

Walfront Walfrontin5mzswcd0

Walfront 150W AC-DC Switching Power Supply Module User Manual

Model: Walfrontin5mzswcd0

1. INTRODUCTION

This manual provides essential information for the safe and effective use of the Walfront 150W AC-DC Switching Power Supply Module. This module is designed to convert AC 100V-240V input to a stable DC 24V output, suitable for various industrial equipment and electronic projects. Please read these instructions carefully before installation and operation.

2. SAFETY INFORMATION

WARNING: Risk of Electric Shock. This device operates with high voltage. Improper handling can result in serious injury or death.

- Always ensure the power source is disconnected before making any connections or performing maintenance.
- Installation should only be performed by qualified personnel familiar with electrical systems and safety procedures.
- Do not operate the module in wet or damp conditions.
- Ensure proper ventilation to prevent overheating.
- Do not touch live terminals or components when the module is powered.
- Verify input and output voltage/current ratings before connecting to any device.

3. PRODUCT OVERVIEW

The Walfront 150W AC-DC Switching Power Supply Module is an efficient power conversion unit featuring robust design and protective measures.



Figure 3.1: Angled view of the Walfront 150W AC-DC Switching Power Supply Module, showing input/output terminals and heat sinks.

Key Features:

- **Efficient Power Conversion:** Transfers power from AC 100V~240V (50HZ/60HZ) to DC 24V.
- **Switching Regulator Technology:** Utilizes switching regulators for higher efficiency, smaller size, and lighter weight compared to linear regulators.
- **Comprehensive Protection:** Supports over-voltage, over-current, and short-circuit protection for enhanced safety and reliability.
- **Optimized Heat Dissipation:** Designed with two heat sinks to ensure effective thermal management during operation.
- **Robust Construction:** An electronic power supply module incorporating a switching regulator for efficient power delivery.

