

# Ref: 38.051

### Features:

- Protection class B
- Semi-glue filling design
- Natural cooling
- Overload protection
- Input under voltage protection
- Output short circuit protection
- Output over current protection
- Output over voltage protection

| Input<br>characteristics                          | AC input voltage range min. / typical / max.     | 90V / 230V / 264V  |
|---|--|--|
|   | AC input voltage frequency min. / typical / max. | 47Hz / 50Hz / 63Hz   |
|   | Input current                                    | 3A   |
|   | Power factor                                     | 0.95 (220V full load)  |
|   | Inrush current                                   | 90us / 780us A (230 full load, cold state)   |
| Output<br>characteristics                         | Output voltage range min. / typical / max.       | 21.6V / 24V / 26.4V (adjustable between 21.6V and 26.4V)   |
|   | Output current range min. / max.                 | 0A / 16.7A (At 90-170V, 50% derating, maximum output current of 8.3A)  |
|   | Constant voltage tolerance                       | ±2%  |
|   | Noise & ripple (peak to peak value)              | 300mV (test under the conditions of full load output and rated 230Vac input. Before the test, connect a 0.1uF metalized-film capacitor and a 10uF electrolytic capacitor in parallel at the output. The bandwidth of the oscilloscope is 20MHz.) |
|   | Output power                                     | 400W   |
|   | Output efficiency min. / typical                 | 93% / 94% (230Vac input, 100% load output)   |
|   | Start-up output delay                            | <1500ms (230Vac, full load)  |
|   | Rise time of output voltage                      | <100ms (Rated input, rated output)   |
|   | Degree of protection                             | IP42   |
| Environment                                       | Working temperature min. / max.                  | -30°C / +70°C (for working over 45°C, please refer to the load derating curve in the latter part of this data sheet)   |
|   | Ambient temperature for storage min. / max.      | -40°C / +90°C  |
|   | Relative working humidity min. / max.            | 0 / 95% (no condensation)  |
|   | Altitude max.                                    | 5000m  |
|   | Atmospheric pressure min. / max.                 | 70kPa / 106kPa   |
| Protections                                       | Output current limit protection min. / max.      | 18A / 25A  |
|   | Output over voltage protection min. / max.       | 27.6V / 33V (test under the conditions of normal temperature and full load. The protection mode is hiccupping.)  |
|   | Over temperature protection min. / max.          | 80°C / 100°C (auto-recovery. The referred temperature is the temperature of the upper casing.)   |
| Safety<br>standards<br>& insulation<br>parameters | Input - output                                   | 3000Vac / 5mA / 1min (no arc striking, no breakdown)   |
|   | Input - ground                                   | 1500Vac / 5mA / 1min (no arc striking, no breakdown)   |
|   | Output - ground                                  | 500Vdc / 5mA / 1min (no arc striking, no breakdown)  |
|   | Insulation resistance                            | $\geq\!\!100M\Omega$ (It's the insulation resistance of input-output, input-ground and output-ground under conditions of normal atmosphere, relative humidity less than 90% and test voltage of 500Vdc.)   |
|   | Touch current                                    | <0.7mA (220Vac input, L - GND & N - GND)   |
| Other   | Dimensions                                       | 219.5x124.8x54mm   |
|   | Casing shape                                     | aluminum rain-proof casing   |
|   | Weight   | 0.9 kg   |

3 years



Guarantee









# power supply

### Measurements:





### **Diagram:**



# Product characteristic curves

## **PF Curves**



#### **Efficiency Curves**







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# power supply

### Load Derating Curve



#### Assembly and Safety Information

Applied standards (ESD): • EN 55024

Applied standards (CS): • IEC 61000-4-6

• IEC 61000-4-2

# Applied standards (RS):

- EN 55024
- IEC 61000-4-3

Applied standards (EFT/B): • EN 55024

- IEC 61000-4-4
- EN 55024 • IEC 61000-4-5
- Applied standards (CE / RE):

Applied standards (SURGE):

**Voltage Derating Curve** 

100%

90% 80% 70% 60% 50% 40%

10%

(%) 70% 60% 50% 40% 20% 20%

- EN 55032
- GB9254

### Safety standards:

• IEC 62368

904 104 1704 1304 1504 1704 1804 7004 7004 7004 7004 7004 7004

- UL/CUL62368
- EN 62368-1:2014/A11:2017
- GB17625.1-2012
- GB4943.1-2011

# Attention:

- Please use this product according to its specifications otherwise there may be malfunction.
- Use uncertified wires or connectors may cause fire or other hazards.
- It is suggested that user use a slotted screwdriver or a Philips to adjust the output current of led driver, otherwise the potentiometer may be damaged. (please use the screwdriver with an insulated handle, and the screwdriver with a 2mm head is recommended as well. Meanwhile, please pay attention that the intensity of torque not exceed 0.5KNm).
- Man-made damage is not covered by guarantee.

# Installation Method:

- 1. Please use vertical wall mounted installation, no forward, backward or horizontal, shown as the following picture:
- 2. For ensuring good heat dissipation, anything should be kept 10cm from four sides (up, down, left and right) of the led driver and 5cm from the vent on the front side, shown as the following picture:





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