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› WFCO WF-8735-AD WF-8700-AD Series Power Center User Manual

WFCO WF-8735-AD

WFCO WF-8735-AD Power Center User Manual

Model: WF-8735-AD

1. INTRODUCTION

The WFCO WF-8735-AD Power Center is an advanced power management unit designed for recreational vehicles. It integrates a power converter with an AC distribution panel and DC fuse panel, providing reliable 120 VAC and 12 VDC power to your RV's systems. This model features innovative Auto-Detect technology, which automatically identifies the connected battery chemistry (Lithium-Ion or Lead-Acid) and adjusts its charging profile for optimal battery health and longevity.

Key Features:

- Automatic detection and charging for Lithium-Ion and Lead-Acid batteries.
- 35 Amps DC output for efficient battery charging and 12V appliance power.
- Input voltage range of 105-130 VAC, 60 Hz.
- 600W power output capacity.
- Integrated AC distribution and DC fuse panels for comprehensive power management.

2. PRODUCT OVERVIEW



Front view of the WFCO WF-8735-AD Power Center, featuring its durable black casing and ventilation grilles.



Rear view of the power center, illustrating the various wiring connections and the DC output wiring diagram for installation.

3. INSTALLATION AND SETUP

Proper installation is crucial for the safe and efficient operation of your WFCO Power Center. It is recommended that installation be performed by a qualified technician.

Safety Precautions:

- Always disconnect shore power and battery power before beginning installation.
- Ensure proper grounding for both AC and DC systems.
- Verify all wiring connections are secure and correct according to the provided diagrams and local electrical codes.
- Refer to your RV's electrical diagrams for specific wiring requirements and component locations.

Installation Steps:

1. **Preparation:** Before removing the old unit, take clear photographs of all existing wiring connections. Label each wire carefully (e.g., using small pieces of masking tape) to ensure correct re-connection to the new unit.
2. **Mounting:** Securely mount the WFCO Power Center in the designated location within your RV. Ensure adequate ventilation around the unit to prevent overheating.
3. **AC Wiring:** Connect the incoming AC shore power wires (hot, neutral, ground) to the appropriate terminals within the power center's AC distribution panel. Ensure all connections are tight and properly insulated.
4. **DC Wiring:** Connect the DC output wires to your RV's 12V distribution panel. Connect the battery positive and

negative wires to the designated terminals on the power center. Pay close attention to polarity (red for positive, white for negative).

- 5. **Circuit Breakers and Fuses:** Install appropriate AC circuit breakers and DC fuses as per the unit's specifications and your RV's requirements. Ensure correct amperage ratings are used for all circuits.
- 6. **Final Checks:** Double-check all wiring connections for correctness and security. Once verified, carefully restore battery power, then shore power. Verify proper operation of all connected appliances and the battery charging functions.

4. OPERATING INSTRUCTIONS

The WFCO WF-8735-AD Power Center features an advanced Auto-Detect technology that automatically identifies the connected battery chemistry (Lithium-Ion or Lead-Acid) and adjusts its charging profile accordingly. This eliminates the need for manual switches or settings.

Automatic Battery Detection:

- Upon initial connection of a battery or after a significant discharge cycle, the power center will analyze the battery type.
- For Lithium-Ion batteries, the unit will engage a multi-stage charging process optimized for LiFePO4 chemistry, typically charging at 14.6V in bulk mode.
- For Lead-Acid batteries, it will follow a standard three-stage charging profile (Bulk, Absorption, Float) to maximize battery life.
- The unit's internal indicator light (visible through a small opening on the unit, if applicable) may change color (e.g., green for Lead-Acid, blue for Lithium) to indicate the detected battery type.

Power Distribution:

The power center efficiently distributes 120 VAC to your RV's AC appliances via integrated circuit breakers. Simultaneously, it converts 120 VAC to 12 VDC to power your RV's 12VDC appliances and maintain the charge of the house battery.

5. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your WFCO Power Center.

- **Ventilation:** Periodically inspect and ensure that the ventilation openings on the unit are clear and unobstructed. Do not block airflow, as this can lead to overheating and reduced performance.
- **Connections:** Annually or as needed, check all electrical connections (both AC and DC) for tightness and signs of corrosion. Loose connections can cause resistance, leading to heat buildup and potential failure.
- **Fuses and Breakers:** Inspect fuses and circuit breakers for any signs of damage or tripping. Replace blown fuses only with ones of the correct amperage rating as specified on the unit or in your RV's manual.
- **Cleaning:** Keep the exterior of the unit clean and free of dust and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners, solvents, or abrasive materials, as these can damage the unit.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No 12VDC power to appliances.	Blown DC fuse, tripped AC breaker, no shore power, battery disconnected.	Check all DC fuses and replace if necessary. Reset any tripped AC circuit breakers. Verify shore power connection and ensure the RV battery is properly connected.
Battery not charging or not detected as Lithium.	Battery deeply discharged, incorrect wiring, fuse issues, battery management system (BMS) in protection mode.	Ensure battery is not completely depleted (some Lithium batteries require a small charge to activate their BMS). Verify battery wiring and correct fuse sizes. For Lithium detection, fully discharge the battery until its BMS cuts off, then reconnect to shore power. This often triggers the auto-detect feature.
Unit is overheating or fan runs constantly.	Blocked ventilation, excessive electrical load, internal fault.	Ensure all vents are clear and unobstructed. Reduce electrical load if possible by turning off unnecessary appliances. If the issue persists, contact customer support.

If problems persist after attempting these solutions, contact WFCO customer support for further assistance.

7. SPECIFICATIONS

Attribute	Value
Model	WF-8735-AD
Output	35 Amps DC
Input Voltage	105-130 VAC, 60 Hz
Wattage	600W
Dimensions (L x W x H)	11.88 x 8.25 x 1 inches
Weight	1 pounds

8. WARRANTY AND SUPPORT

Warranty Information:

For specific warranty details regarding your WFCO WF-8735-AD Power Center, please refer to the warranty card included with your product packaging or visit the official WFCO website. It is important to retain your proof of purchase for any warranty claims.

Customer Support:

If you require assistance with installation, operation, troubleshooting, or have any questions about your WFCO Power Center, please contact WFCO customer support. Have your model number (WF-8735-AD) and purchase information ready when contacting support to expedite the process.

WFCO Official Website: [wfcoelectronics.com](https://www.wfcoelectronics.com)

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question