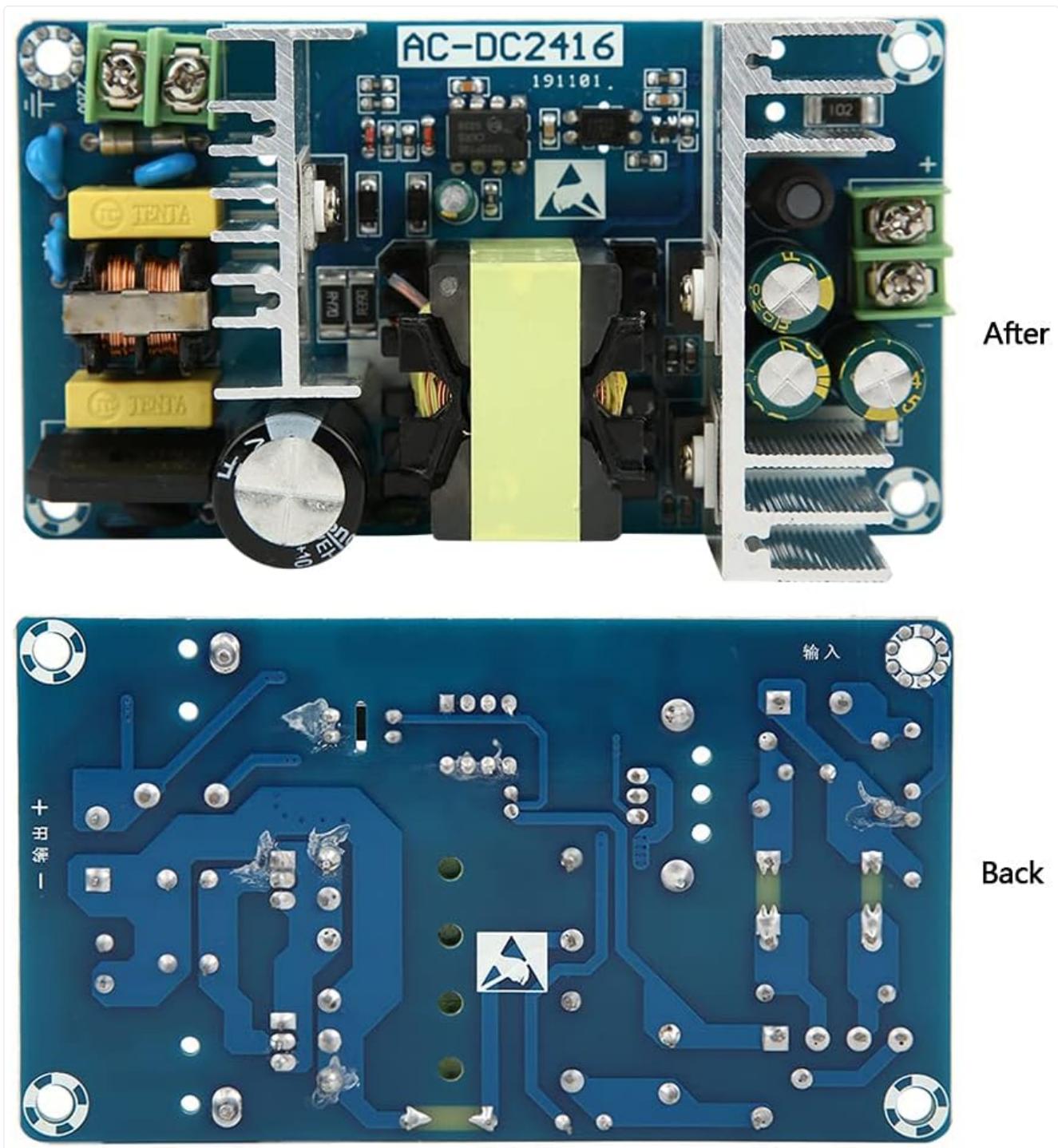


Figure 3.2: Comparison of the front (component side) and back (PCB trace side) of the power supply module.

4. SPECIFICATIONS

Specification	Value
Input Voltage	AC 100V to 240V (50Hz/60Hz)
Output Voltage	DC 24V
Output Current	6A to 9A (no voltage drop)
Output Power	150W (maximum 220W)
Over Current Protection	Yes

Specification	Value
Overload Protection	Yes
Short Circuit Protection	Yes
Dimensions (L x W x H)	11.5 x 6.5 x 3.5 cm (4.52 x 2.56 x 1.37 inches)
Mounting Hole Pitch	10.5 cm (4.13 inches) and 5.5 cm (2.16 inches)
Item Weight	7.4 ounces (0.21 Kilograms)
Model Number	Walfrontin5mzswcd0
UPC	798382941812

