC load 100%),2400ms/20ms (115VAC load 100%)(5-24V); 1200ms/100ms (230VAC load 100%),2400ms/100ms (115VAC load100%)(36-48V) | | | | | |
| | hold up time | 50ms/ (230VAC) load 100%; 15ms/ (115VAC) load 100%; | | | | | |
| | Line regulation | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% |
| | Load regulation | ±6% | ±2% | ±2% | ±2% | ±2% | ±2% |
| | Voltage accuracy | ±8% | ±5% | ±5% | ±5% | ±5% | ±5% |
| EMC | EMS | Design refer :EN61547;EN61000-4-2,3,4,5,6,8,11; | | | | | |
| | Harmonic current | Design refer :GB17625.1;EN61000-3-2, EN61000-3-3 | | | | | |
| | EMI | Design refer :EN55015, GB17743 class B | | | | | |
| Safety | Safety Standard | Design refer :GB19150.1,14/EN61347-1, -2-13/EN62384 /UL8750/IP67 | | | | | |
| | Withstand voltage | I/P-O/P:3.0KVac/10mA test for 1min | | | | | |
| | Isolation resistance | I/P-O/P:100M ohms; | | | | | |
| Protections | Over Voltage | 115-150% ,shut down o/p voltage,re-power on to recover | | | | | |
| | Over Load | 105~175% of rated output power,hiccup mode,recovers automatically after fault condition is removed | | | | | |
| | Short Current | recovers automatically after fault condition is removed | | | | | |
| Environment | Working Temp&humidity | -30~70℃ 20%~95%RH non-condensing （Refer to Derating Curve） | | | | | |
| | Storage Temp&humidity | -40℃~80℃; 10%~95%RH non-condensing | | | | | |
| | Vibration | 10~500Hz,5G,10min/1 cycle,60min.each along X,Y, Z axes | | | | | |
| | Shock | 20G,last 11ms,3 impacts along X, Y and Z axes | | | | | |
| | Altitude | the ambient temperature derating of 0.6 °C/100m for operating altitude higher than 2000m | | | | | |
| | Warranty | 3 years | | | | | |
| | IP Level | IP67 | | | | | |
| Reliability | MTBF | 25°C:500000Hrs, MIL-217 Method | | | | | |
| Others | Size | 140×32×25 mm （L×W×H） | | | | | |
| | Packing | 0.195kgs/pc,108pcs/ctn,21.2kgs/ctn | | | | | |
| | Cold mode | <input checked="" type="checkbox"/> free air convection <input type="checkbox"/> with fan | | | | | |
| Remarks | <div>❖ In order to extend the lifetime, it is recommended to configure the load more than 20% of the remaining allowance. For example: the power of the device requires 100W, then use the power of not less than 120W.</div> <div>❖ Ripple test method at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</div> <div>❖ All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25℃ of ambient temperature.</div> <div>❖ The power supply is considered as a component that will be operated in combination with final equipment.All EMC tests are carried out by installing the sample on the metal plate. The power supply should be combined with the terminal equipment for EMC test.</div> | | | | | | |

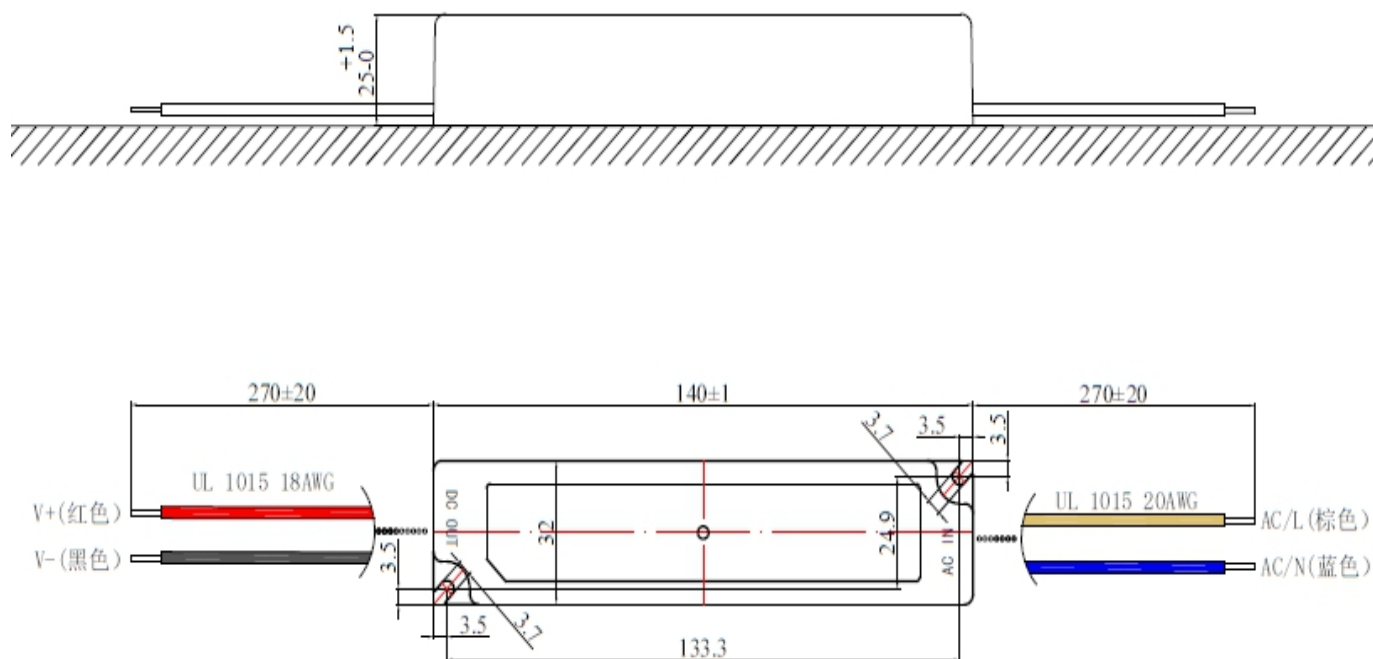
● Load and temperature curve



● Static characteristic curve



● Install drawing



● Use instructions:

- 1、 please follow the installation instructions when use the power supply。
- 2、 Before power on test run after installation, please check and proofread the wiring on each terminal, make sure that the input and output, AC and DC, positive and negative, voltage and current values are correct, prevent the occurrence of wrong connection, and avoid damaging the power supply and user equipment。
- 3、 Before power on, please use a multimeter to measure whether the live wire, zero wire and ground wire are short circuited, and whether the output terminal is short circuited; it is better to start without load when power on。
- 4、 Do not exceed the nominal value of the power supply when using, so as not to affect the reliability of the product. If you need to change the output parameters of the power supply, please consult our technical department before using.
- 5、 In order to ensure the safety of use and reduce interference, please ensure that the grounding terminal is reliably grounded (ground wire please thicker than AWG18#) 。
- 6、 If the power supply fails, please do not repair it without permission. Please contact our customer service department as soon as possible, customer service line: 86-519-85215050。

● Transport、 storage:

1、 Transport:

The package is suitable for shipping by automobiles, ships, airs, trains, etc. During transportation, it shall be rain proof,loaded and unloaded gently。

2、 Storage:

When the product is not in use, it shall be placed in the packing box. The storage environment temperature and relative humidity shall meet the requirements of the product. No corrosive gas or product in the warehouse, and no strong mechanical vibration, impact and strong magnetic field. The packing box shall be padded at least 20cm above the ground, and not be soaked. If the storage time is too long (more than 1 year), it shall be rechecked by professionals before use.