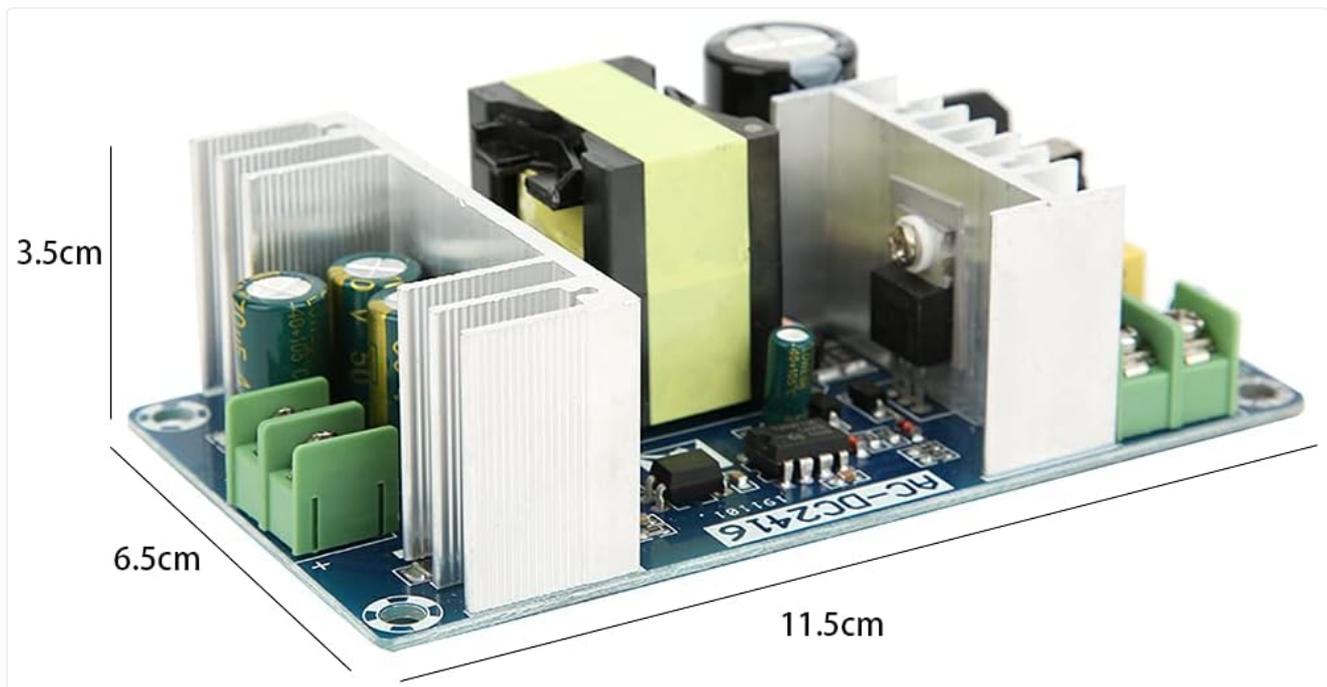


Figure 4.1: Physical dimensions of the power supply module.

5. SETUP AND INSTALLATION

Follow these steps for safe and correct installation of the power supply module.

1. **Power Disconnection:** Ensure that the main AC power source is completely disconnected before beginning installation.
2. **Mounting:** Securely mount the power supply module in a well-ventilated enclosure using the designated mounting holes. Refer to Figure 4.1 for mounting hole pitch.
3. **Input Connection (AC):** Connect the AC input wires to the designated input terminals. Typically, these are labeled 'L' (Live), 'N' (Neutral), and 'GND' (Ground). Ensure correct polarity and a secure connection for AC 100V-240V (50/60Hz).
4. **Output Connection (DC):** Connect the DC output wires to your load device. The output terminals are typically labeled '+' (Positive) and '-' (Negative) for DC 24V. Double-check polarity to avoid damage to your equipment.
5. **Verification:** After all connections are made, visually inspect them to ensure they are tight, correctly polarized, and free from any short circuits.
6. **Power On:** Once verified, connect the main AC power source. The module should now provide a stable DC

24V output.



Figure 5.1: Top view of the module, highlighting input and output terminal blocks for wiring.

6. OPERATING INSTRUCTIONS

The Walfront 150W AC-DC Switching Power Supply Module is designed for continuous operation once properly installed and connected.

- Upon applying AC input power, the module will automatically convert it to a regulated DC 24V output.
- Ensure that the total power consumption of the connected load does not exceed the module's maximum output power of 150W (220W peak).
- The built-in over-current, over-voltage, and short-circuit protections will activate to safeguard the module and connected devices in case of faults. If a protection mechanism triggers, disconnect power, identify and resolve the issue, then reapply power.

7. MAINTENANCE

Minimal maintenance is required for this power supply module to ensure its longevity and reliable performance.

- **Cleaning:** Periodically clean the module and its surroundings to prevent dust accumulation, especially on the heat sinks, which can impede cooling. Use a soft, dry brush or compressed air. Ensure power is disconnected before cleaning.
- **Ventilation:** Ensure that the module's installation location provides adequate airflow to prevent overheating. Do not block ventilation openings.
- **Connection Checks:** Occasionally inspect all wiring connections for tightness and signs of wear or corrosion. Re-tighten if necessary.

8. TROUBLESHOOTING

If you encounter issues with your power supply module, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No output voltage	No AC input power Incorrect wiring Internal fuse blown Overload/Short-circuit protection activated	Check AC power source and connections Verify input/output wiring polarity Consult a qualified technician for internal inspection Disconnect load, check for shorts, then reapply power
Unstable or low output voltage	Overload on output Poor input power quality Loose connections	Reduce load or use a higher-rated power supply Ensure stable AC input Check and tighten all wiring connections
Module is excessively hot	Insufficient ventilation Overload High ambient temperature	Ensure adequate airflow around the module Reduce load Operate within specified temperature ranges

If the problem persists after attempting these solutions, contact Walfront customer support or a qualified technician.

9. WARRANTY AND SUPPORT

Specific warranty details for this product are not provided within this manual. Please refer to your purchase documentation or contact the seller directly for warranty information.

For technical support or further inquiries, please visit the official Walfront store or contact their customer service channels.

[Visit the Walfront Store on Amazon](#)